

Release Process Management

ServiceNow - App Engine Workshop

Allianz Technology - München

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PLEASE SEND YOUR FEEDBACK TO THIS LAB GUIDE TO:
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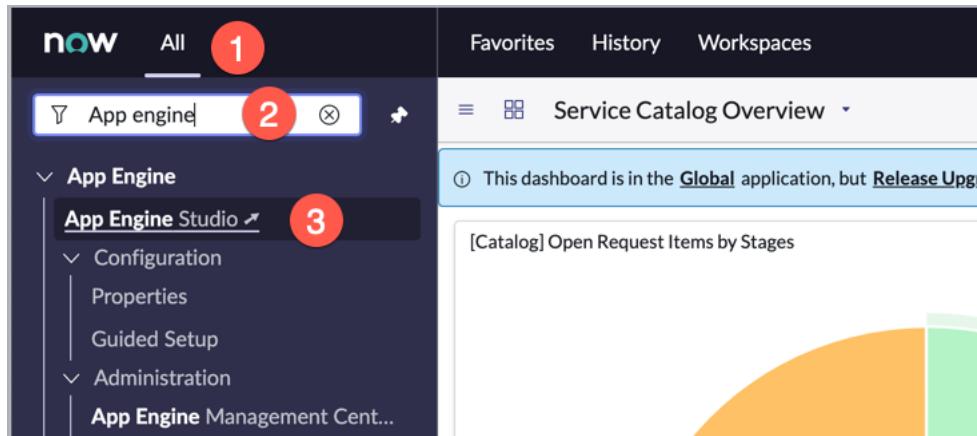
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1 Prepare your Dev environment

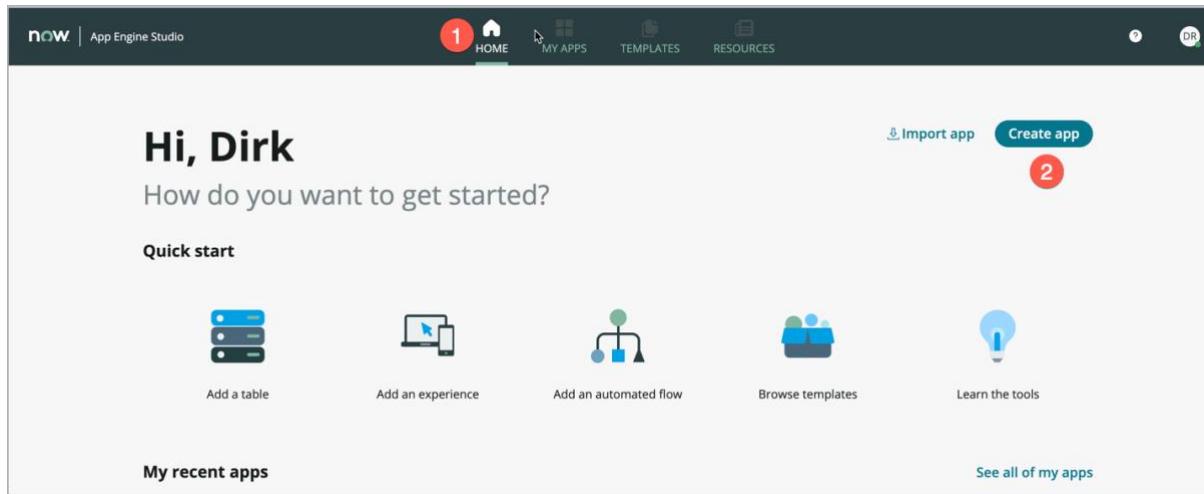
1.1 Exercise #1 – Create the Application

In the top menu bar, click “**All**” (1) and enter “**App engine**” (2) to the filter navigator. From the search results in the navigator, select “**App Engine Studio**” (3).



App Engine Studio opens in a new Browser tab.

Make sure, the “**Home**” Tab (1) is selected and then click “**Create app**” (2)



On the first screen that opens (see below), review the sidebar (1) showing your current location. You can hide the side bar by clicking the toggle at the left bottom of the screen (2).

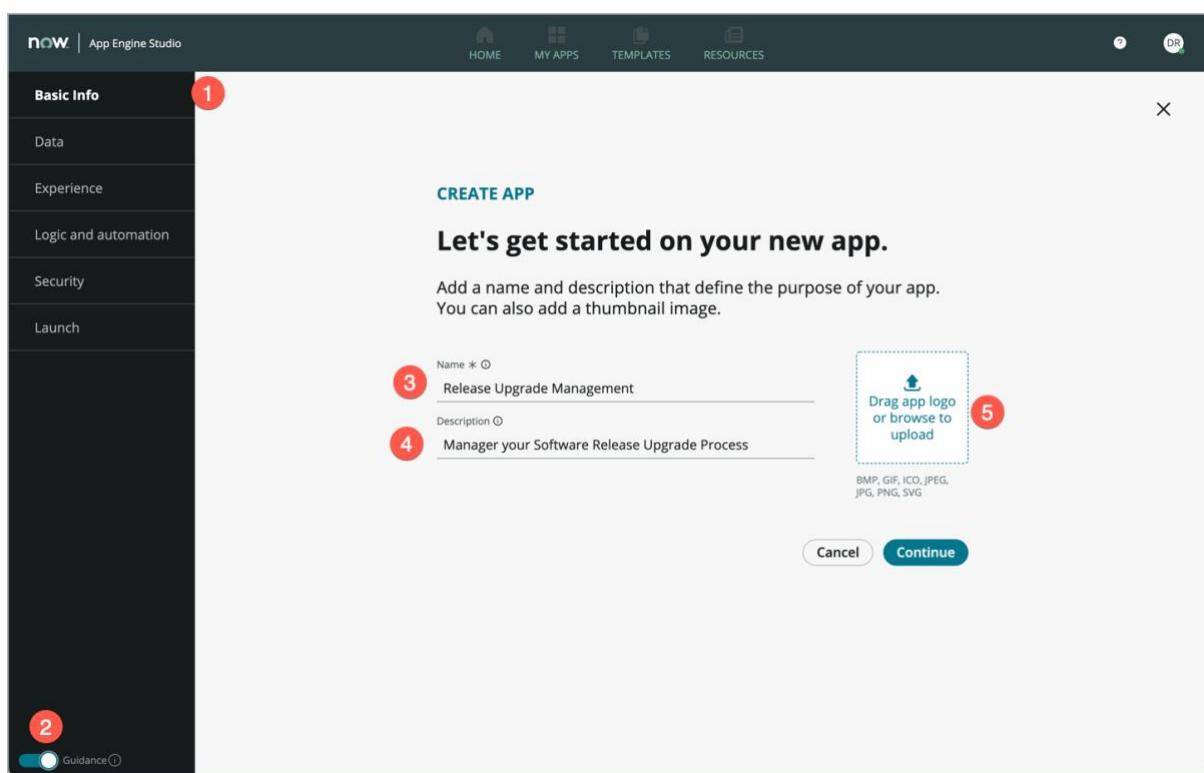
Enter a meaningful “**Name**” (3) for your App. In this case name it “**Release Upgrade Management**” and optionally enter a “**Description**” (4).

You can also upload a picture as the logo for your App (5), which is used in the overview of Apps on the App Engine Studio Home page. Uploading a Logo is an optional step, but it really looks nice in the App Overview.

In the next screenshot, you can see that I have clicked the toggle in the lower-left edge to hide the side panel (2) – giving me some more space on the screen.

You can also add a logo for your App (5), by uploading an image file.

Click “**Continue**” to move on.



On the next screen, you can create and manage the Roles to be used in your App. App Engine Studio already prepared two Roles for you.

The “admin” Role (2) is intended to manage the settings and base data of the App, later in the production environment. Mostly, users with the “admin” Role also have access to all data.

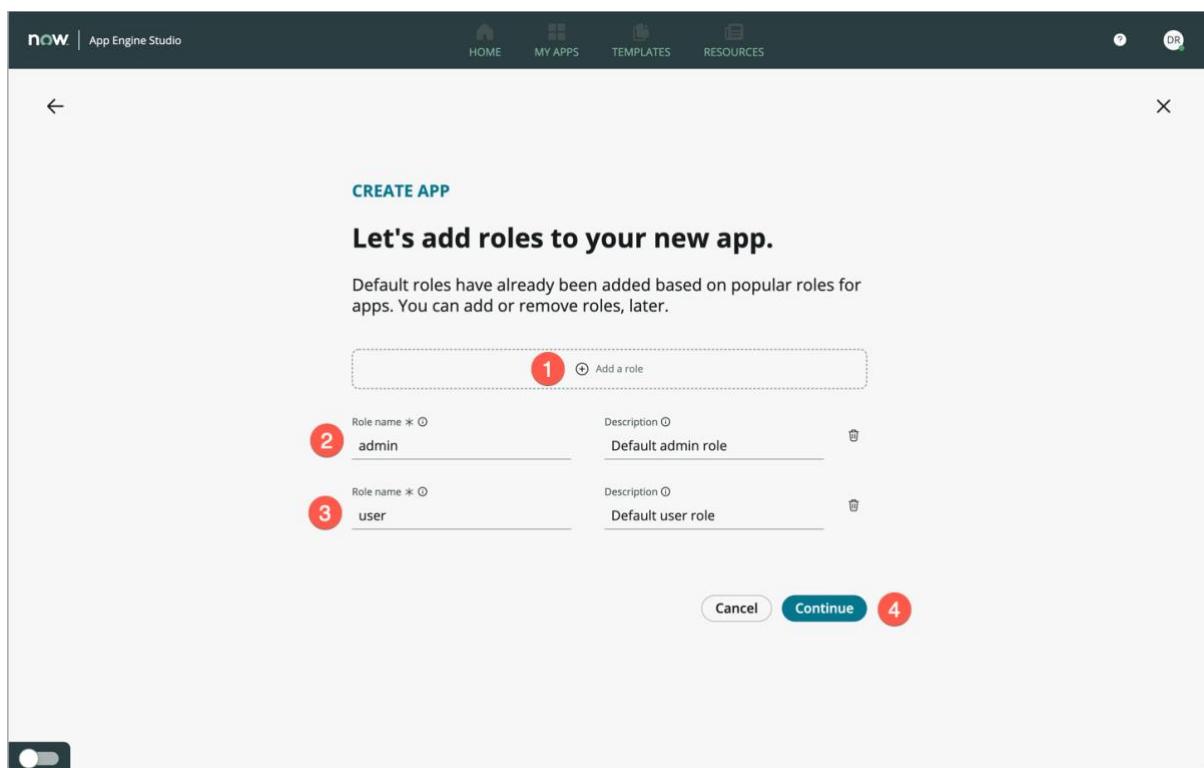
Note:

This is an App-specific “admin” Role and is NOT the same as the “System Administrator” (admin) Role!

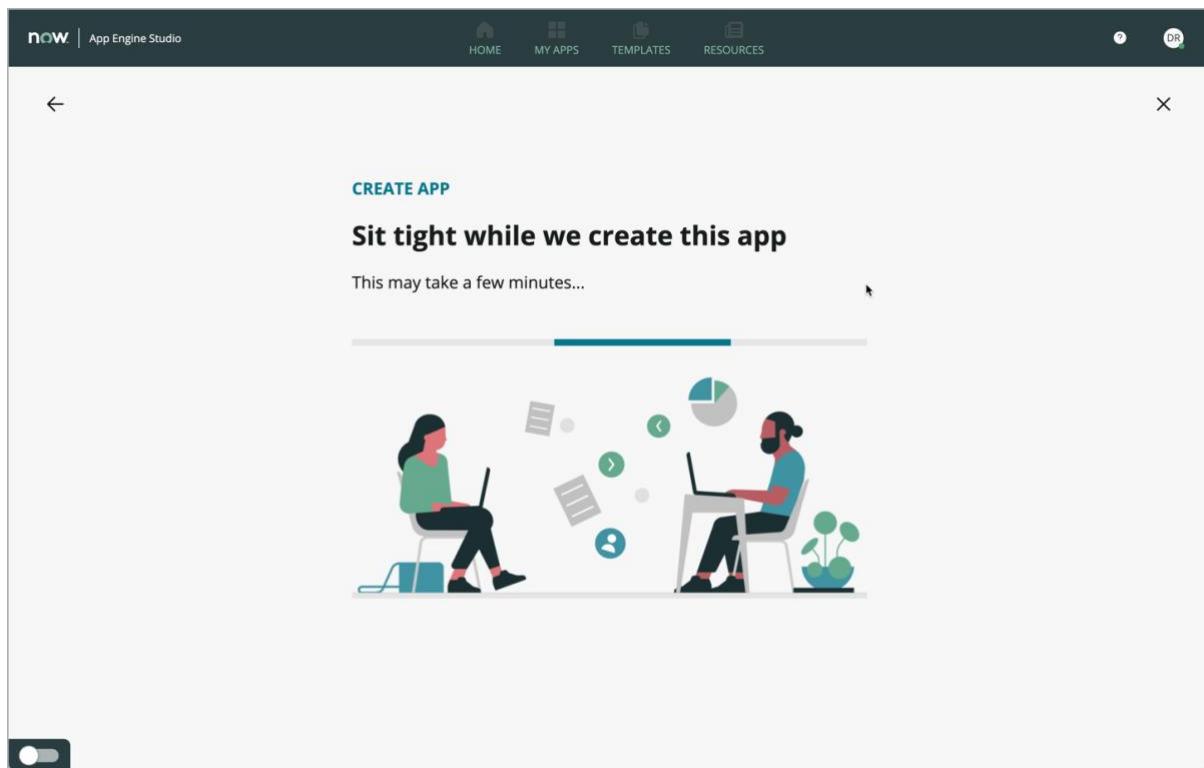
The “user” Role (3) is intended to use all or parts of the applications functions. Think about the Persona that your App is addressed to. It may make sense to create (at least) one Persona specific Role for your App.

You can add more new custom Roles to your App (which makes sense in the context of your App) by clicking “Add a role” (1)

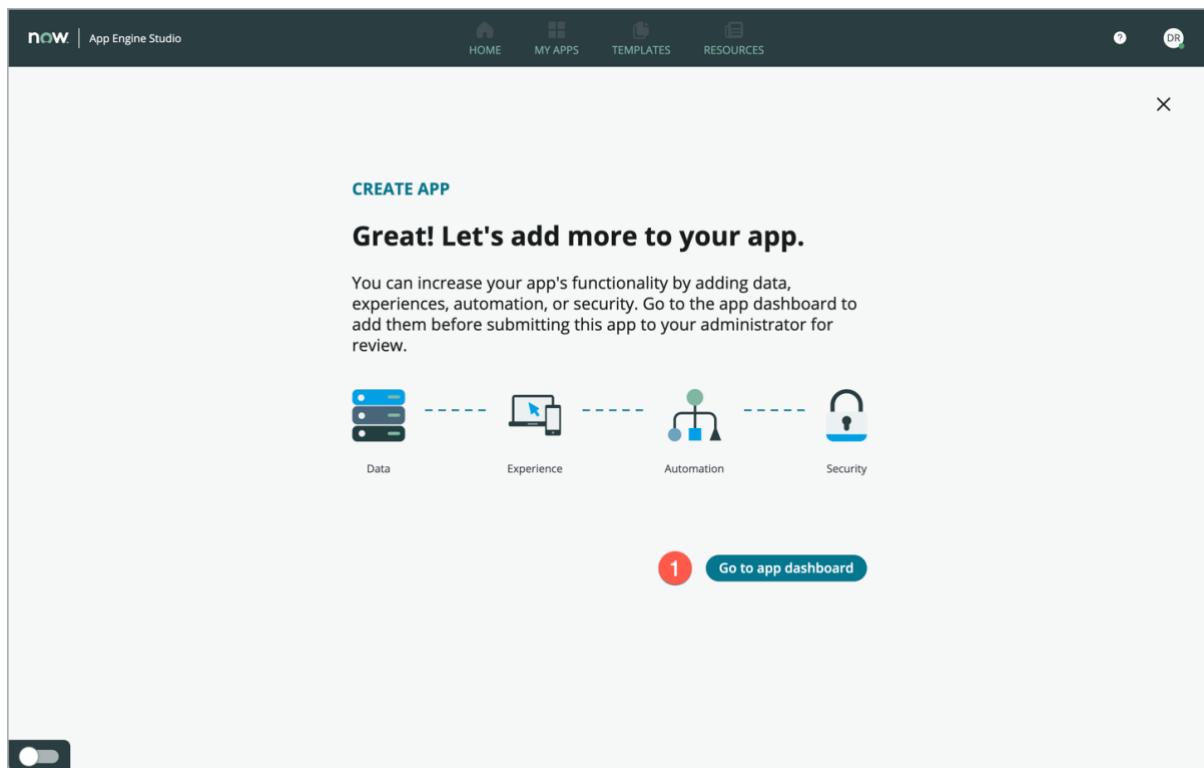
For our Lab, we do not focus on this topic, so we will keep the predefined Roles.
Click “Continue” (4) to move on.



App Engine Studio now creates a new App, which also gets its own (so called) Scope in ServiceNow. Scopes isolate Apps from each other, and Apps also allow to be deployed in separate packages during the Release cycle of your Application.



After a few moments, the new App is created in your ServiceNow instance and you can now navigate to the App's Dashboard by clicking "Go to app dashboard" (1).



Welcome to the dashboard of your Application in App Engine Studio. For this Lab, we will mainly focus on the three areas indicated below.

In the “**Data**” section, you can find “add” (1) and manage the database tables that are created as part of this Application.

In the “**Experience**” section, you can find “add” (2) and manage all User interfaces that are created as part of this Application.

In the “**Logic and automation**” section, you can find “add” (3) and manage all Computer interfaces. Automation and integration which is part of this Application.

The screenshot shows the ServiceNow App Engine Studio interface. At the top, there's a navigation bar with links for HOME, MY APPS (which is currently selected), TEMPLATES, and RESOURCES. Below the navigation bar, the main content area is titled "Release Upgrade Management". The content is organized into four sections:

- Data**: Shows 1 item to add. Description: "Store information in your app". Action: "+ Add".
- Experience**: Shows 2 items to add. Description: "Create interfaces for users to interact with the app". Action: "+ Add".
- Logic and automation**: Shows 3 items to add. Description: "Add automated workflows to improve productivity". Action: "+ Add".
- Security**: Shows 2 items. Description: "Control access to your app". Action: "See all (2)".

Each section has a dashed-line box around it, and each box contains an action button with a plus sign and the text "Add a table or upload a spreadsheet" or "Add an interface". There are also "Source control" and "Submit" buttons at the top right of the main content area.

2 Data and tables

Today, the process is completely run using an Excel file, which you can see in the screenshot below:

The screenshot shows an Excel spreadsheet with the following structure:

	A	B	C	D	E	F	G
	Datum	Zeitraum	Was	Wer	Status	Bemerkung	
1							
2	26.09.22	08 Uhr	Freigabe des Change im CAB/DB einholen	Frank	offen		
3	26.09.22	ganztags	Telko für Release Planung	Frank	offen		
4	26.09.22	ganztags	Intranet News erstellen	Frank	offen		
5	26.09.22	ganztags	Team Info versenden	Frank	offen		
6	28.10.22	ganztags	Auflistung der Artefakte für Upgrade	Frank	offen		
7	28.10.22	ganztags	MID Server Anpassungen prüfen	Frank	offen		
8	28.10.22	ganztags	Zugriffsrechte Rechenzentrum & Cloud	Sam	offen		
9	28.10.22	ganztags	Auflistung Testfälle für Produktivsetzung	Sam	offen		
10	28.10.22	ganztags	Auflistung Testuser, ggf. neue Testuser anlegen und zuweisen	Sam	offen		
11	28.10.22	ganztags	Terminplanung der Verantwortlichen	Sam	offen		
12	28.10.22	ganztags	Planung des Klos auf Testinstanz	Frank	offen		
13	29.10.22	ganztags	Abhängigkeiten zu anderen Changes auflisten	Christian, Sam, Frank	offen		
14	29.10.22	bis 16 Uhr	Aktualisierung der Intranet News	Frank	offen		
15	29.10.22	9 - 18 Uhr	Automatische Jobs stoppen	Frank	offen		
16	29.10.22	9 - 18 Uhr	Installierte Plug-Ins aktualisieren	Frank	offen		
17	29.10.22	20 Uhr	Info an CAB über Status	Frank	offen		
18	29.10.22	20 Uhr	Zugänge zum System sperren	Frank	offen		
19	29.10.22	02-06 Uhr	Major Release Upgrade ServiceNow durchführen	Frank	offen		
20	29.10.22	08 Uhr	Team Abstimmung zum Abschließen des Release Upgrade	Frank, Sam	offen		
21	29.10.22	08 - 09 Uhr	Notwendige LIVE System Tests - Production Readiness	Christian, Sam, Frank	offen		
22	29.10.22	08 - 09 Uhr	System Log und Release Logs prüfen	Christian, Sam, Frank	offen		
23	29.10.22	08 - 09 Uhr	Manuelle Anpassungen durchführen	Christian, Sam, Frank	offen		
24	29.10.22	08 - 09 Uhr	Automatische Jobs wieder starten	Christian, Sam, Frank	offen		
25	29.10.22	08 - 09 Uhr	Zugriffsrechte wieder einräumen	Christian, Sam, Frank	offen		
26	29.10.22	08 - 09 Uhr	Testbenutzer-Zugriff für Test Phase freigeben	Christian, Sam, Frank	offen		
27	29.10.22	08 - 09 Uhr	ITX Prozesse Test-Drive / Review	Christian, Sam, Frank	offen		
28	29.10.22	08 - 09 Uhr	manuelle Datenanpassungen tätigen	Christian, Sam, Frank	offen		
29	29.10.22	09 Uhr	Verteilung Testaufgaben	Team	offen		
30	29.10.22	09 - 12 Uhr	Abstimmung über Test-Ziel und Zeitrahmen	Team	offen		
31	29.10.22	12 - 13 Uhr	Automationen und Jobs Test	Sam, Frank	offen		
32	29.10.22	12 - 13 Uhr	UI Tests	Sam, Frank	offen		
33	29.10.22	12 Uhr	Integrationstests	Team	offen		
34	29.10.22	12 - 13 Uhr	Protokoll Zusammenstellung	Team	offen		
35	29.10.22	13 Uhr	Release Status feststellen	Team	offen		
36	29.10.22	im Anschluss	Zugang zu LIVE System freigeben	Frank	offen		
37	29.10.22	im Anschluss	Testbenutzer-Zugriff aus Test Phase sperren	Frank	offen		
38	29.10.22	im Anschluss	Informal an Stakeholder	Frank	offen		
39	29.10.22	im Anschluss	Kommunikation Intranet	Frank	offen		
40	29.10.22	im Anschluss	Change im System protokollieren und abschließen	Frank	offen		
41	29.10.22	15 - 18 Uhr	Rücksicherung Clone	Christian, Sam, Frank	offen		
42	30.09.21	09 - 12 Uhr	Test der Instanz nach Rollback	Alle	offen		
43	02.10.22	7 - 9 Uhr	Go Live Quick-Check	Frank, Sam	offen		
44	02.10.22	ab 9 Uhr	Go Live Stand-by Support	Team	offen		

At the bottom of the Excel interface, there are buttons for Blueprint, Go Live Plan, and a progress bar indicating Average: 44818,2, Count: 51, Sum: 448182, and a zoom level of 115%.

This Excel file is used for exactly ONE Release Upgrade process. That means, that we will need a new Excel file for each Release Upgrade Process. In fact, the Excel file is set up for the PROCESS of one Release and contains a number of Tasks that need to be worked on to reach the target (to Release the Upgrade successfully in time).

For the App, that we are going to build, we want to make it possible to drive any number of Upgrades, because Upgrades happen periodically (e.g. bi-annually like for ServiceNow).

Let's review the data structure, that we want to use for the App. We will work with three database tables.

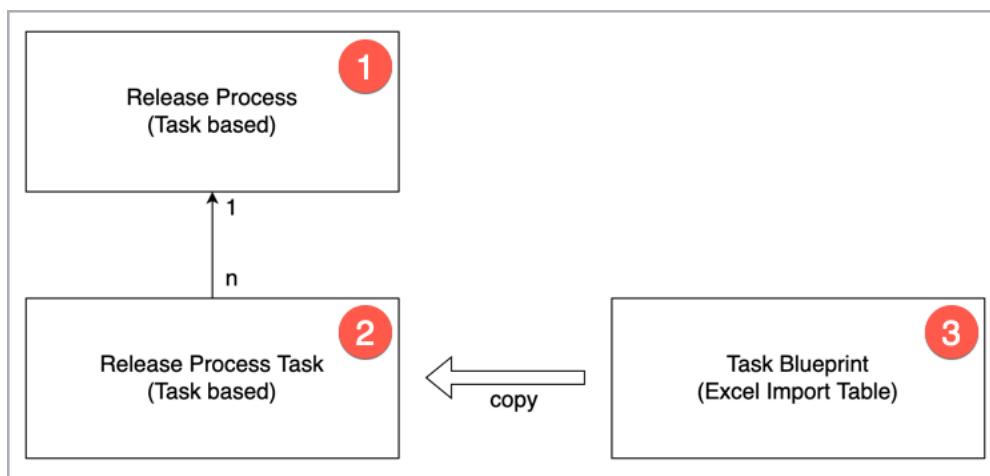
The first table "**Release Process**" (1) is the level of the today's Excel file itself. There will be ONE data row for each Release Upgrade Process, which will be managed by the App.

The second table "**Release Process Task**" (2) is the level of the Tasks inside today's Excel file, where all separate Tasks are listed and assigned to individuals for fulfillment. The arrow from the "Release Process Task" up to the "Release Process" indicates, that each one "1" Release Process can contain any number of "n" Release Process Tasks.

Because each Release Process for a given App may follow the same (or at least a similar) schema, we do not want to capture all Tasks for each Release Process from scratch.

Therefore, we create a "**Task Blueprint**" (3) table, which holds the steps (tasks), which need to be used for each Release Process.

For the App, we want to allow to make a copy of the list of Blueprint Tasks to new "Release Processes" and use them as a template.



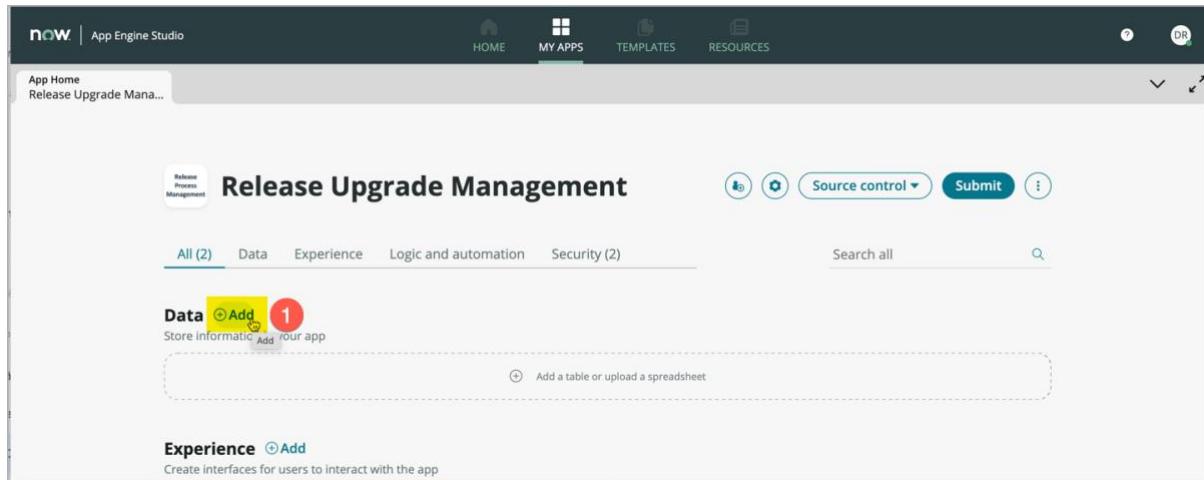
2.1 Exercise #2 – Create the database tables

In this exercise, we will create the table “**Release Process**” and “**Release Process Task**” shown in the diagram above.

We will create both as tables **extended from the “task” table**. We will see later that there are great benefits by extending tables, and we will also review the benefits from using the main and very important “task” table in ServiceNow.

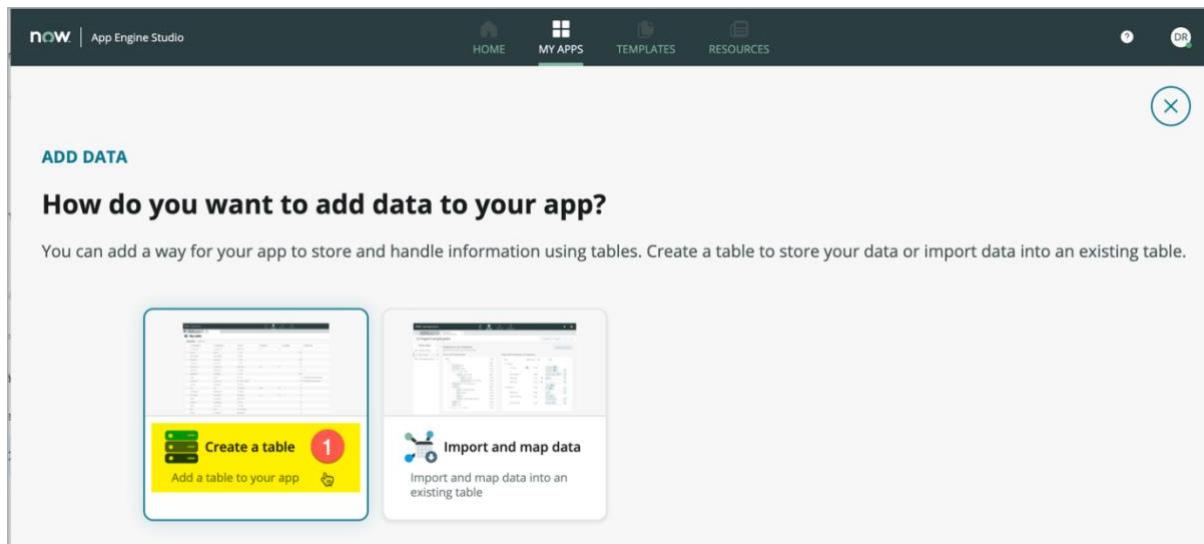
2.1.1 Create the “Release Process” table

On the Dashboard of your App, click “Add” (1) in the “Data” section.



The screenshot shows the ServiceNow App Engine Studio interface. At the top, there's a navigation bar with links for HOME, MY APPS, TEMPLATES, and RESOURCES. Below the navigation, the 'Release Upgrade Management' section is active. In the 'Data' section, there's a prominent yellow 'Add' button with a red circle containing the number '1', indicating a new item. A tooltip says 'Store information Add to your app'. Below this, there's a placeholder text 'Add a table or upload a spreadsheet'. The 'Experience' section is partially visible below, with its own 'Add' button. At the bottom right of the screen, there's a small circular icon with an 'X'.

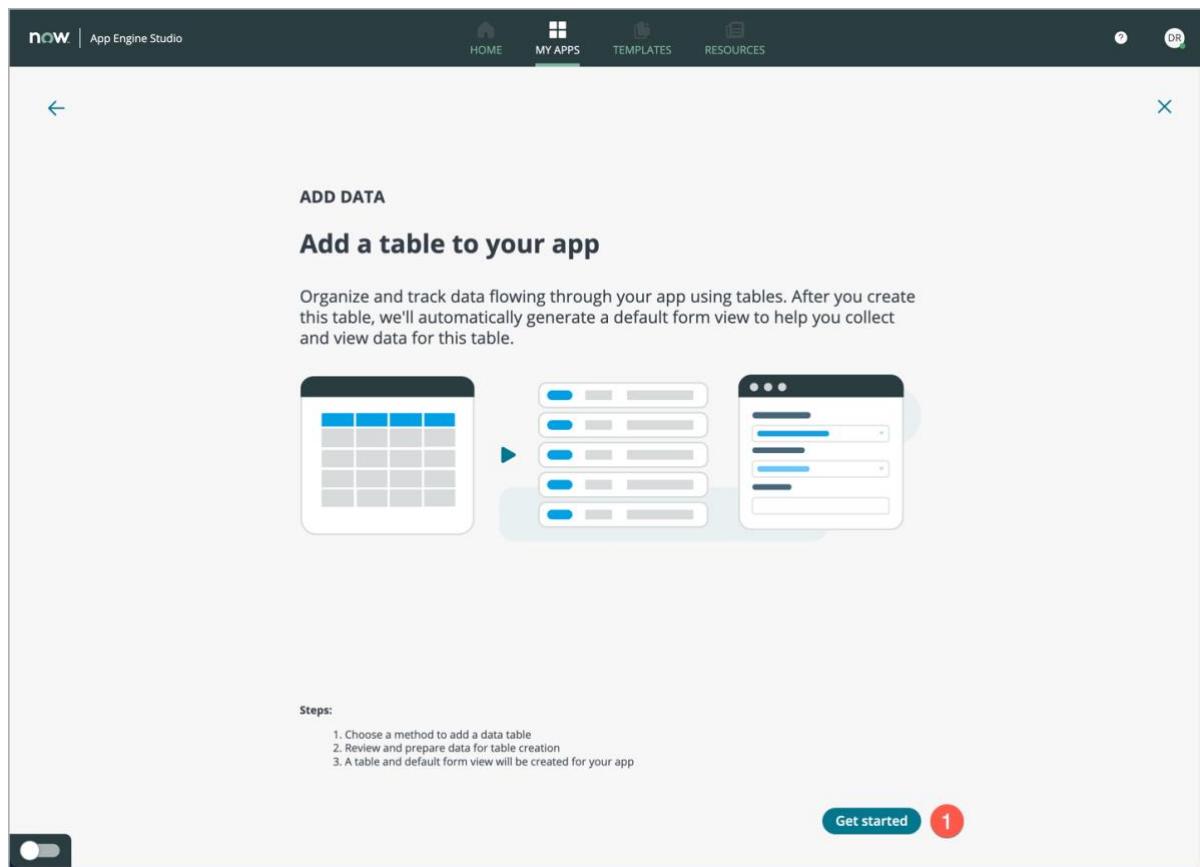
Select the left card “Create a table” (1).



The screenshot shows a modal window titled 'ADD DATA'. The question 'How do you want to add data to your app?' is displayed. Two options are presented: 'Create a table' (which is highlighted with a green border and has a red notification badge '1') and 'Import and map data'. Below each option is a brief description: 'Create a table' says 'Add a table to your app', and 'Import and map data' says 'Import and map data into an existing table'. There is a close button 'X' in the top right corner of the modal.

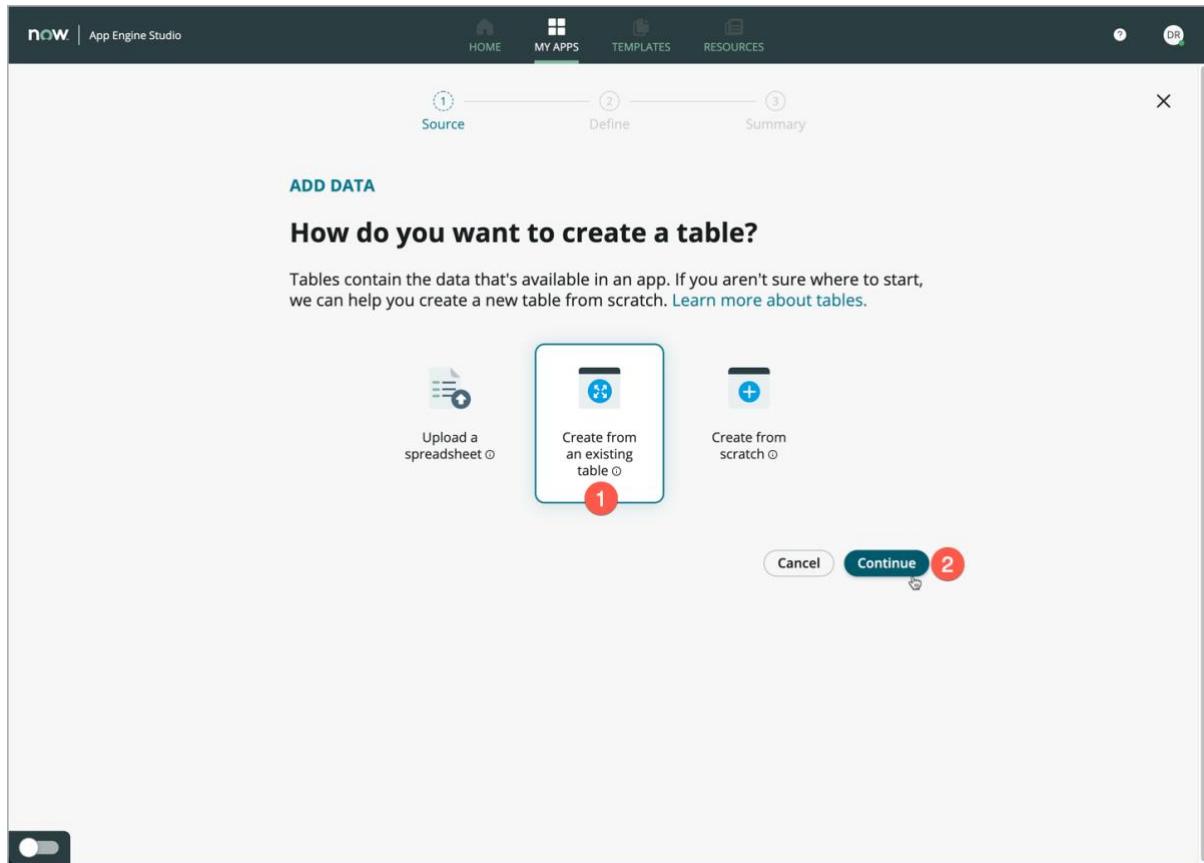
On the next screen, click “**Get started**” (1).

Note: If the “Get started” Button is not visible, scroll down the screen a bit.



Now, select the middle card “**Create from an existing table**” (1) and click “Continue” (2).

This option is used to build logic on top of existing database tables and its associated logic.



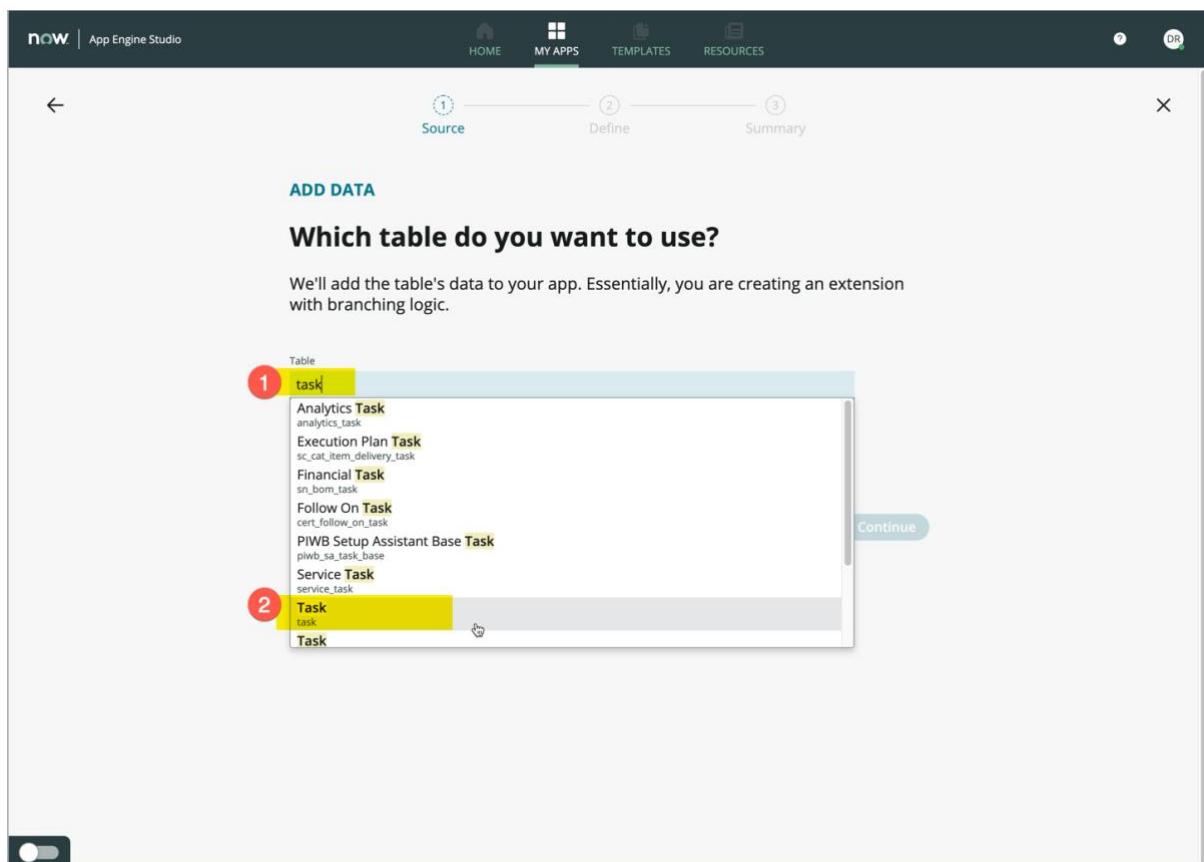
In the next step, you can select which table will be the base to be extended for your new table. Click the “Table” field (1) to open the dropdown and type “task” (1) in the blue field above the dropdown. This filters the list of shown tables to all tables containing “Task” in their name.

Note:

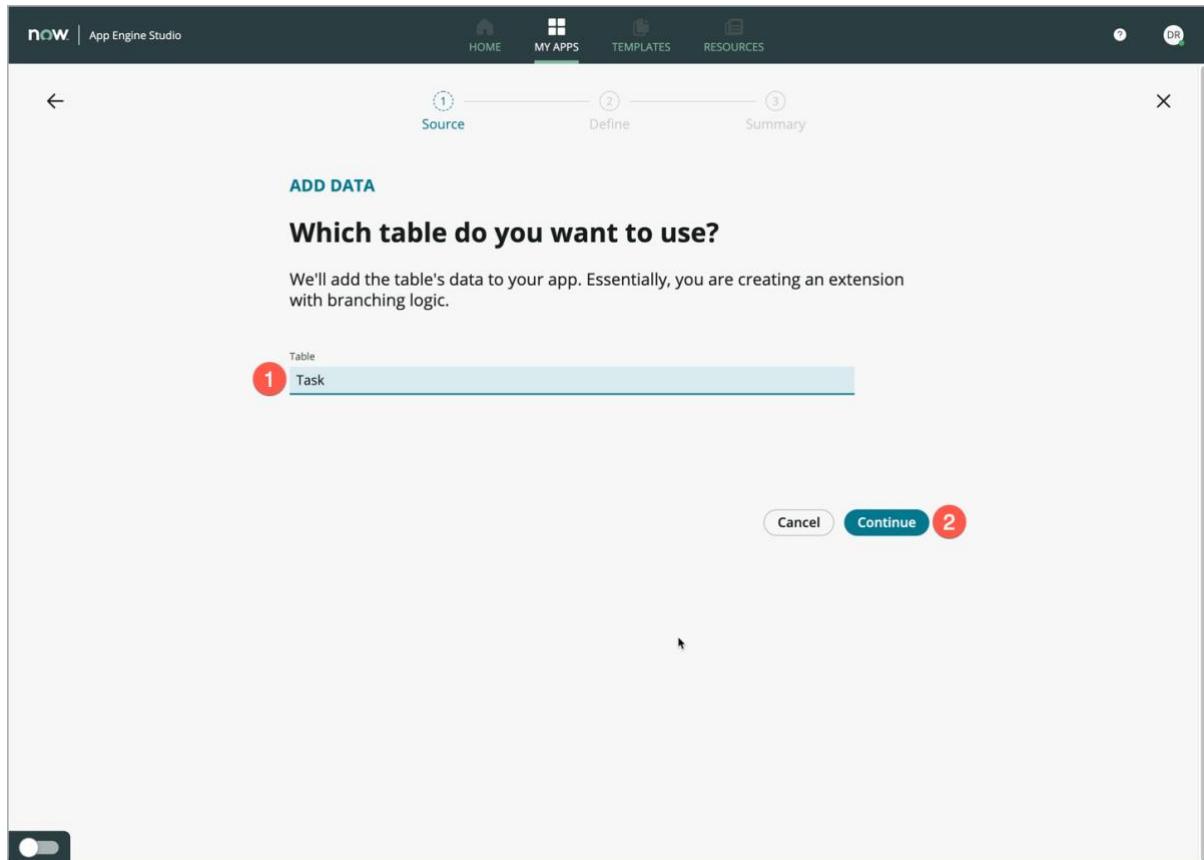
Scroll down if needed and select the “Task” table (**with the small “task” mentioned below – see screenshot**).

Note:

There are a lot of tables having “Task” in their name, but it is important for this lab to use the “Task” table as shown in the screenshot below.



After you selected the “Task” (1) table, click “Continue” (2) to move on.



Now, you need to name your table.

Enter the name “**Release Process**” in the “**Table label**” field (1), which is the name of the table shown to end-users. As soon as you leave this field, the “**Table name**” field (2) will be filled in automatically (that is the technical name of the table).

Note:

Do NOT change the “**Table name**” (2) field and just leave it as is!

Mark the “**Auto number**” Checkbox (3) and enter a valid “Prefix” (4) to be put in front of your Auto number. Use “**RPRC**” in this case.

Note:

Maybe a red annotation appears stating that the Prefix is invalid. In this case, change to focus of the field to (e.g.) “Table label” and review, if the red annotation disappears. If it does not disappear, change the value of the “Prefix” field and try again.

If all fields are filled in correctly, click “**Continue**” (5) to move on.

The screenshot shows the 'Define' step of the 'ADD DATA' process in the ServiceNow App Engine Studio. The top navigation bar includes 'HOME', 'MY APPS' (which is active), 'TEMPLATES', and 'RESOURCES'. Below the navigation, three steps are shown: 'Source' (with a checkmark), 'Define' (which is the current step), and 'Summary'. The main content area is titled 'Now, let's get more info about your new table' and instructs to 'Define the properties of your new table.' It contains the following fields:

- Table label ***: A text input field containing 'Release Process' (marked with a red circle and number 1).
- Table name ***: An auto-filled field showing 'x_snc_release_up_1_release_process' (marked with a red circle and number 2).
- Make extensible**: A checkbox that is not checked.
- Auto number**: A checkbox that is checked (marked with a red circle and number 3).
- Prefix ***: A text input field containing 'RPRC' (marked with a red circle and number 4).
- Starting number ***: A text input field containing '1000'.
- Number of digits ***: A text input field containing '7'.

At the bottom right are 'Cancel' and 'Continue' buttons, with 'Continue' being highlighted (marked with a red circle and number 5).

In the next step, you can configure which Roles of your Application will get which access to that new table.

For the “admin” Role, select all checkboxes (1) and for the “user” Role, select all checkboxes (2), except the “Delete” checkbox.

Click “Continue” (3) to move on.

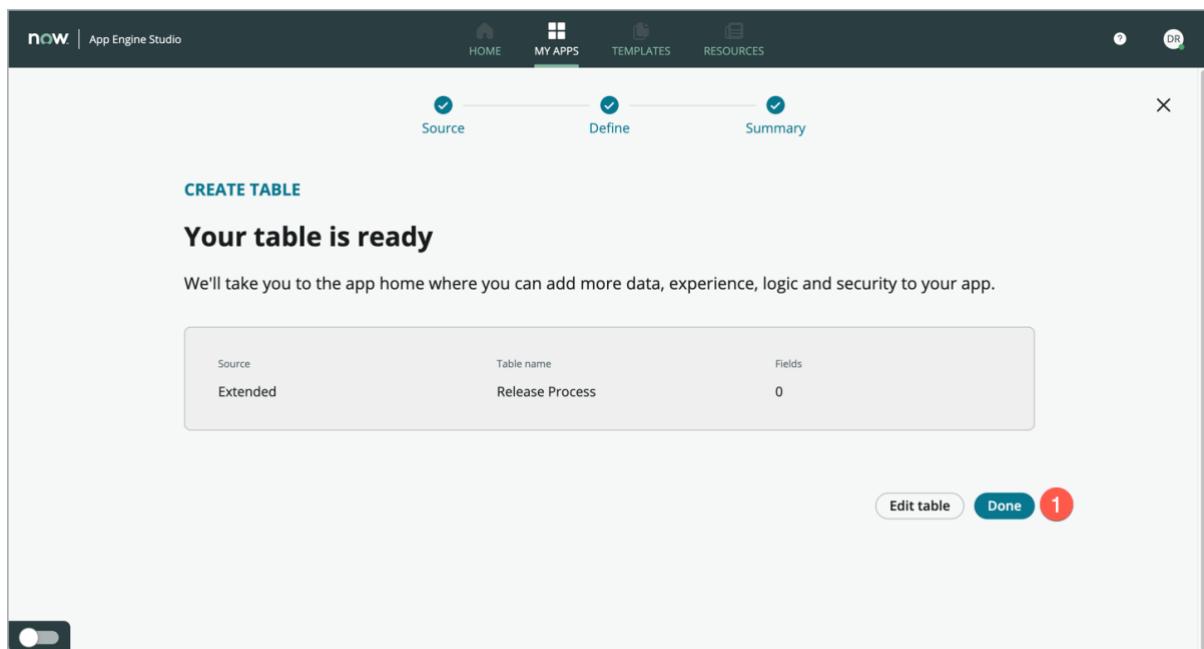
The screenshot shows the "Define" step of the "ADD DATA" process in App Engine Studio. It lists two roles: "admin" and "user". The "admin" role has checkboxes checked for All, Create, Read, Write, and Delete. The "user" role has checkboxes checked for All, Read, Write, and a tooltip "Disallow users to delete record in this table" points to the Delete checkbox, which is unchecked. A "Continue" button is highlighted with a red circle labeled "3".

Role Name	Description	All	Create	Read	Write	Delete
1 admin	Default admin role	<input checked="" type="checkbox"/>				
2 user	Default user role	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

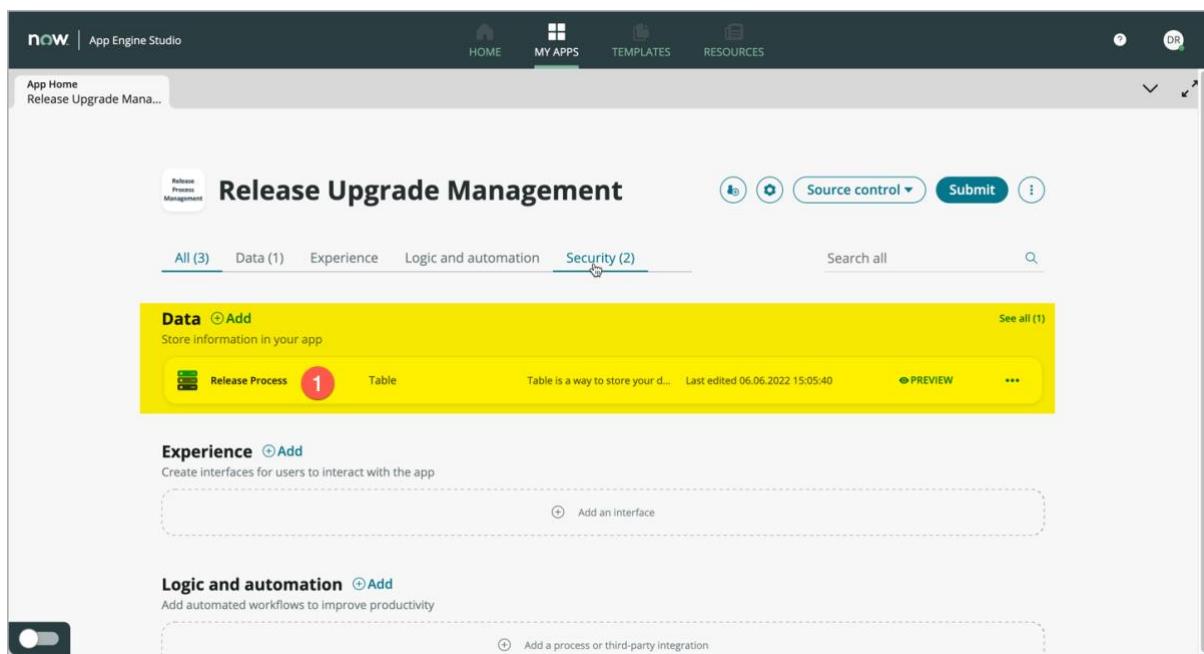
App Engine Studio will now create your table (extended from the “Task” table).

The screenshot shows the "Define" step of the "ADD DATA" process in App Engine Studio. It displays a message "Ok Dirk. Sit tight while we add this table to your app." and a note "This may take a few minutes...". A progress bar is shown at the top. Below it are four decorative icons: a person, a play button, a target, and a gear.

On the next screen, which appears after a moment, click “Done” (1).



Back on the Dashboard of your App, you can find the newly created “Release Process” (1) table below the “Data” section – see screenshot below:



Great, you created the first table “Release Process”!

2.1.2 Create the “Release Process Task” table

Now, let's do that once more and create the “**Release Process Task**” table, which will also be extended from the Task table.

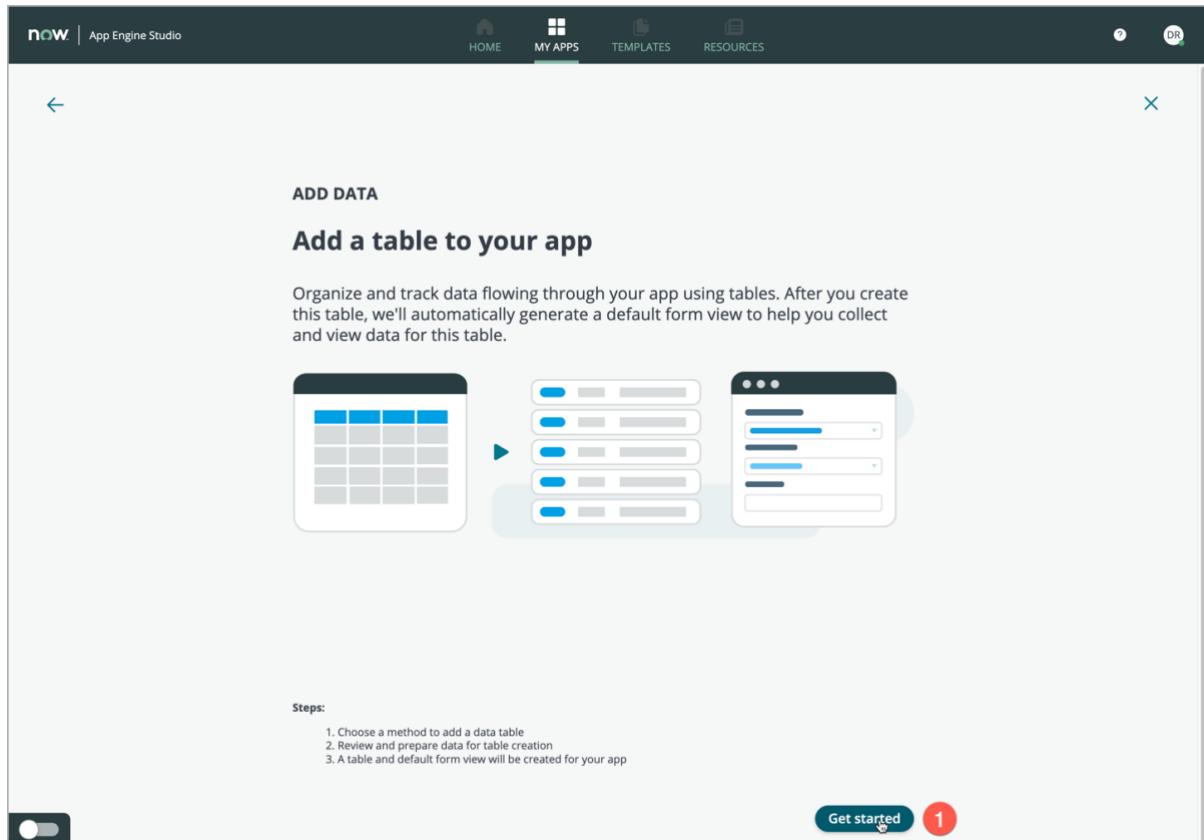
From the Dashboard of your Application, click “Add” (1) in the “Data” section, to start the table creation wizard for our second table – the “Release Process Task” table.

The screenshot shows the ServiceNow App Engine Studio interface. At the top, there are navigation tabs: HOME, MY APPS (which is selected), TEMPLATES, and RESOURCES. Below the tabs, the title "Release Upgrade Management" is displayed. Under the "Data" section, there is a card for "Release Process" (Table), which has a red circle with the number "1" indicating it is the active item. Other categories shown include "Experience" and "Logic and automation". A search bar and a "Source control" button are also present at the top right.

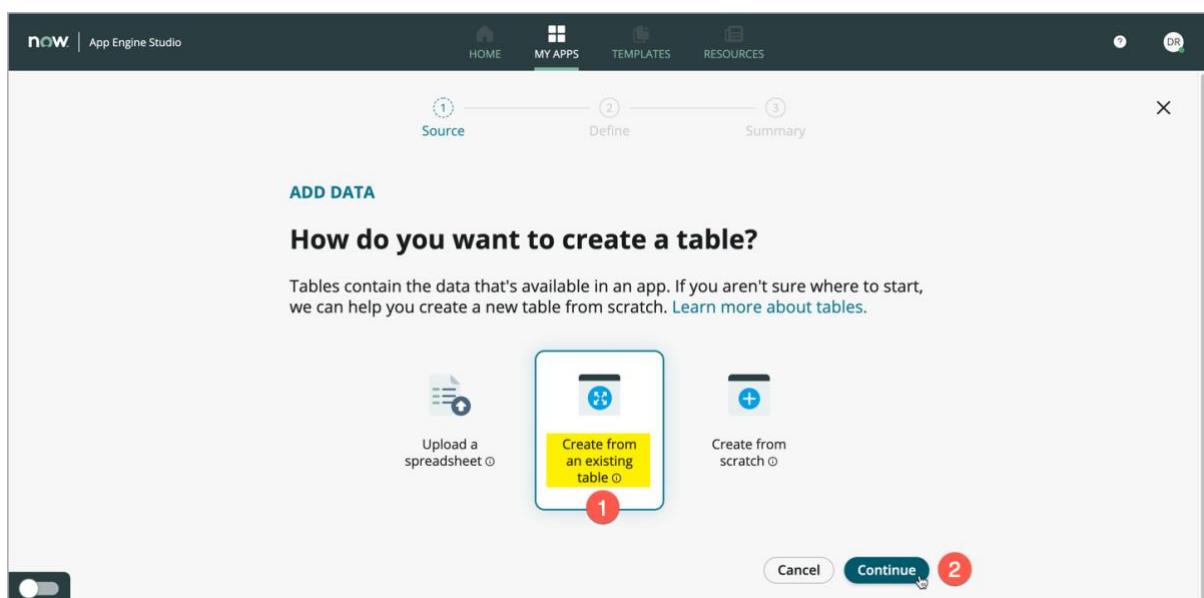
Again, click “Create a table”

The screenshot shows the "ADD DATA" wizard in ServiceNow. The title "How do you want to add data to your app?" is displayed. Two options are available: "Create a table" (selected, indicated by a yellow background and a red circle with "1") and "Import and map data". A message below states: "You can add a way for your app to store and handle information using tables. Create a table to store your data or import data into an existing table." A close button is located in the top right corner of the wizard window.

In the next screen, click “**Get started**”



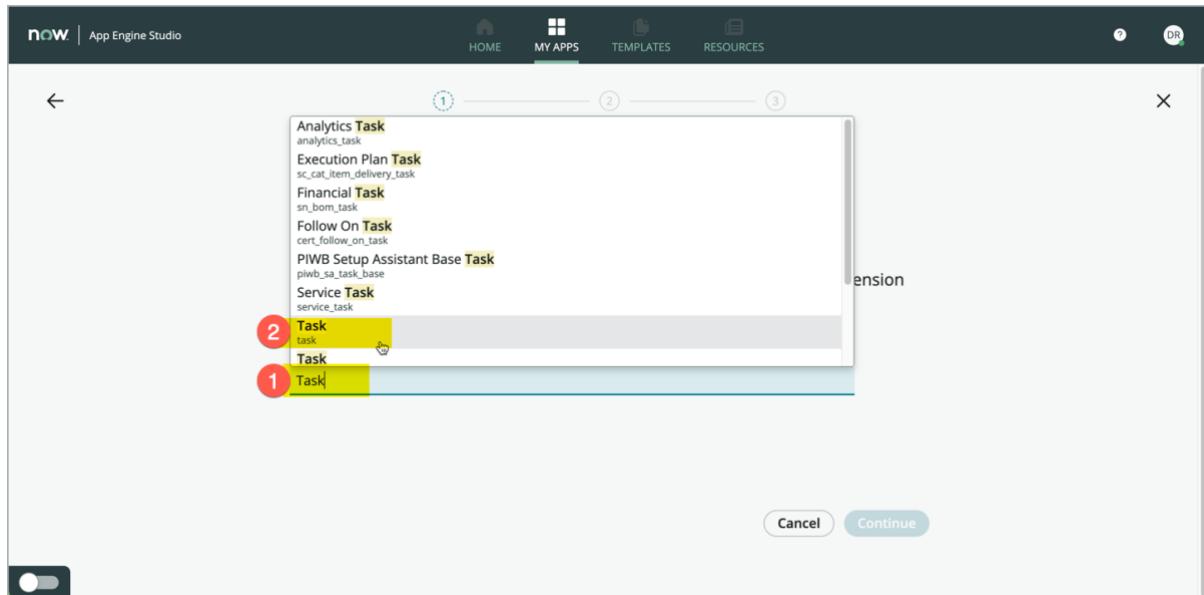
Like for the first table, click “**Create from an existing table**” (1) and click “**Continue**” (2).



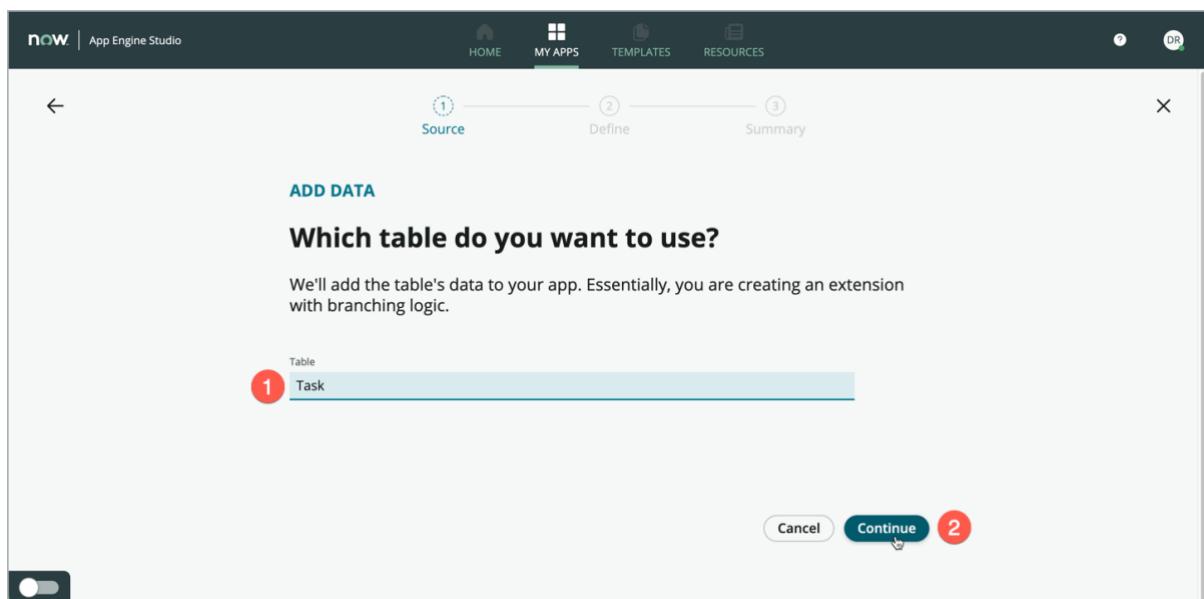
This table is also extended from Task (see screenshot below).

Note:

Do not expect to extend ALL tables from “Task” in the future. The “Task” tables serve as a “first class citizen”, if you want to have tables that stored data, which relates 1:1 to task based data, like a “Process Task” (or the overall “Release Process”, which is a huge Task effectively).



Select the “Task” (1) table (like shown in the screenshot) and click “Continue” (2).



Enter the “Table label” (1) as “Release Process Task” and **do not change** the “Table name” (2) field, which will be populated automatically.

Mark the “Auto number” (3) field and enter a valid “Prefix” (use “RPTSK” (4) here).

Click “Continue” (5) when done to move on.

ADD DATA

Now, let's get more info about your new table

Define the properties of your new table.

1 Table label * Ø Release Process Task	2 Table name * Ø x_snc_release_up_1_release_process
3 Auto number Ø <input checked="" type="checkbox"/>	Make extensible Ø
4 Prefix * Ø RPTSK	Starting number * Ø 1000
	Number of digits * Ø 7

Cancel Continue 5

Now, set the permissions for the Roles of the App (1) & (2), just like you did for the first table (see screenshot below) and hit “Continue” (3).

ADD DATA

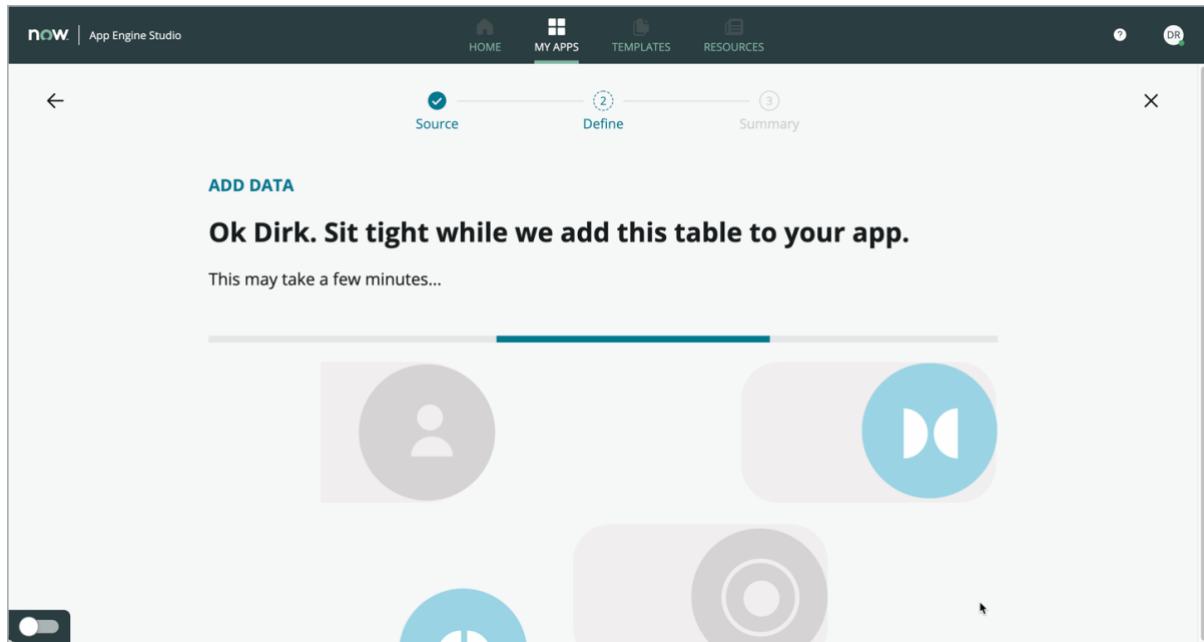
Let's add permissions to your table.

Create roles and define how much control each role has of this table. Note: at least one role needs to have 'read' access for you to 'preview' the data in your table.

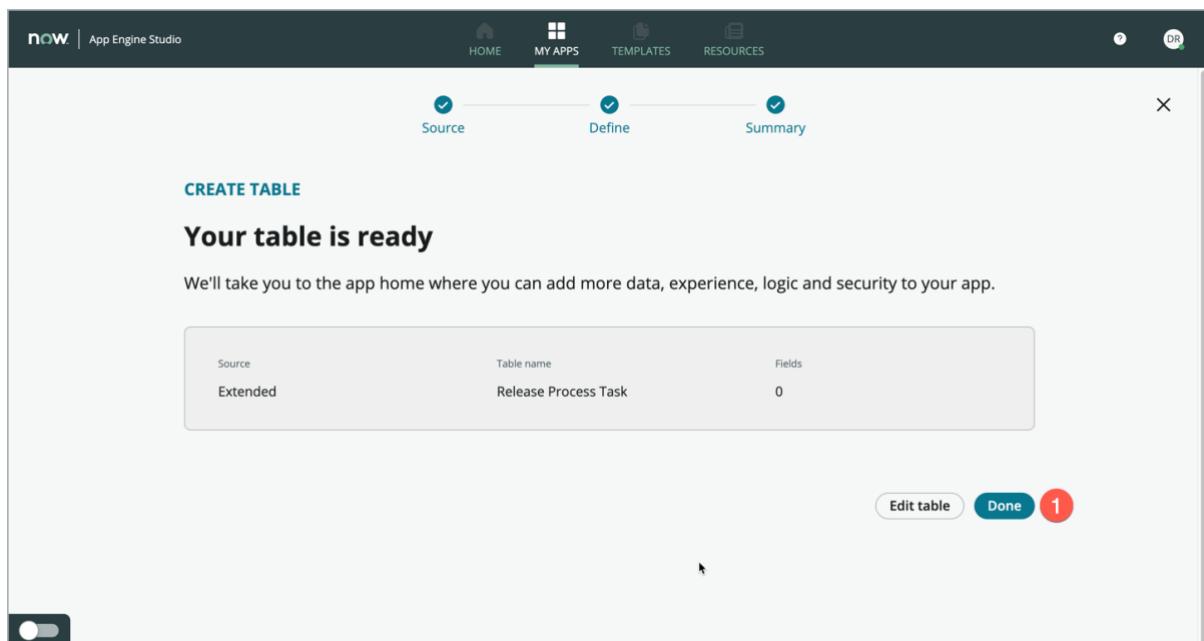
Role Name Ø	Description Ø	All	Create	Read	Write	Delete
1 admin	Default admin role	<input checked="" type="checkbox"/>				
2 user	Default user role	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Cancel Continue 3

ServiceNow will now create the table:



After the wizard finishes, click “**Done**” (1).



Find your newly created table now also under the “Data” section on the Application Dashboard:

The screenshot shows the ServiceNow App Engine Studio Application Dashboard. At the top, there are navigation links: HOME, MY APPS, TEMPLATES, and RESOURCES. Below the navigation bar, the title "Release Upgrade Management" is displayed, along with a "Source control" button and a "Submit" button. A "Data" section is visible, containing two entries: "Release Process Task" and "Release Process". The "Release Process Task" entry is highlighted with a red circle containing the number "1". The "Experience" and "Logic and automation" sections are also shown below.

App Home
Release Upgrade Mana...

now | App Engine Studio

HOME MY APPS TEMPLATES RESOURCES

Release Upgrade Management

All (4) Data (2) Experience Logic and automation Security (2)

Search all

Data [Add](#) See all (2)

Store information in your app

1 Release Process Task Table Table is a way to store your d... Last edited 06.06.2022 15:25:29 [PREVIEW](#) ...

Release Process Table Table is a way to store your d... Last edited 06.06.2022 15:05:40 [PREVIEW](#) ...

Experience [Add](#)

Create interfaces for users to interact with the app

Add an interface

Logic and automation [Add](#)

Add more fields to the table

Now, that the table is created, let's add one more field to the table.

Open Table Builder by clicking the “Release Process Task” table on its Name (see screenshot below):

The screenshot shows the ServiceNow App Engine Studio interface. The top navigation bar includes 'HOME', 'MY APPS' (which is highlighted), 'TEMPLATES', and 'RESOURCES'. Below the navigation is the 'Release Upgrade Management' application home screen. The 'Data' section is active, showing two entries: 'Release Process Task' (highlighted with a red circle labeled '1') and 'Release Process'. Both entries are described as 'Table' and note that they are used to store information. The 'Experience' and 'Logic and automation' sections are also visible but inactive.

Note:

Alternatively, you can click the three dots (1) on the right side of the table row and select “Edit” (2) - see screenshot below.

This screenshot is similar to the previous one, showing the ServiceNow App Engine Studio interface with the 'Release Upgrade Management' application. The 'Data' section is active, displaying the 'Release Process Task' and 'Release Process' tables. A context menu is open over the 'Release Process Task' row, with the 'Edit' option selected. Red circles labeled '1' and '2' indicate the location of the three-dot menu icon and the 'Edit' option respectively.

Table Builder opens on a new tab (1) in App Engine Studio. You can see that you are currently viewing the “Table” view (2). The main area of the screen (3) shows the fields of the table. As you can see, there are already several fields (in fact 70 fields – see bottom-left in the screenshot) in the table. Those are the fields which are “inherited” from the extended table “Task” (which we chose during table creation).

You cannot remove any of those inherited fields from your table here. But you can add your own fields to those already existing.

Selecting the Checkbox “Show non-extended table field” (5), you can filter the list of fields to those, which are added to this table AFTER extending from Task.

Mark the Checkbox (5) and move to the instructions below.

Column label *	Column name *	Type *	Reference	Max length	Default value	Display	Updated
Accounting period	sn_fin_accounting_period	Reference	Accounting Periods	32			03.04.2022 11:17:14
Active	active	True/False		40	true		16.03.2022 07:55:27
Activity due	activity_due	Due Date		40			16.03.2022 08:20:31
Actual end	work_end	Date/Time		40			16.03.2022 08:20:31
Actual start	work_start	Date/Time		40			16.03.2022 08:20:31
Additional assignee list	additional_assignee_list	List	User	4,000			16.03.2022 07:55:28
Additional comments	comments	Journal Input		4,000			16.03.2022 07:55:27
Approval	approval	String		40	not requested		16.03.2022 07:55:27
Approval history	approval_history	Journal		4,000			16.03.2022 07:55:27
Approval set	approval_set	Date/Time		40			16.03.2022 07:55:27

Showing 1-20 of 70 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70

In the next screenshot, you can see, that I marked the Checkbox (1), so that the only field left is the field “Sys ID”.

Info:

The Sys ID is a System field, which occurs in EVERY table in ServiceNow and holds a unique ID (a GUID) to identify each record in the table. ServiceNow adds this field for you, and you cannot delete it.

To add a new field to your table, click “**Add new field**” (2) and enter the “**Column label**” (3) in the field like shows in the screenshot below.

Column label *	Column name *	Type *	Reference	Max length	Default value	Display	Updated
Sys ID	sys_id	Sys ID (GUID)		32		<input type="checkbox"/>	06.06.2022 15:25:29
Stage	stage	String		40		<input type="checkbox"/>	

Hit the <ENTER> Key and click the row in the “Type” column

Column label *	Column name *	Type *	Reference	Max length	Default value	Display	Updated
Sys ID	sys_id	Sys ID (GUID)		32		<input type="checkbox"/>	06.06.2022 15:25:29
Stage	stage	String		40		<input type="checkbox"/>	

That opens a dropdown field, where you can select the field type (1) of your new column in your table. The field type defaults to “String”.

Change the Field to “**Choice**” by first typing “Choi” (1) in the upper field, and the selecting the “Choice” (2) entry from the dropdown that appears.

Column label *	Column name *	Type *	Reference	Max length	Default value	Display	Updated
Sys ID	sys_id	Sys ID (GUID)		32			06.06.2022 15:25:29
Stage	stage	1 Choi	2 Choice	40			

In the “**Choice Type**” field (1) that appears, select the first option “**Dropdown without – None --**” (2).

Column label *	Column name *	Type *	Reference	Max length	Default value	Display	Updated
Sys ID	sys_id	Sys ID (GUID)		32			06.06.2022 15:25:29
Stage	stage	Choice	Choice Type *	Dropdown without -- None -- (must specify a default ...)			

Remember / Review:

From our Excel file in the first Column, we found a total of four Stages of the process (“Preparation”, “Execution”, “Tests” and “Closing”).

Let's use those values to create Choices.

Enter “Preparation” into the “Choices” (1) field and click “Add” (2).

Note, that in the list below the “Choices” field, your entry is listed. There are two columns, because **for each choice**, there is a “Label” (1) (which is used to show to the end-user on the screen) and a “Value” (2) which will be stored in the database field for this choice selection.

Note:

The “Value” is written **ALL in lowercase**. This is important to review and set up accordingly. Mention, that the value of the choice in the database must be unique per choice field, and that the values are case-sensitive.

In the same way, enter the Choice Values for “Execution” (1), “Tests” (2) and “Closing” (3). Again **MAKE SURE**, that the values all are done in **lowercase**.

Click “Done” (4) to close the popup.

Column label *	Column name *	Type *	Reference	Max length	Default value	Display	Updated
Sys ID	sys_id	Sys ID (GUID)		32			06.06.2022 15:25:29
Stage	stage	Choice					

Showing 1-1 of 1

Records per page 20 ▾

1 2 Preparation preparation
Execution execution
3 Tests tests
4 Closing closing

Done 4

Click “Save” (1) to make the changes permanent

Column label *	Column name *	Type *	Reference	Max length	Default value	Display	Updated
Sys ID	sys_id	Sys ID (GUID)		32			06.06.2022 15:25:29
Stage	stage	Choice	4 Choices	40			

Showing 1-1 of 1

Records per page 20 ▾

1 Save

Congratulations, you just have created another table with an additional field.

2.1.3 Create the “Release Task Blueprint” table

For our App, we started from an Excel spreadsheet, where we can find data, that until today, was used to drive the process. (review the screenshot of the spreadsheet above in this document).

Remember, that in today's process, one Excel file (or at least the “Go Live Plan” Tab) always related to ONE Release Upgrade Process.

We now want to leverage the list of available Tasks as a template/blueprint for new Processes to be created.

Note:

Before we import the Excel file to our App, we want to “clean-up” this file a bit, and modify the columns to match our needs in the App.

Let's have a look at the modified version of the Excel file from above:

Stage	Active	On Day	Start Time	Duration	Order	Description	Responsible	Assigned to	Assignment Group	Status	Notes
Preparation	TRUE	0	08:00:00	9	100 Freigabe des Change im CAB/DB einholen	Frank	Frank	Release Admins	Open		
Preparation	TRUE	0	08:00:00	9	200 Telos für Release Planung	Frank	Frank	Release Admins	Work in progress		
Preparation	TRUE	0	08:00:00	9	300 Intranet News erstellen	Frank	Frank	Release Admins	Closed complete		
Preparation	TRUE	0	08:00:00	9	400 Team Info versenden	Frank	Frank	Release Admins	Open		
Preparation	TRUE	3	08:00:00	9	500 Auflistung der Artefakte für Upgrade	Frank	Frank	Release Admins	Open		
Preparation	TRUE	3	08:00:00	9	600 MID Server Anpassungen prüfen	Frank	Frank	Release Admins	Open		
Preparation	TRUE	3	08:00:00	9	700 Zugriffssrechte Rechenzentrum & Cloud	Sam	All Release Process	All Release Process	Open		
Preparation	TRUE	3	08:00:00	9	800 Auflistung Testfälle für Produktivsetzung	Sam	All Release Process	All Release Process	Open		
Preparation	TRUE	3	08:00:00	9	900 Auflistung Testuser, ggfl. neue Testuser anlegen und zuweisen	Sam	All Release Process	All Release Process	Open		
Preparation	TRUE	3	08:00:00	9	1000 Terminplanung der Verantwortlichen	Sam	Release Admins	Open			
Preparation	TRUE	3	08:00:00	9	1100 Abstimmung des Klienten auf Testfazilitäten	Frank	Frank	Release Admins	Open		
Preparation	TRUE	3	08:00:00	9	1200 Abstimmung der Stakeholder um Changes aufzufinden	Christian, Sam, Frank	Christian	Testers	Open		
Preparation	TRUE	4	08:00:00	9	1300 Aktualisierung der Intranet News	Frank	Frank	Release Admins	Open		
Execution	TRUE	4	09:00:00	9	1400 Automatische Jobs stoppen	Frank	Frank	Release Admins	Open		
Execution	TRUE	4	09:00:00	9	1500 Installieren Plugin-Assemblies	Frank	Frank	Release Admins	Open		
Execution	TRUE	4	20:00:00	3	1600 Info an CAB über Status	Frank	Frank	Release Admins	Open		
Execution	TRUE	4	20:00:00	3	1700 Zugriffe zum System sperren	Frank	Frank	Release Admins	Open		
Execution	TRUE	4	02:00:00	4	1800 Major Release Upgrade ServiceNow durchführen	Frank	Frank	Release Admins	Open		
Execution	TRUE	4	08:00:00	2	1900 Team Abstimmung zum Abschließen des Release Upgrade	Frank, Sam	Frank	Release Admins	Open		
Execution	TRUE	4	08:00:00	1	2000 Notwendige LIVE System Tests - Production Readiness	Christian, Sam, Frank	Christian	Testers	Open		
Execution	TRUE	4	08:00:00	1	2100 System Log und Release Logs prüfen	Christian, Sam, Frank	Christian	Testers	Open		
Execution	TRUE	4	08:00:00	1	2200 Manuelle Anpassungen durchführen	Christian, Sam, Frank	Christian	Testers	Open		
Execution	TRUE	4	08:00:00	1	2300 Automatische Jobs wieder starten	Christian, Sam, Frank	Christian	Testers	Open		
Execution	TRUE	4	08:00:00	1	2400 Zugriffssrechte wieder einräumen	Christian, Sam, Frank	Christian	Testers	Open		
Execution	TRUE	4	08:00:00	1	2500 Testbenutzer-Zugriff für Test Phase freigeben	Christian, Sam, Frank	Christian	Testers	Open		
Execution	TRUE	4	08:00:00	1	2600 TX mit Test Drive / Review	Christian, Sam, Frank	Christian	Testers	Open		
Execution	TRUE	4	08:00:00	1	2700 Qualitäts-Dokumentationen fertigen	Christian, Sam, Frank	Christian	Testers	Open		
Tests	TRUE	4	09:00:00	1	2800 Verteilung Testaufgaben	Team					
Tests	TRUE	4	09:00:00	1	2900 Abstimmung über Test-Ziel und Zeitrahmen	Team					
Tests	TRUE	4	09:00:00	1	3000 Automationen und Job Test	Sam, Frank	Sam	Release Admins	Open		
Tests	TRUE	4	12:00:00	1	3100 UI Tests	Sam, Frank	Sam	Release Admins	Open		
Tests	TRUE	4	12:00:00	1	3200 Integrationstests	Team					
Tests	TRUE	4	12:00:00	1	3200 Protokoll Zusammenstellung	Team					
Closing	TRUE	4	13:00:00	1	3400 Release Status feststellen	Team					
Closing	TRUE	4	12:00:00	1	3500 Zugang zu LIVE System freigeben	Frank	Frank	Release Admins	Open		
Closing	TRUE	4	12:00:00	1	3600 Testbenutzer-Zugriff aus Test Phase sperren	Frank	Frank	Release Admins	Open		
Closing	TRUE	4	12:00:00	1	3700 Informal an Stakeholder	Frank	Frank	Release Admins	Open		
Closing	TRUE	4	12:00:00	1	3800 Kommunikation Intranet	Frank	Frank	Release Admins	Open		
Closing	TRUE	4	12:00:00	1	3900 Change im System protokollieren und abschließen	Frank	Frank	Release Admins	Open		
Closing	TRUE	4	15:00:00	3	4000 Rücksicherung Clones	Christian, Sam, Frank	Christian	Release Admins	Open		
Closing	TRUE	5	09:00:00	3	4100 Test der Instanz nach Rollback	Alle					
Closing	TRUE	5	09:00:00	2	4200 Go Live Quick Check	Frank, Sam	Frank	Release Admins	Open		
Closing	TRUE	5	09:00:00	3	4300 Go Live Stand-by Support	Team					
Closing	FALSE	9	09:00:00	3							

Let's briefly discuss the meaning of the columns:

- The first column is renamed to “**Stage**” and now holds a value in each row.
 - Note, that you have a “SIMPLE” format in your Excel file before importing. That makes the import much more efficient.
- The “**Active**” Column is intended to define, if each given row is still active and should be used for new Processes to start. If the Row is marked as “Active = FALSE”, it should NOT be used and NOT be copied to new Release Processes.

- The “**On Day**” Column holds the number of days, the task becomes due, relative to the start day of the overall process. This makes the blueprint act “dynamic” for newly created Release Processes.
- The “**Start Time**” field holds the time, which should be used on the specific day for the “Expected start time” of each given task.
- The “**Duration**” field holds an estimated time (in hours), the task will take.
- The “**Description**” is a short description of the task itself to be completed
- The “**Responsible**” column list people involved in that task
- The “**Assigned to**” column hold the ONE person in charge to make sure this task will get completed.
- The “**Assignment Group**” column holds a group of people which is also accountable for this task. E.g. if the “Assigned to” person is not available, another person from the “Assignment Group” may take over the task.
- The “**Status**” column relates to the overall status of that given task
- The “**Notes**” field may hold more details for the task (which can be used as Description in the ServiceNow Task)

Let's import that Excel file now and create a new database table from it.

Navigate back to your App Dashboard (1) within App Engine Studio and click “Add” (3) in the “Data” section. Make sure, the “All” tab (2) is selected.

The screenshot shows the ServiceNow App Engine Studio interface. At the top, there are tabs for HOME, MY APPS, TEMPLATES, and RESOURCES. Below these, a navigation bar includes 'App Home', 'Release Upgrade Mana...', 'Data Table And Forms', and 'Release Process Task'. A yellow box highlights the 'Data' tab. A red circle with the number '1' is placed over the 'Create a table' button. The main content area is titled 'Release Upgrade Management' and contains three sections: 'Data', 'Experience', and 'Logic and automation'. The 'Data' section is active, showing two tables: 'Release Process Task' and 'Release Process'. Each table has a 'PREVIEW' button and a '...' button. Below the 'Data' section, there are buttons for 'Add an interface' and 'Add a connector or third-party integration'.

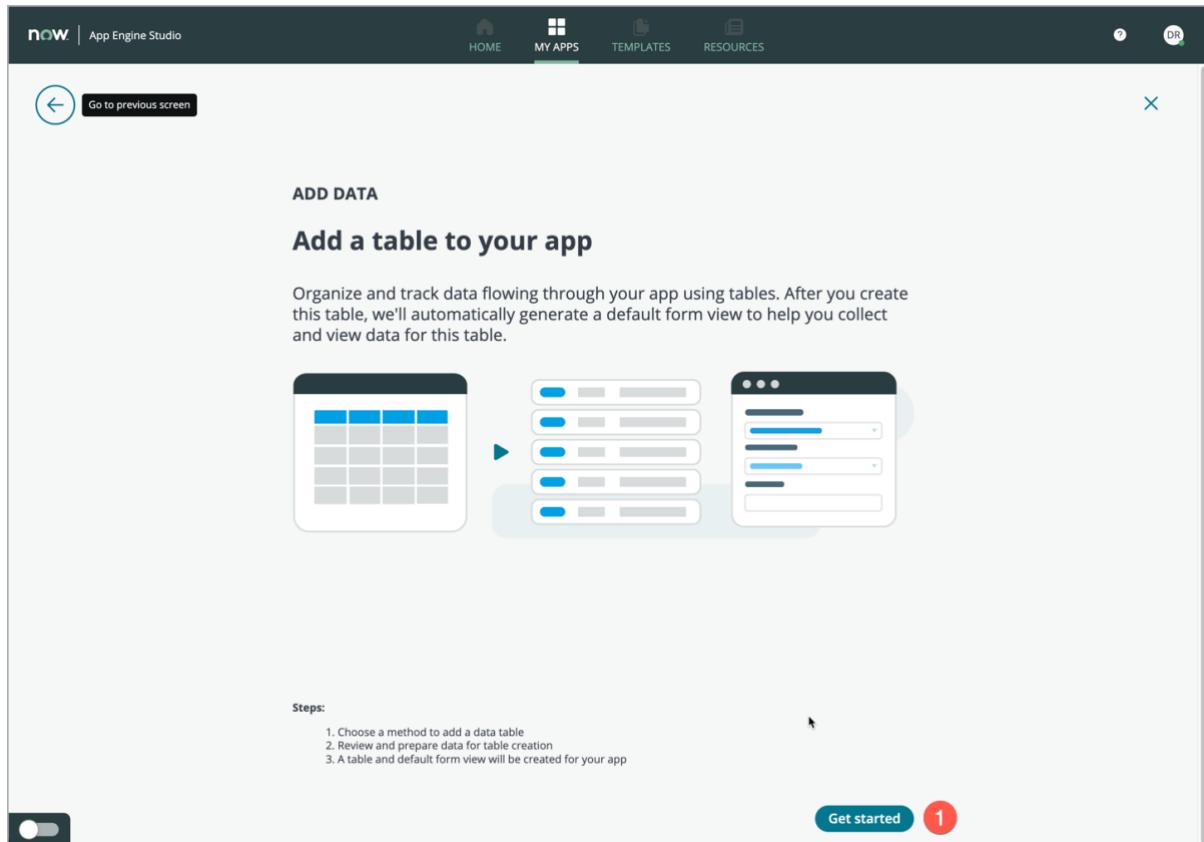
Once more, click “Create a table” (1)

The screenshot shows the 'ADD DATA' screen in the ServiceNow App Engine Studio. The title is 'How do you want to add data to your app?'. It asks, 'You can add a way for your app to store and handle information using tables. Create a table to store your data or import data into an existing table.' Two options are shown: 'Create a table' (highlighted with a yellow box and a red circle with '1') and 'Import and map data'. Both options have a '... More' button at the bottom.

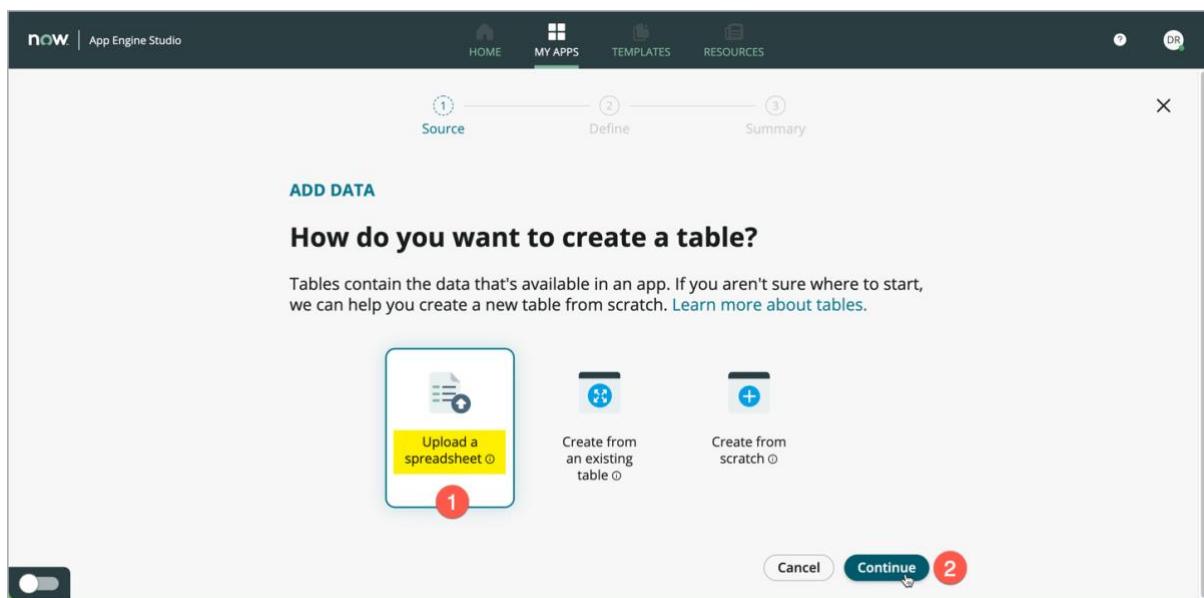
Note:

Even if “Import and map data” sounds applicable, that option is used to create imports without creating tables. For our exercise today, we want to create a new table.

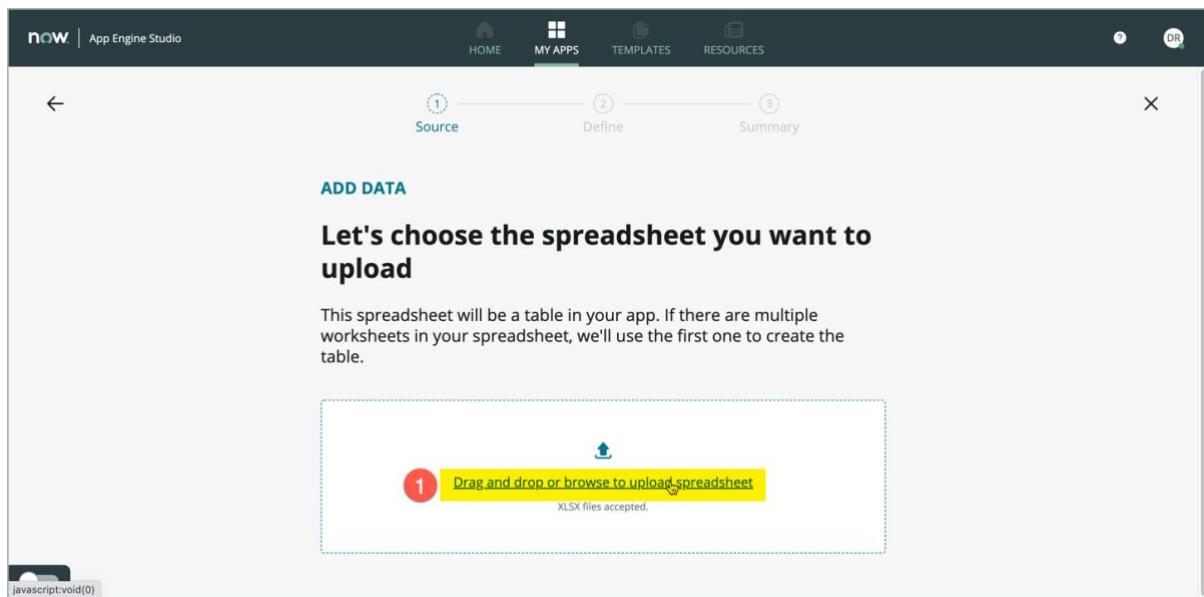
Click “**Get started**” (1). Scroll down a bit, if the button is not visible on your screen.



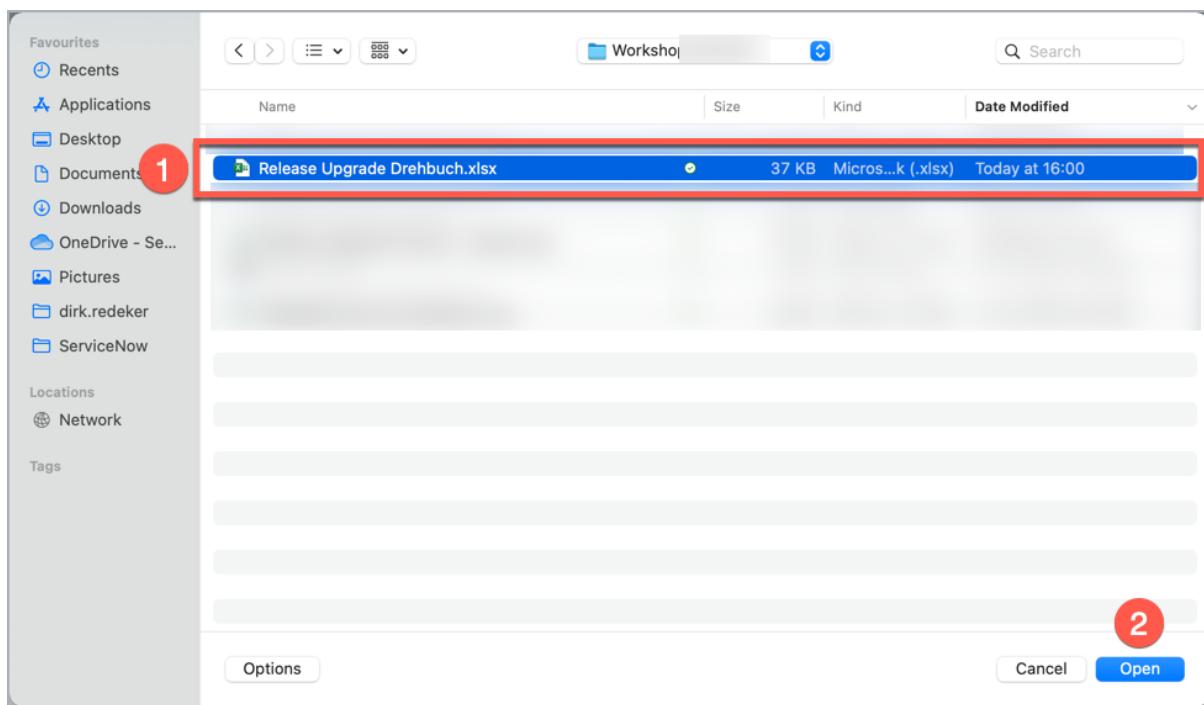
This time, select the left card “**Upload a spreadsheet**” (1) and click “**Continue**” (2)



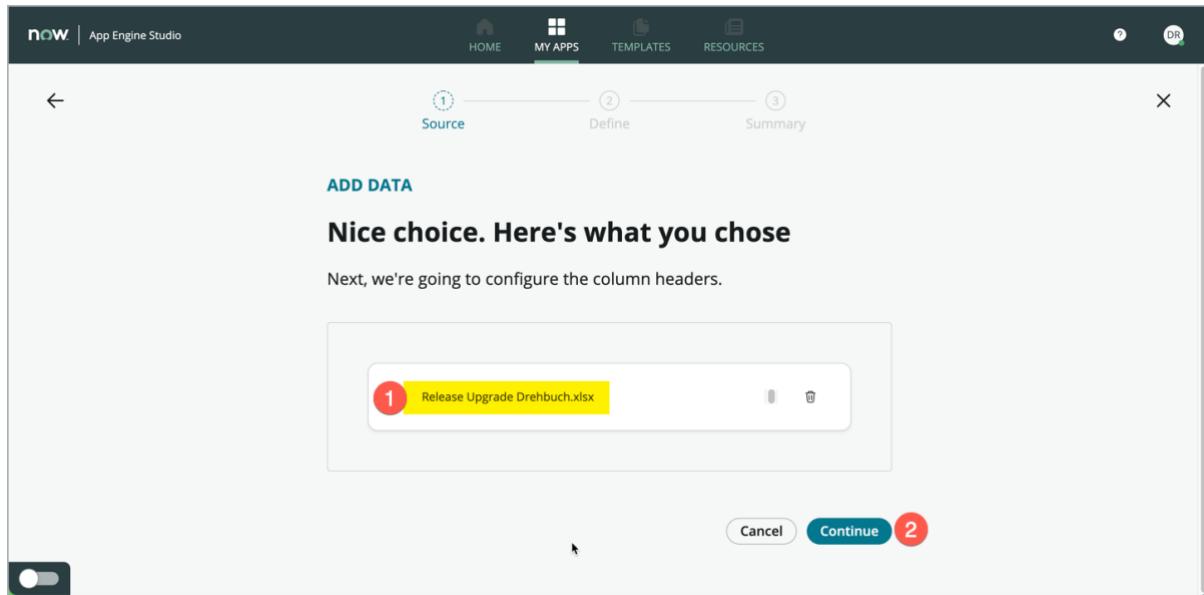
Now, select the Excel file from your local drive, by clicking the Link (1) shown in the screenshot below. This opens the file picker dialog on your local computer.



Find and select the Excel file (1) to be used for the import and click “Open” (2).



The filename will be mirrored in the dialog (1). Click “**Continue**” (2) to move on.

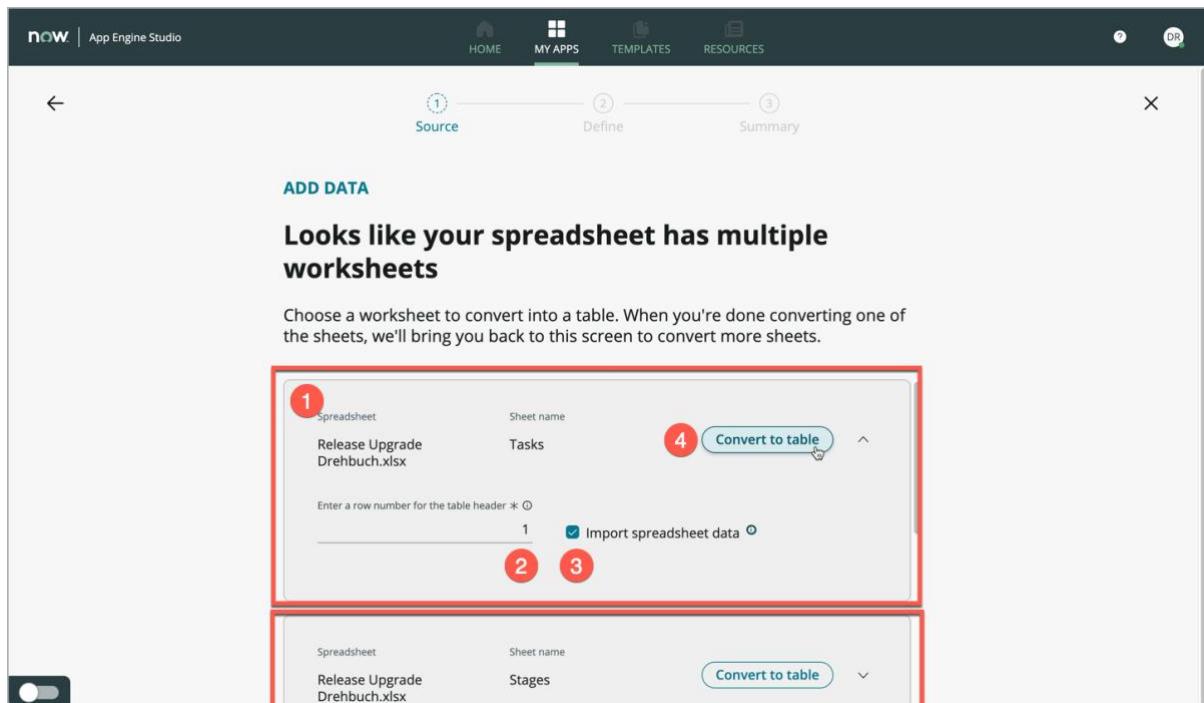


Note:

As soon as the Excel file you import, has more than one tab, there will be the same number of boxes shown in the next screen. For our use case, we only want to import the first tab (1).

Mark the “**Import spreadsheet data**” (3) Checkbox and review, that the field names will be derived from the first row (2) of the Excel file.

Click “**Convert to table**” (4) to move on.



ADD DATA

Converting the "Tasks" sheet into a table and preparing the column headers for review

The column headers will display as rows for you to review. You will be able to edit the details of each column.

In the next step, you can review the Columns and fields identified in the Excel spreadsheet.

Now it is time to easily adjust field types and sizes, as well as field names – if desired.

Click the “Type” dropdown of the “Status” field (1) – which was defaulted to a “String” type field – and Select “Choice” (2) from the List. This will define the new column of the field as dropdown as well.

BUILD DATA

Great! Here's the info we brought from your spreadsheet

Make sure you update any necessary field in the spreadsheet.

Field Label *	Field name *	Type *	Character limit *
Start Time	start_time	String	40
Status	status	Choice	
On Day	on_day	Integer	
Active	active	String	40

Scroll down and find the “**Active**” field (1). Click the “Type” dropdown (2) and select “True/False” (3). This will result in a **Checkbox style** user interface field.

The screenshot shows the ServiceNow App Engine Studio interface. In the 'BUILD DATA' section, there is a table of fields. The first row has 'Field Label *' set to 'Active', 'Field name *' set to 'active', and 'Type' set to 'Integer'. The second row has 'Field Label *' set to 'Stage', 'Field name *' set to 'stage', and 'Type' set to 'String'. A dropdown menu is open over the 'Type' field for the 'Stage' row, showing options: 'Select one', 'True/False' (highlighted with a red circle), 'Choice', 'Currency', 'Decimal', 'Email', 'Floating Point...', 'Date/Time', and 'Date'. The third row has 'Field Label *' set to 'Assignment Group', 'Field name *' set to 'assignment_group', and 'Type' set to 'String'. At the bottom right of the screen are 'Cancel' and 'Continue' buttons.

Same for the “**Stage**” field (1). Change the Type from “String” (2) to “**Choice**” (3):

This screenshot is similar to the previous one but focuses on the 'Stage' field. The 'Stage' field now has 'Type' set to 'True/False' (highlighted with a red circle). The dropdown menu for 'Type' is still open, showing 'String' (highlighted with a red circle) and 'Choice' (highlighted with a red circle and a cursor icon). The other fields remain the same: 'Active' is 'String' and 'Assignment Group' is 'String'.

Note:

Selecting the column type “Choice” will automatically populate the Choice options for you, by using all unique combinations/values found in the source spreadsheet file for that given column.

Change the “Assignment Group” field (1) from “String” type (2) to “Reference” type (3).

The screenshot shows the ServiceNow App Engine Studio interface. At the top, there are tabs for HOME, MY APPS, TEMPLATES, and RESOURCES. Below that, Source, Define, and Summary tabs are visible. The main area is titled "BUILD DATA" and contains the following fields:

- Field Label *: Assignment Group (highlighted with a red circle)
- Field name *: assignment_group (highlighted with a red circle)
- Type *: String (highlighted with a red circle)
- Character limit *: 40
- Field Label *: Duration
- Field name *: duration
- Field Label *: Responsible
- Field name *: responsible
- Field Label *: Order
- Field name *: order

A dropdown menu is open over the "Type" field, listing various options: HTML, Integer, Journal, Percent Com..., Phone Numb..., Price, Reference (highlighted with a red circle), String (selected), and URL.

For Database fields of the **Type “Reference”**, you need to define, to WHICH table the reference is defined. Therefore, you need to fill in the “**Reference table**” (1) field. From the List of tables, select the “**Group**” [**sys_user_group**] table.

Note:

The fastest way to find this table is by filtering the list of tables. Just type in (part) of the searched table name (1), and the list of tables in the dropdown list will be filtered automatically (2).

Make sure to exactly select the table name as shown in the screenshot below.

The screenshot shows the 'BUILD DATA' screen in ServiceNow App Engine Studio. At the top, there are tabs for 'Source', 'Define', and 'Summary'. Below this, the main area has a heading 'Great! Here's the info we brought over from your spreadsheet'. It displays four data fields: 'Assignment Group' (Field Label: 'Assignment Group', Field name: 'assignment_group', Type: 'Reference', Reference table: 'sys_user_group'), 'Duration' (Field Label: 'Duration', Field name: 'duration', Type: 'Integer'), 'Responsible' (Field Label: 'Responsible', Field name: 'responsible', Type: 'String', Character limit: 40), and 'Order' (Field Label: 'Order', Field name: 'order', Type: 'Integer'). A dropdown menu is open for the 'Reference table' field of the 'Assignment Group' row. The menu contains two items: 'Group' and 'Group Type'. The item 'Group' is highlighted with a yellow background and a red circle (1). The item 'Group Type' is also visible with a red circle (2). At the bottom right of the screen are 'Cancel' and 'Continue' buttons.

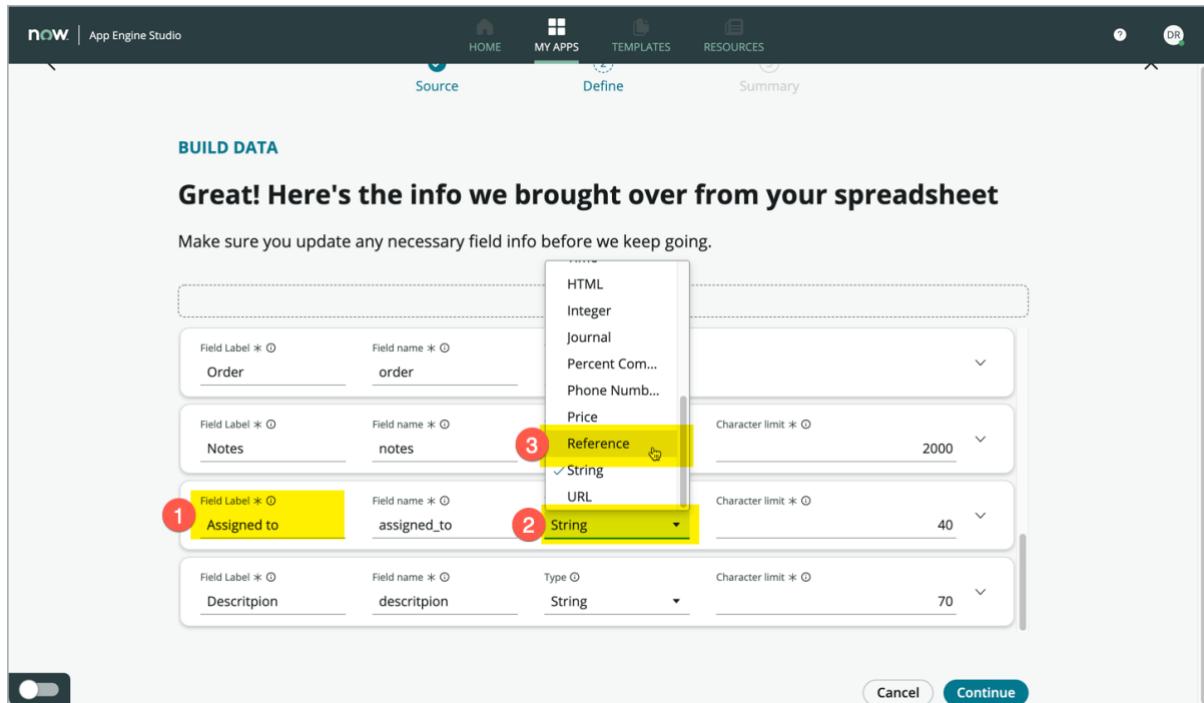
Change the field type of the “Duration” field (1) from “Integer” (2) to “Duration” (3).

The screenshot shows the 'Define' tab in ServiceNow App Engine Studio. Under 'BUILD DATA', there is a list of fields. The first field, 'duration', has its 'Field Label' set to 'Duration' (1), 'Field name' to 'duration' (2), and 'Type' set to 'Integer' (2). A dropdown menu is open over the 'Type' field, showing options like Decimal, Email, Floating Point..., Date/Time, Date, Duration (3), Time, HTML, and Integer. The 'Duration' option is highlighted with a red circle. To the right of the dropdown, there are 'Character limit' and 'Notes' fields.

Change the size of the “Notes” field (1) to “2000” characters in the right column (2).

The screenshot shows the 'Define' tab in ServiceNow App Engine Studio. Under 'BUILD DATA', there is a list of fields. The second field, 'notes', has its 'Field Label' set to 'Notes' (1), 'Field name' to 'notes', and 'Type' set to 'String'. The 'Character limit' field next to it is set to '2000' (2). Below this, there are other fields: 'order' (Type Integer, Character limit 40), 'assigned_to' (Type String, Character limit 40), and 'description' (Type String, Character limit 70). At the bottom right are 'Cancel' and 'Continue' buttons.

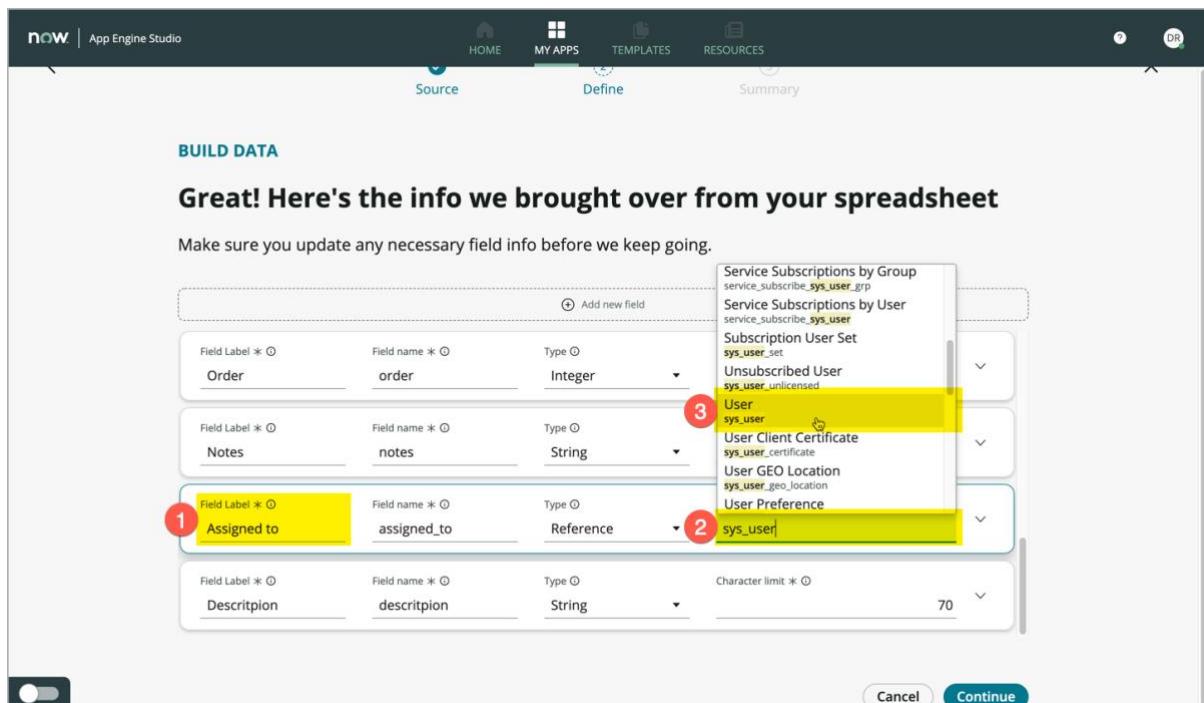
Change the field type of the “Assigned to” field (1) from “String” (2) to “Reference” (3)



And finally, set the **Referenced table** for the “Assigned to” field to the “User” [sys_user] table.

Note:

Find and use the table exactly as shown in the screenshot below, as there is a high number of tables containing “user”. Filter the list before scrolling it.



Expand the field size of the “Description” field (1) to “300” characters (2).

Field Label *	Field name *	Type	Character limit *
Order	order	Integer	
Notes	notes	String	2000
Assigned to	assigned_to	Reference	User
1 Description	description	String	300 2

Hit “Continue” to move on

Next, we name the table (like we did for the first two tables we created).

Set the “**Table label**” (1) to “Release Tasks Blueprint” and **don’t change the “Table name” (2) field.**

Mark the “**Auto number**” Checkbox (3) and set the “**Prefix**” to “RTB” (4).

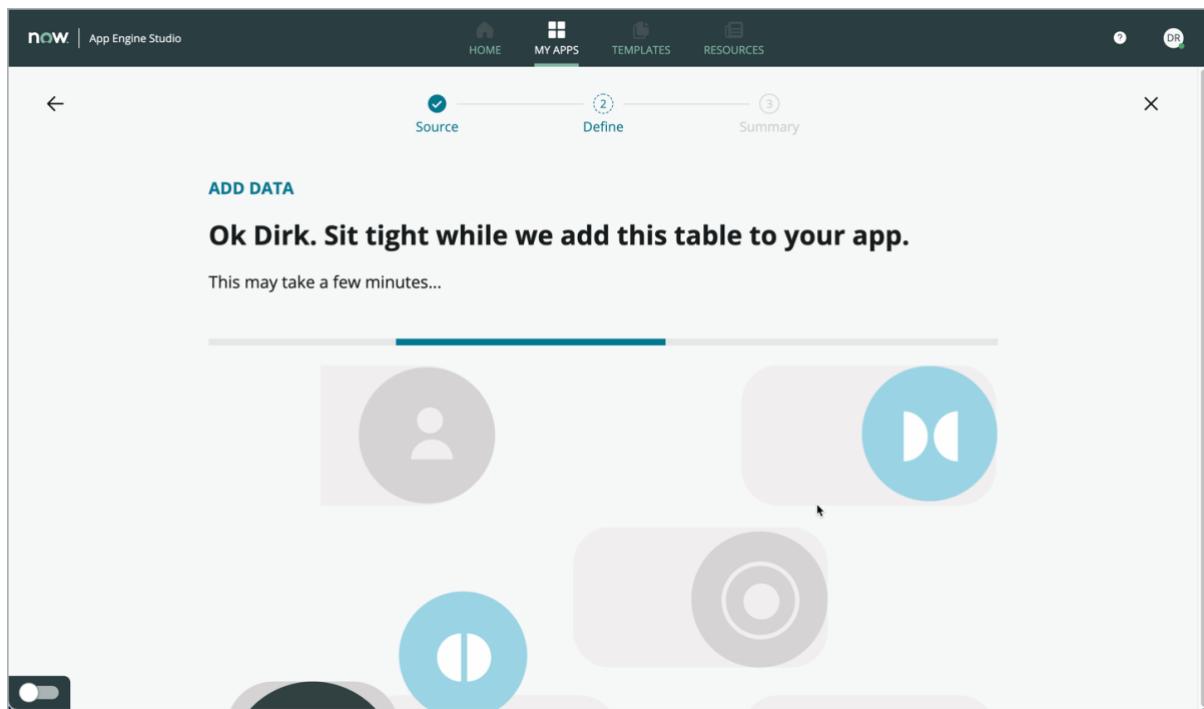
Click “**Continue**” (5) to move on.

The screenshot shows the 'Define' step of creating a new table in ServiceNow. The 'Table label' is set to 'Release Tasks Blueprint' (1). The 'Table name' is 'x_snc_release_up_1_release_tasks_b' (2). The 'Auto number' checkbox is checked (3). The 'Prefix' is 'RTB' (4). The 'Continue' button is highlighted with a red circle (5).

Give **full access** to all Roles (1) & (2) and click “**Continue**” (3)

The screenshot shows the 'Define' step for adding permissions to the table. Two roles are selected: 'admin' (1) and 'user' (2). Both roles have checkboxes checked under 'All', 'Create', 'Read', 'Write', and 'Delete'. The 'Continue' button is highlighted with a red circle (3).

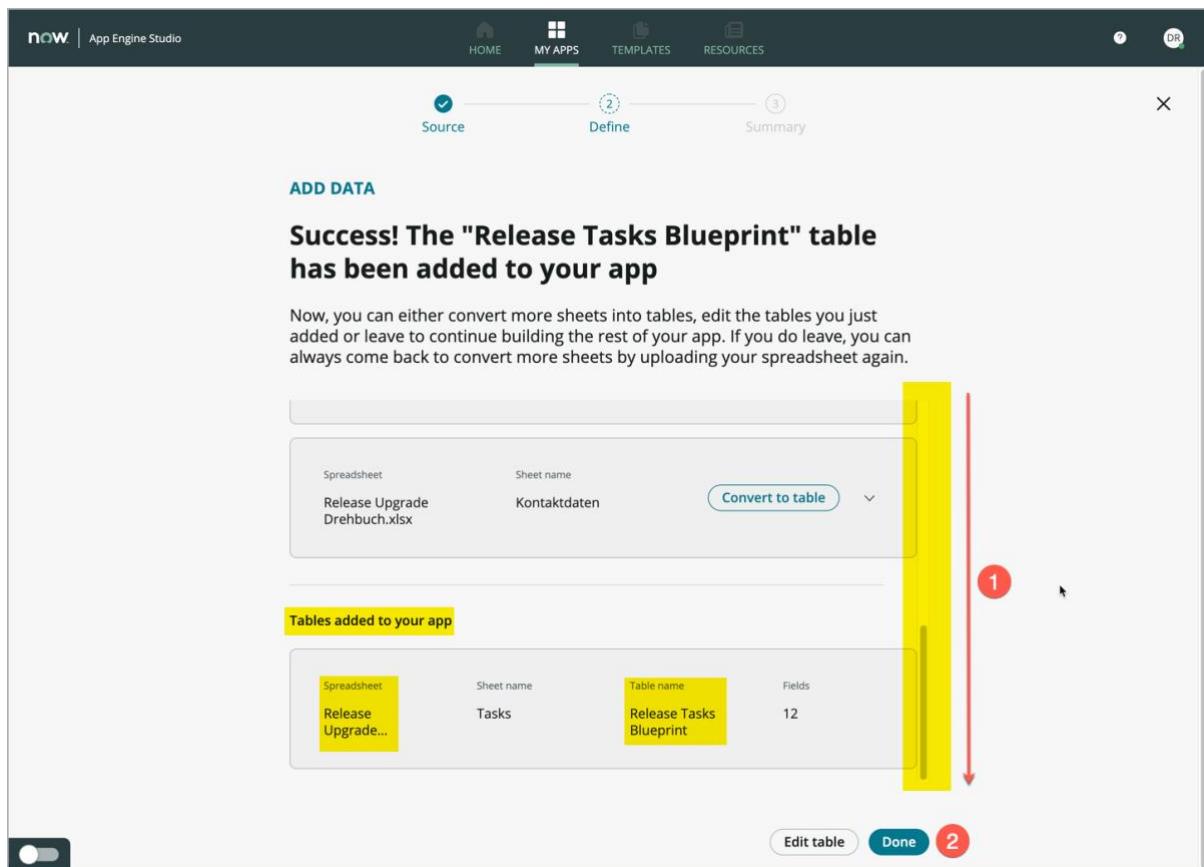
ServiceNow reads the Excel file, creates the table and fields for you and in the same moment, also imports the data from the Excel file into your ServiceNow instance.



The wizard now allows you to import even more tables from other tabs of your spreadsheet, but we do not want to import more data.

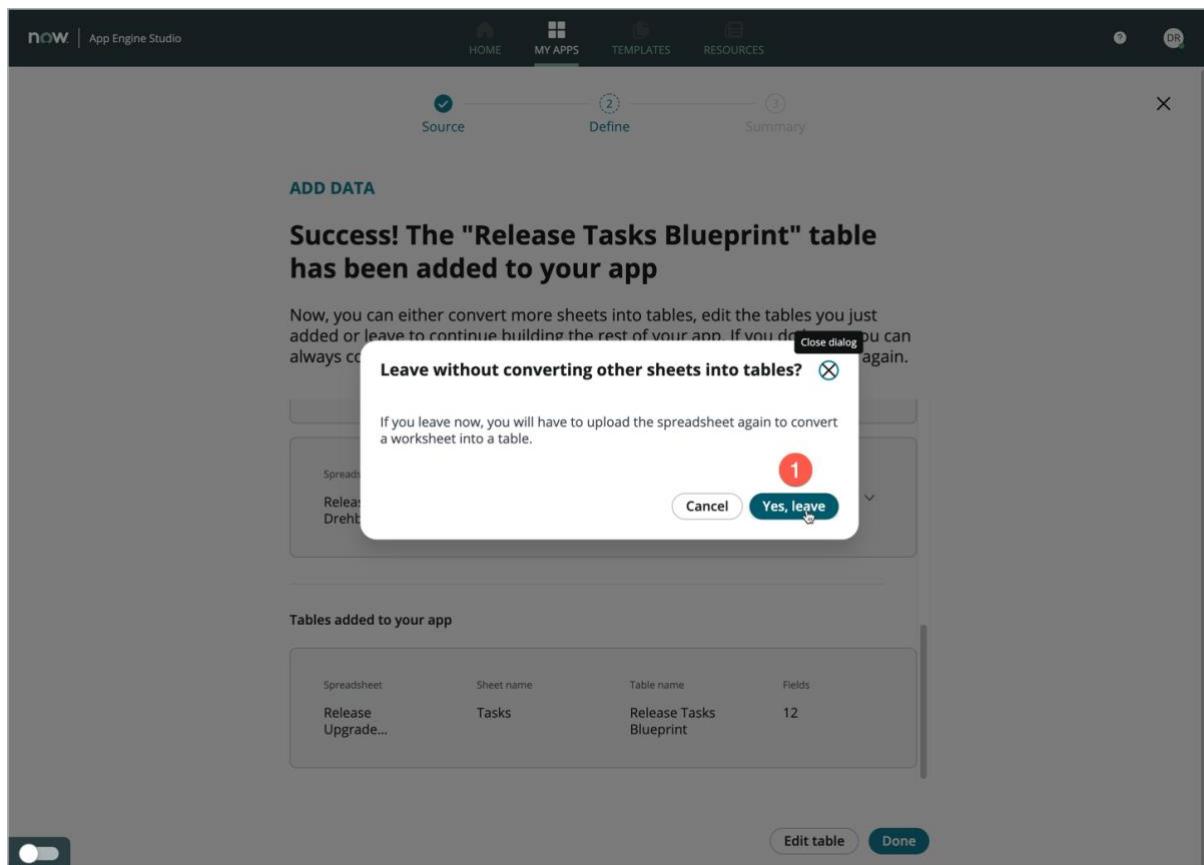
Scroll down the screen (1) and click “Done” (2)

Note: You can see the already imported tabs from your Excel file listed at the end of the list (see screenshot).



A message appears asking, if you want to leave as long as there are other tabs of the Excel file, which have not been imported yet.

Click “**Yes leave**” (1) to move on.



Back on your App Dashboard, you can find the new table imported

The screenshot shows the ServiceNow App Engine Studio interface. At the top, there are tabs for HOME, MY APPS, TEMPLATES, and RESOURCES. Below the tabs, a breadcrumb navigation shows 'App Home > Data Table And Forms > Release Process Task'. The main content area is titled 'Release Upgrade Management' and displays three imported tables:

- Data** (3 items):
 - Release Tasks Blueprint**: Table, Last edited 06.06.2022 16:58:26, PREVIEW, ...
 - Release Process Task**: Table, Last edited 06.06.2022 15:25:29, PREVIEW, ...
 - Release Process**: Table, Last edited 06.06.2022 15:05:40, PREVIEW, ...
- Experience** (0 items):
 - Add an interface
- Logic and automation** (0 items):
 - Add a process or third-party integration
- Security** (2 items):
 - Control access to your app

Congratulations, you now have created the third table by uploading a spreadsheet.

This way to create tables is very fast, easy and efficient, while importing data in the same moment.

3 Configure Lists & Forms

In this part of the Lab, we will configure the List Views and Form Views of the three tables created in the previous Exercises.

3.1 Exercise #3 – Configure the Layout for the List & Forms

We start from the Dashboard of your App in App Engine Studio.

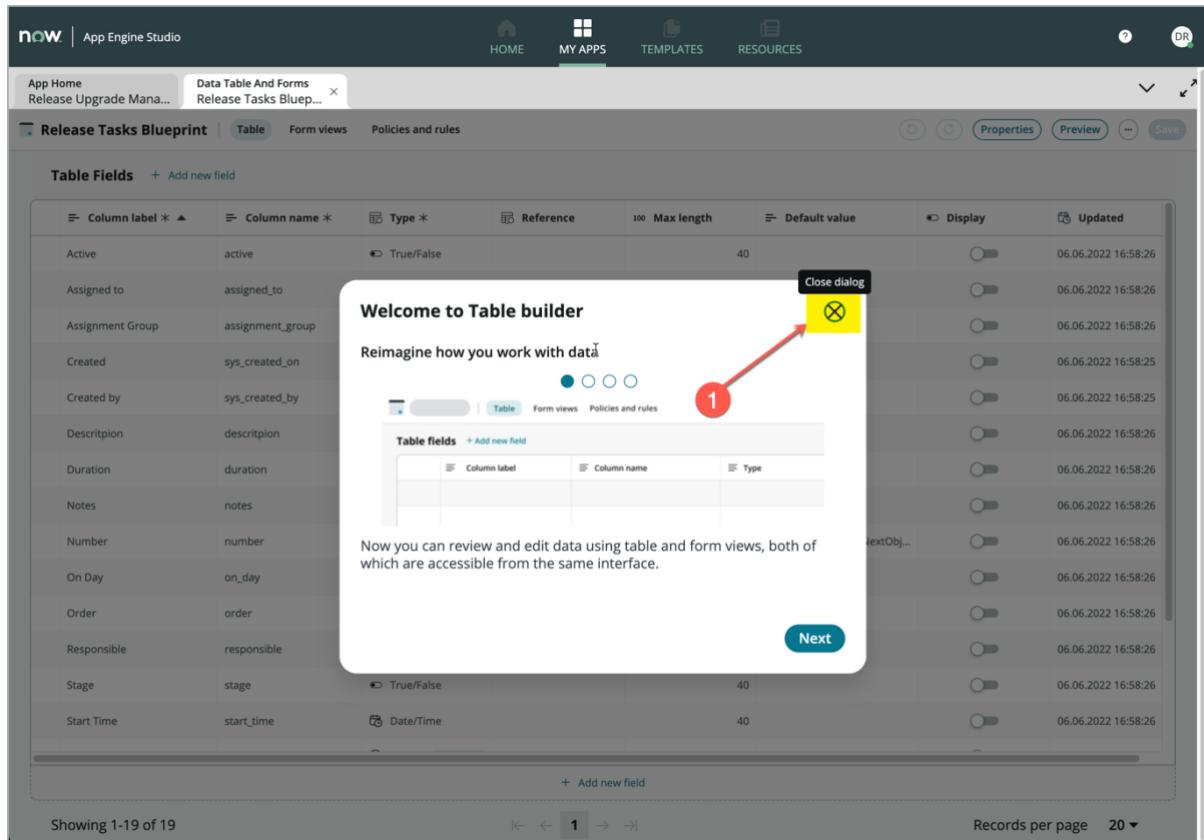
There are different options in the platform to configure Lists and Forms. For today, we will start from Table Builder within App Engine Studio.

3.1.1 Layout for the “Release Tasks Blueprint” table

In the “Data” section (1), click the name on the left side for the “Release Task Blueprint” table (2).

The screenshot shows the ServiceNow App Engine Studio interface. At the top, there's a navigation bar with 'now' logo, 'App Engine Studio', 'HOME', 'MY APPS' (which is underlined in green), 'TEMPLATES', and 'RESOURCES'. Below the navigation bar, the main area has a title 'Release Upgrade Management' with a 'Release Process Management' icon. There are tabs for 'A... (6)', 'Da... (3)', 'Experienc...', 'Logic and automati... (1)', and 'Securi... (2)'. A search bar says 'Search all' with a magnifying glass icon. On the left, a sidebar shows sections like 'Data' (with a red circle '1') and 'Experience' (with a red circle '2'). The 'Data' section is expanded, showing three tables: 'Release Tasks Blueprint' (highlighted with a yellow background and a red circle '2'), 'Release Process Task', and 'Release Process'. Each table row includes a 'PREVIEW' button and a '...' button. The 'Release Tasks Blueprint' table is described as 'Table is a way to store your...' and was last edited on 06.06.2022 at 16:58:26.

Close the Popup dialog by using the X-sign in the upper-right corner (1).



a) Configure the LIST layout

The first page you see from Table Builder is the “Table” Tab (1). This is the tab, where you can manage all columns/fields from the given table.

Click “Preview” (2) to open a new Tab in App Engine Studio to preview the List View for the “Release Tasks Blueprint” table.

Column label *	Column name *	Type *	Reference	Max length	Default value	Display	Updated
Active	active	True/False		40			06.06.2022 16:58:26
Assigned to	assigned_to	Reference	User	32			06.06.2022 16:58:26
Assignment Group	assignment_group	Reference	Group	32			06.06.2022 16:58:26
Created	sys_created_on	Date/Time		40			06.06.2022 16:58:25
Created by	sys_created_by	String		40			06.06.2022 16:58:25
Description	description	String		300			06.06.2022 16:58:26
Duration	duration	Duration		40			06.06.2022 16:58:26
Notes	notes	String		2,000			06.06.2022 16:58:26
Number	number	String		40	javascript:global.getNextObj...		06.06.2022 16:58:26
On Day	on_day	Integer		40			06.06.2022 16:58:26
Order	order	Integer		40			06.06.2022 16:58:26
Responsible	responsible	String		40			06.06.2022 16:58:26
Stage	stage	True/False		40			06.06.2022 16:58:26
Start Time	start_time	Date/Time		40			06.06.2022 16:58:26

+ Add new field

Showing 1-19 of 19 1 Records per page 20

As you can see in the screenshot below, there is a new Tab in App Engine Studio (1), for the List View of the “Release Tasks Blueprint” table.

Hover the mouse over the column header of the “Number” column, so that the small menu icon with the three vertical dots appears (2).

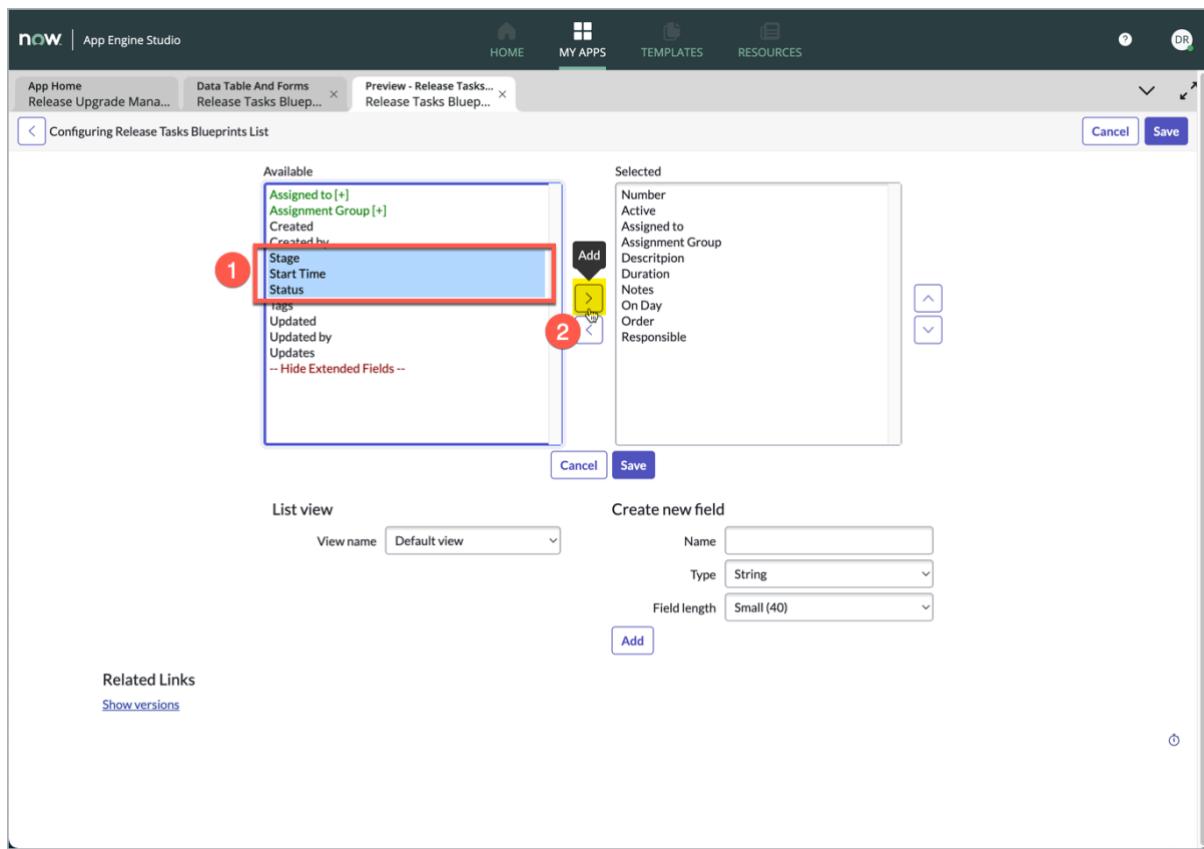
Click that icon and open the menu of the List.

Select the “Configure” Entry and then “List Layout” (3).

Number	Active	Assigned To	Assignment Group	Description	Duration	Notes	On Day	Order	Responsible
RTB000100	Search		Release Admins	Freigabe Change im CAB/DB	9 Hours		0	100	Andree
RTB000100	Sort (a to z)		Release Admins	Telko für Release Samstag einstellen	9 Seconds		0	200	Andree
RTB000100	Sort (z to a)		Intranet News	intranet News	9 Seconds		0	300	Andree
RTB000100	Ungroup		Newstickerereintrag erstellen	Newstickerereintrag erstellen	9 Seconds		0	400	Andree
RTB000100	Group By Number		All	Liste der Update Sets im Change aktualis...	9 Seconds		3	500	Andree
RTB000100	Bar Chart		Table	Zugang MID Server Verzeichnisse prüfen	9 Seconds		3	600	Andree
RTB000100	Pie Chart		Security Rules	Prüfung des Serverfarm Zugangs	9 Seconds		3	700	Alle
RTB000100	Import		Business Rules	Prüfung Testfälle für Produktivsetzung	9 Seconds		3	800	Alle
RTB000100	Export		Workflows	Prüfung Testuser, ggf. neue Testuser anl...	9 Seconds		3	900	Alle
RTB000100	>		Flow Designer Flows	Abstimmung Test mit Ansprechpartner Leit...	9 Seconds	PV:	3	1,000	Mike
RTB000100	Update Selected		Client Scripts	Planung des Klons auf Testinstanz	9 Seconds	Ziel: https://tasystest4.servicenow.com...	3	1,100	Andree
RTB000100	Update All		UI Policies	Abhängigkeiten zu anderen Changes prüfen	9 Seconds		3	1,200	Volker, Mike, Andree
RTB000100	Create Application Files		Data Policies						
RTB000100	Import XML		UI Actions						
RTB000100	Show XML		Notifications						
RTB000100			Dictionary						
RTB000100			Metrics						
RTB000100	true	(empty)							
RTB000100	true	(empty)							
RTB000100	true	(empty)							
RTB000100	true	Mike							
RTB0001011	true	Andree	Release Admins						
RTB0001012	true	Volker	Testers						

The left list is showing fields which are currently NOT in the List view but are available to be added to the List. Select (also multiselect is possible) items in the left list (1) and click the “Add” (“>”) button (2) to move the fields to the list on the right side. The right-hand list shows the columns top-down that appear in List View, in the order from left to right.

You can also remove fields from the “Selected” List (on the right-side), by selecting the entries in the list and click on the “Remove” (“<”) button (2).



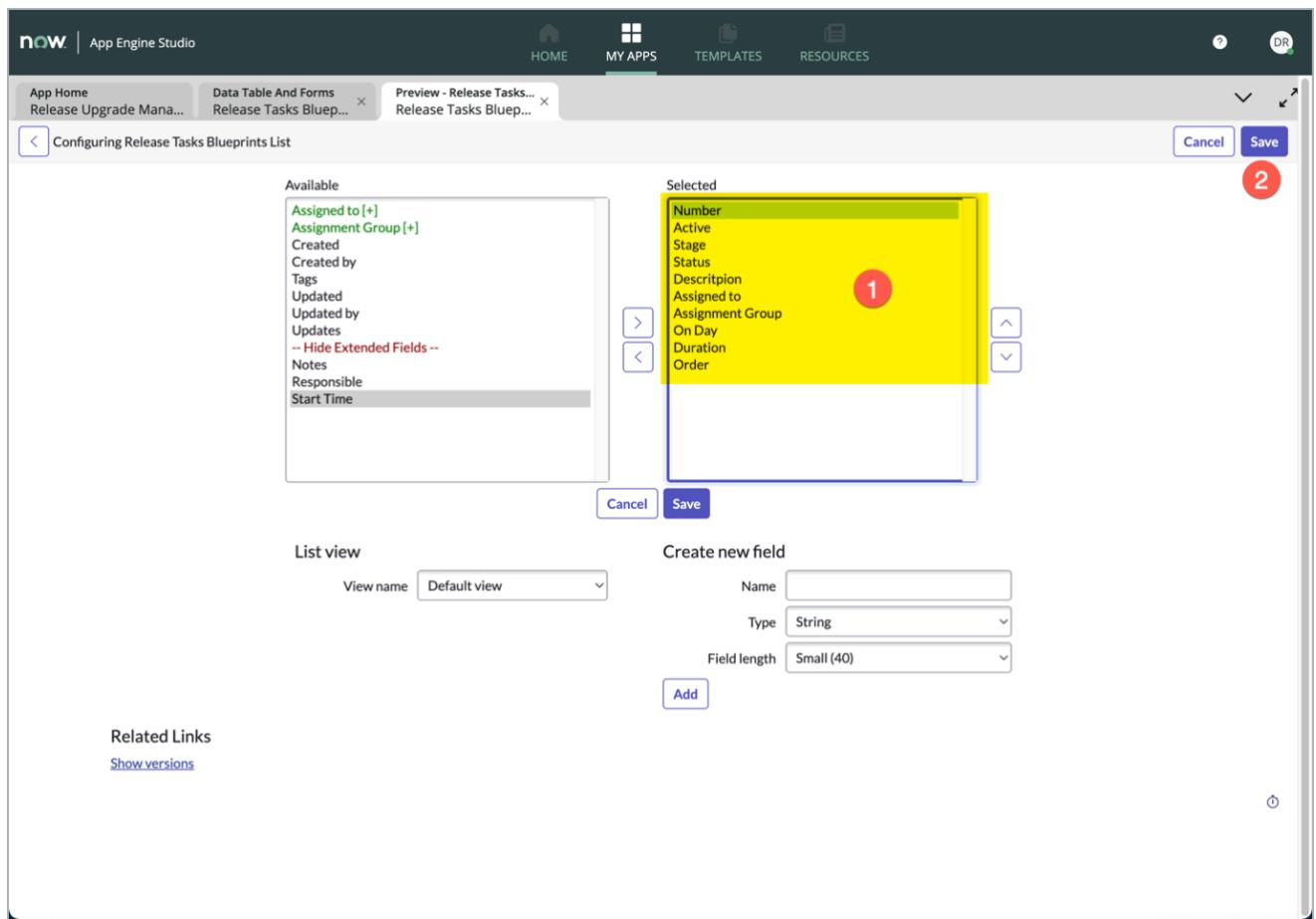
Select one or more columns in the right-hand list and use the “Move up” and “Move down” buttons (2) to change to order of the columns in the List View.

The screenshot shows the 'Configuring Release Tasks Blueprints List' dialog in ServiceNow App Engine Studio. The 'Selected' list contains the following fields:

- Number
- Active
- Assigned to
- Assignment Group
- Description
- Duration
- Notes
- On Day
- Order
- Responsible
- Stage
- Start Time
- Status

The 'Stage' field is highlighted with a yellow background and a red circle with the number '1'. A 'Move up' button with a red circle and the number '2' is shown above it. Below the lists are 'Save' and 'Cancel' buttons. At the bottom left is a 'List view' section with a 'View name' dropdown set to 'Default view'. At the bottom right is a 'Create new field' section with fields for Name (String), Type (String), and Field length (Small (40)). A small preview window shows a desktop interface with the title 'App Engine O'.

Try to arrange the fields as shown in the screenshot below (1) and click “Save” (2) when done.

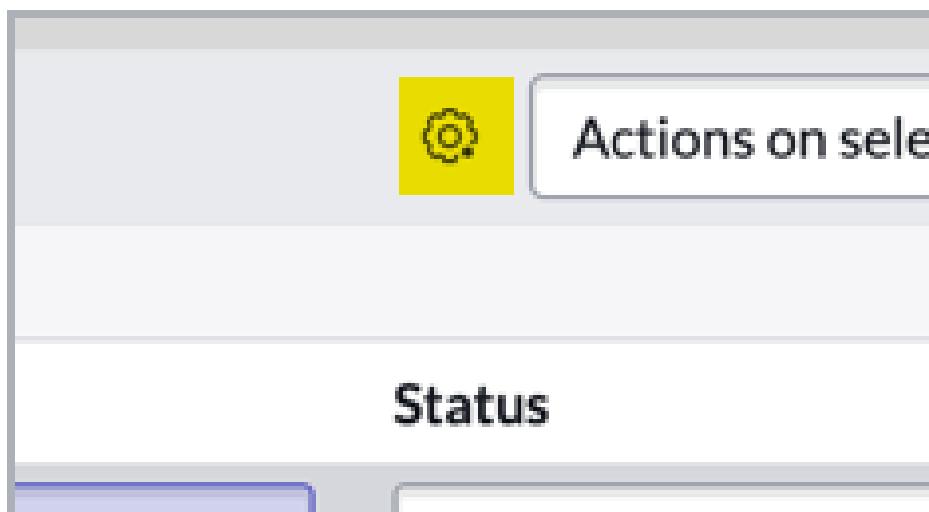


You will navigate back to the List view (1) and the columns should now appear in the order you defined (2). Note that you can also sort the list ascending or descending, just by clicking on one of the column headers.

For users, there is additionally the option to “Personalize” the list (4). Clicking the small gear icon opens a similar dialog like shown above, but this time, you configure the layout just for yourself. That overrides the global settings configured above.

Number	Active	Stage	Status	Description	Assigned to	Assignment Group	On Day	Duration	Order
RTB0001001	true	false	Open	Freigabe Change im CAB/DB	Andree	Release Admins	0	9 Hours	100
RTB0001002	true	false	Work in progress	Telko für Release Samstag einstellen	Andree	Release Admins	0	9 Seconds	200
RTB0001003	true	false	Closed complete	Intranet News erstellen	Andree	Release Admins	0	9 Seconds	300
RTB0001004	true	false	Open	Newstickereintrag erstellen	Andree	Release Admins	0	9 Seconds	400
RTB0001005	true	false	Open	Liste der Update Sets im Change aktualis...	Andree	Release Admins	3	9 Seconds	500
RTB0001006	true	false	Open	Zugang MID Server Verzeichnisse prüfen	Andree	Release Admins	3	9 Seconds	600
RTB0001007	true	false	Open	Prüfung des Serverfarm Zugangs	(empty)	All Release Process	3	9 Seconds	700
RTB0001008	true	false	Open	Prüfung Testfälle für Produktivsetzung	(empty)	All Release Process	3	9 Seconds	800
RTB0001009	true	false	Open	Prüfung Testuser, ggf. neue Testuser anl...	(empty)	All Release Process	3	9 Seconds	900
RTB0001010	true	false	Open	Abstimmung Test mit Ansprechpartner Leit...	Mike	Release Admins	3	9 Seconds	1,000
RTB0001011	true	false	Open	Planung des KIons auf Testinstanz	Andree	Release Admins	3	9 Seconds	1,100
RTB0001012	true	false	Open	Abhängigkeiten zu anderen Changes prüfen	Volker	Testers	3	9 Seconds	1,200
RTB0001013	true	false	Open	Prüfung Intranet News veröffentlicht	Andree	Release Admins	4	8 Seconds	1,300

As soon as you have “personalized” the List Layout, there is a small dot at the gear icon (see screenshot below). That indicates that the List view is personalized and may not reflect the standard layout we configured above (by the System Administrator).

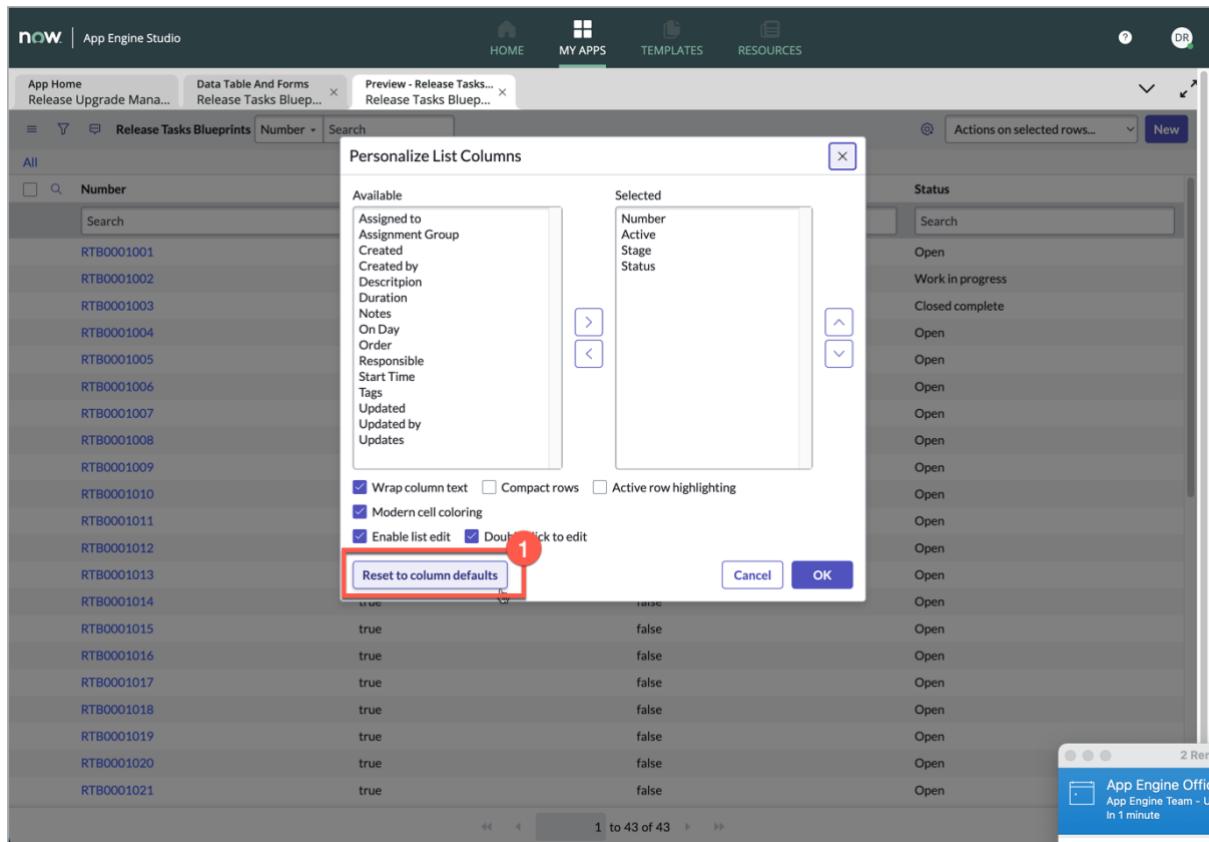


Click the small gear icon again to re-open the “Personalize List” screen – see screenshot below.

As soon as you have a custom (personalized) Layout of the Form, the button “**Reset to column defaults**” (1) is shown. Click that button to remove your personalized layout for this List View and revert to the Standard layout defined by your System Administrator.

Note:

Whenever the layout does not reflect the settings of the List layout you configure, review first if there are some personalized List layout that you can reset/revert.



Congratulations, you just configured your first List Layout.

b) Configure the FORM layout

Next, let's configure the **Form** layout for the “Release Tasks Blueprint” table.

Close the List tab in App Engine Studio, so that you come **back to the Table Builder** opened on the “Release Tasks Blueprint” table (see screenshot below).

Make sure, that you are on the Table Builder Tab (1). Reopen it from the App Dashboard, if you closed it before. Having Table Builder open (for the “Release Tasks Blueprint” table), click “**Form views**” (2) to **switch to the next Tab of Table Builder**.

Column label *	Column name *	Type *	Reference	Max length	Default value	Display	Updated
Active	active	True/False		40			06.06.2022 16:58:26
Assigned to	assigned_to	Reference	User	32			06.06.2022 16:58:26
Assignment Group	assignment_group	Reference	Group	32			06.06.2022 16:58:26
Created	sys_created_on	Date/Time		40			06.06.2022 16:58:25
Created by	sys_created_by	String		40			06.06.2022 16:58:25
Description	description	String		300			06.06.2022 16:58:26
Duration	duration	Duration		40			06.06.2022 16:58:26
Notes	notes	String		2,000			06.06.2022 16:58:26
Number	number	String		40	javascript:global.getNextObj...		06.06.2022 16:58:26
On Day	on_day	Integer		40			06.06.2022 16:58:26
Order	order	Integer		40			06.06.2022 16:58:26
Responsible	responsible	String		40			06.06.2022 16:58:26
Stage	stage	True/False		40			06.06.2022 16:58:26
Start Time	start_time	Date/Time		40			06.06.2022 16:58:26

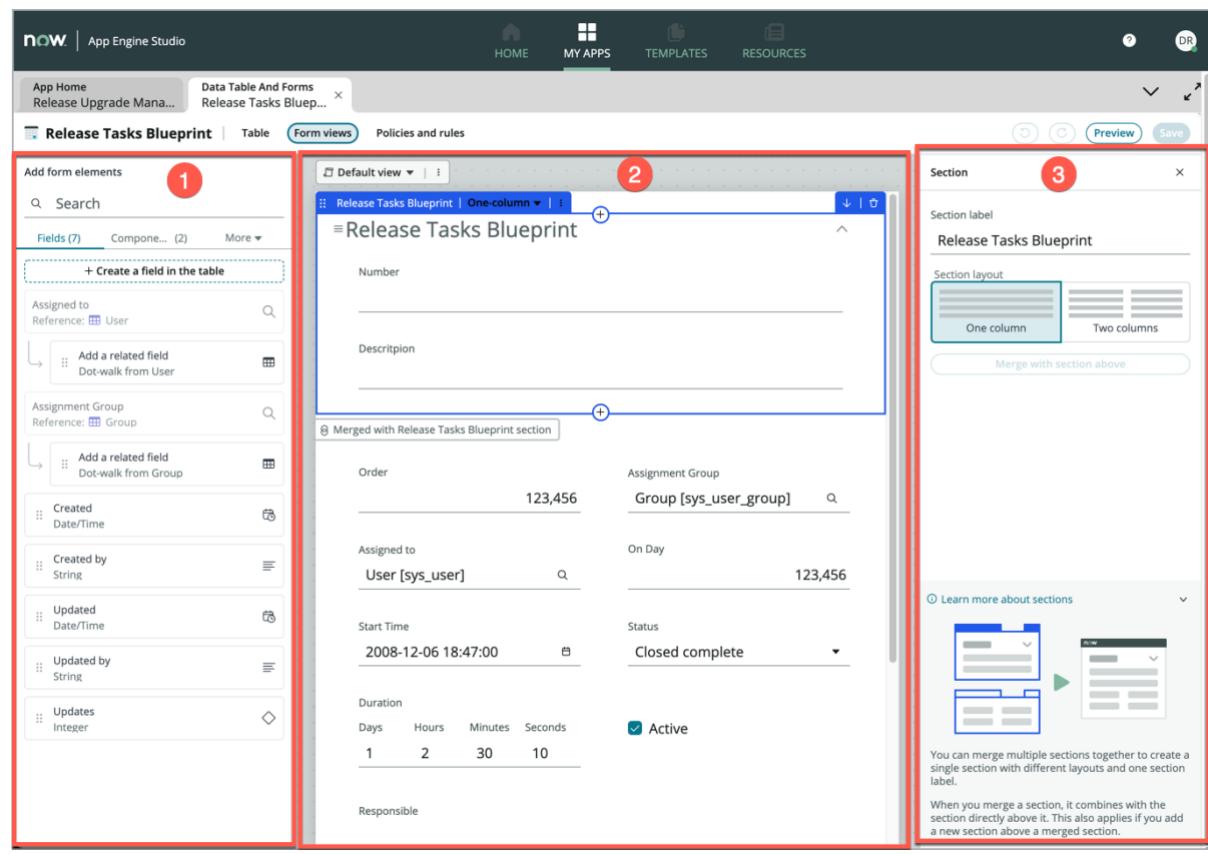
The screen has three main areas.

Left (1), there is a panel with form elements to be added to the form in the middle. The panel contains four tabs (“Fields”, “Components”, “Formatters” and “Embedded Lists” – found below “More”). Drag & Drop elements from here to the form space in the middle.

In the **middle** area (2), you can see the form in its current layout. You can arrange fields on the form by dragging them to the place where you want them to appear. Forms are constructed by sections, and each section can be either “One column” or “Two column” layout.

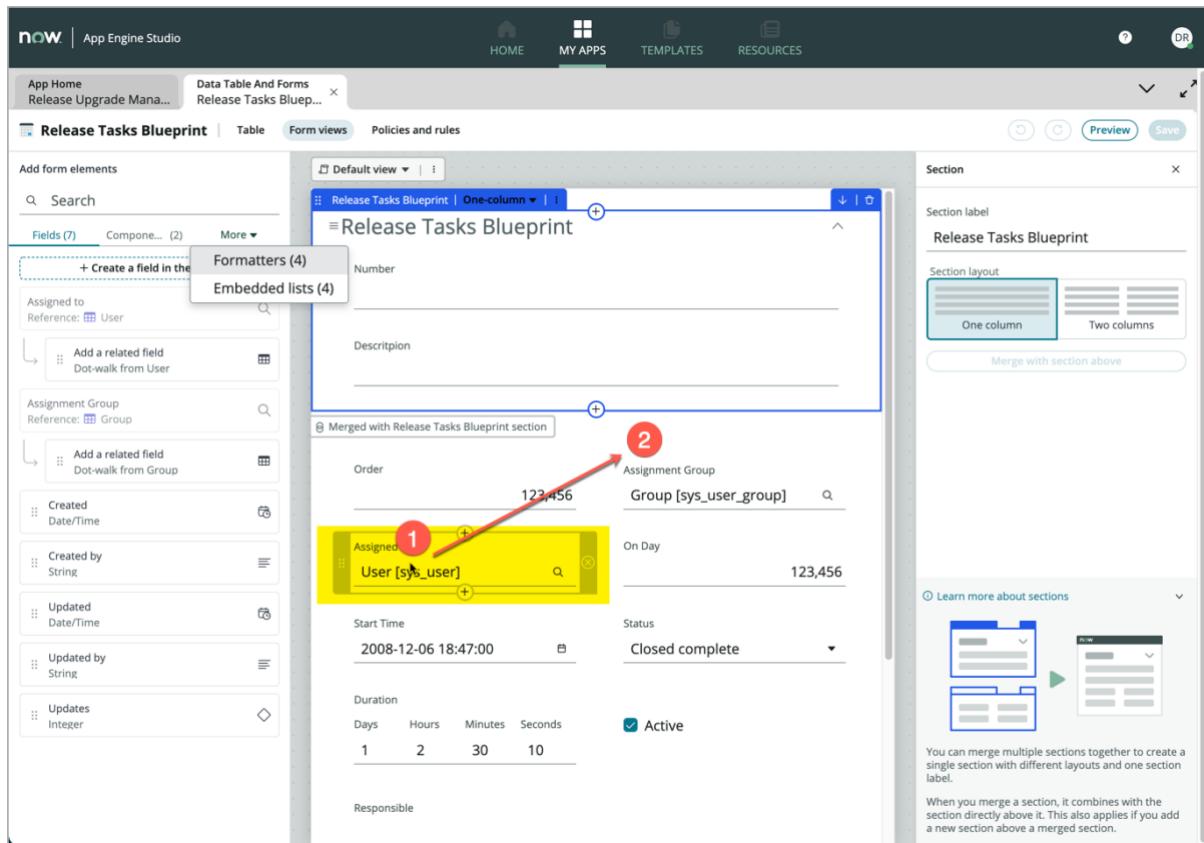
On the **Right** side (3), there is a panel to configure elements selected in the middle area.

There are a lot of configurations you can do here in this Builder. For detailed information, please consult the ServiceNow online documentation.



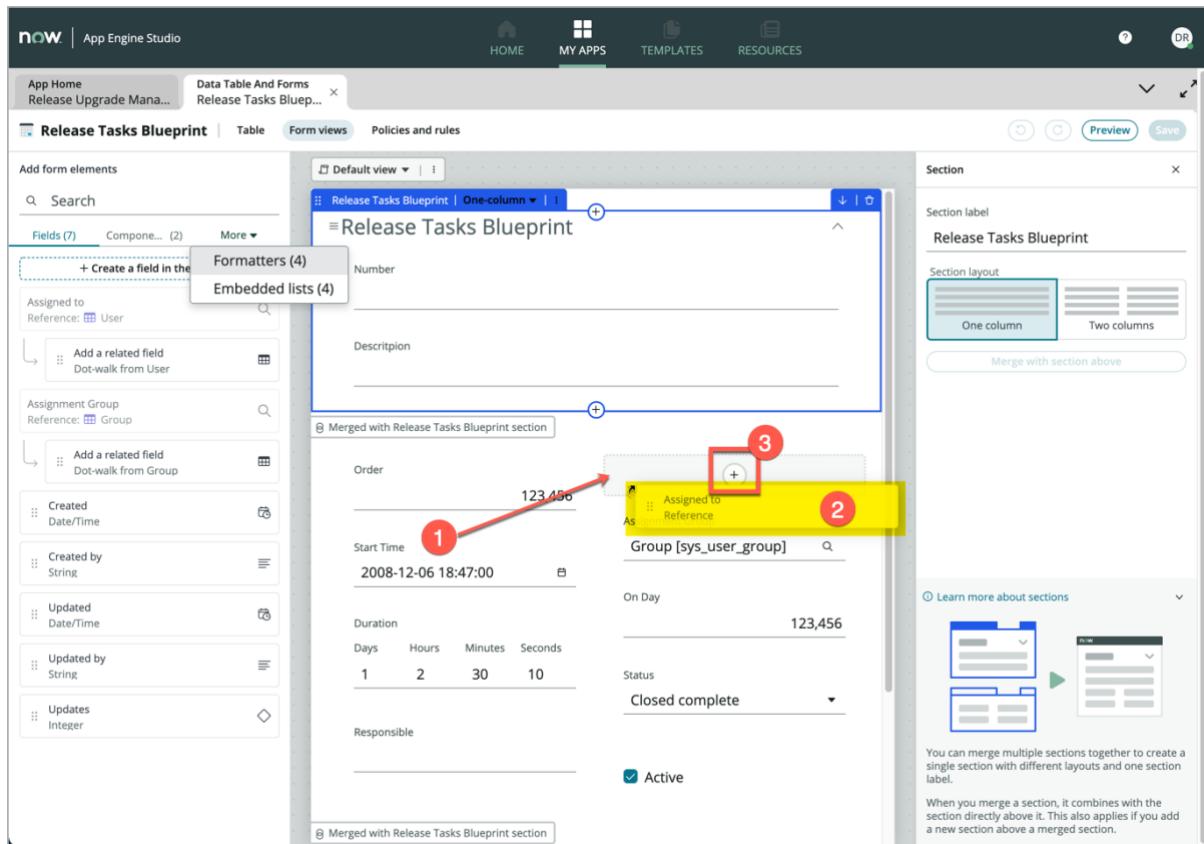
Let's arrange the fields on the form in the way we would like them to appear.

Left click a field on the canvas (1) and **hold mouse button pressed**, so that you can **drag and drop** the column to a different place on the form (2).



Moving the field on the canvas (1) will **show free fields** (3) where you can drop the field (indicated with the (+) Plus sign), that you are currently dragging (2) over the form.

Just release the left mouse button over a free space (having the plus symbol), to place the field on the form.



You can easily remove fields from the form by clicking the **small “x” symbol** (1) on the right side of each field.

The screenshot shows the ServiceNow App Engine Studio interface for editing a 'Release Tasks Blueprint' form. On the left, there's a sidebar with a search bar and a list of fields: Assigned to, Reference: User; Assignment Group, Reference: Group; Created, Date/Time; Created by, String; Start Time, Date/Time; Updated, Date/Time; Updated by, String; and Updates, Integer. The main area displays the form with sections for Number, Description, and Active status (checked). Below these is a merged section labeled 'Merged with Release Tasks Blueprint section' containing 'On Day' (123,456), 'Assigned to' (User [sys_user]), 'Assignment Group' (Group [sys_user_group]), and 'Duration' (Days: 1, Hours: 2, Minutes: 30, Seconds: 10). The 'Status' field in the Duration section is highlighted with a red box and a red circle labeled '1' pointing to its top-right corner, indicating it can be deleted. To the right, there's a 'Merged section' panel with layout options for 'One column' and 'Two columns', and a 'Learn more about sections' section with a diagram illustrating how sections can be merged.

When you have done your changes, click “Save” in the upper-right corner of the window. Click “Preview” to open the Form view for the table on a new tab in App Engine Studio (see next screenshot below).

Info:

Try to arrange the fields on the form in the way shown in the screenshot below (it is not mandatory to arrange exactly in this layout, but helps to learn about the Form Builder).

The screenshot shows the ServiceNow App Engine Studio interface with the 'Preview - Form Release Tasks Blueprint...' tab selected. The form itself is titled 'Release Tasks Blueprint'. It contains the following fields:

- Number:** RTB0001045
- Description:** (empty)
- Responsible:** (empty)
- Active:** Active
- Assigned to:** (empty)
- Assignment Group:** (empty)
- Duration:** On Day: 0, Days: 0, Hours: 0, Minutes: 0, Seconds: 0
- Order:** (empty)
- Notes:** (empty)

You can also click “**Open form in Platform**” in the upper-right corner to open the form in the Experience shown below (which is called the **Platform UI**):

The screenshot shows the ServiceNow Platform UI experience for the 'Release Tasks Blueprint' form. The form fields are identical to the one in the App Engine Studio:

- Number:** RTB0001001
- Description:** Freigabe Change im CAB/DB
- Responsible:** Andree
- Active:**
- Assigned to:** Andree
- Assignment Group:** Release Admins
- Duration:** On Day: 0, Days: 0, Hours: 09, Minutes: 00, Seconds: 00
- Order:** 100
- Notes:** (empty)

At the bottom of the form, there are 'Update' and 'Delete' buttons.

Navigate back to App Engine Studio and close the extra Tab in App Engine Studio, so that you now are back in the Form Builder (see below):

Select the “Number” field (1) on the Form and mark the “Read only” (2) Checkbox in the right-hand panel.

Click “Save” in the upper-right corner and **re-open the Preview**.
You will see, that the “Number” field now cannot be edited anymore.

The screenshot shows the ServiceNow App Engine Studio interface. On the left, there's a sidebar with various fields like 'Assigned to', 'Description', 'Responsible', and some assignment groups. The main area displays a form titled 'Release Tasks Blueprint' with a yellow-highlighted 'Number' field. To the right, the 'Config' tab of the right-hand panel is open, showing the 'Field details' section. A red circle with the number 1 points to the 'Number' field in the list. Another red circle with the number 2 points to the 'Read only' checkbox, which is checked. Other visible settings include 'Label: Number', 'Max. length: 40', and 'Default value'.

The “Number” field is now shown “grayed-out” (1), which means that you cannot edit it anymore:

The screenshot shows the ServiceNow App Engine Studio interface. In the center, there is a form titled "Release Tasks Blueprint". The first field, "Number", contains the value "RTB0001046" and is highlighted with a red rectangular border. A red circle with the number "1" is placed over this border. Below the Number field, there are several other form fields: "Description" (empty), "Responsible" (empty), "Active" (checkbox), "Assigned to" (empty), "Assignment Group" (empty), "On Day" (empty), "Duration" (Days: 0, Hours: 0, Minutes: 0, Seconds: 0), "Order" (empty), and "Notes" (empty). At the top of the screen, there are tabs for "App Home", "Data Table And Forms", "Preview - Form", and "MY APPS". The "MY APPS" tab is currently selected. The status bar at the bottom shows "global" and "Release Upgrade Management".

Congratulations, you have configured the Form layout for the “Release Task Blueprint” table.

3.1.2 Layout for the “Release Process” table.

From the dashboard of your App in App Engine Studio, open Table Builder for the “Release Process” table by clicking the table name in the Data section.

The screenshot shows the ServiceNow App Engine Studio interface. At the top, there's a navigation bar with 'App Engine Studio' and links for 'HOME', 'MY APPS', 'TEMPLATES', and 'RESOURCES'. Below the navigation bar, the 'Release Upgrade Management' app is selected. The main content area is titled 'Release Upgrade Management'. It features a 'Data' section with a sub-section for 'Release Process'. This section contains three tables: 'Release Tasks Blueprint', 'Release Process Task', and 'Release Process'. The 'Release Process' table is highlighted with a red circle and a yellow background. A search bar and a 'See all (3)' link are also visible in the 'Data' section. Below the 'Data' section, there are sections for 'Experience' and 'Logic and automation'.

a) Configure the FORM layout

In Table Builder (1) switch to the “**Form views**” Tab (2) and review the layout, that ServiceNow created automatically for the table (which in fact is based on the default layout of the Task table – the table we used to extend for the “Release Process” table).

There are **several fields available**, and some fields already on the form does not make sense to our use case.

The screenshot shows the ServiceNow App Engine Studio interface for configuring a table. The top navigation bar includes 'HOME', 'MY APPS', 'TEMPLATES', and 'RESOURCES'. The left sidebar shows 'App Home' and 'Release Upgrade Mana...'. The main workspace is titled 'Release Process' under 'Table' and 'Form views'. A red circle labeled '1' is on the 'Data Table And Forms' tab. A red circle labeled '2' is on the 'Form views' tab. A red circle labeled '3' is on the 'Default view' dropdown. The central area displays the 'Release Process' form with fields: Number, Priority (4 - Low), Assigned to (User [sys_user]), State (Open), Configuration item (Configuration Item [cmdb_ci]), Parent (Task [task]), and Active (checkbox checked). Below the form, a note says 'Merged with Release Process section'. The right panel is titled 'Section' and shows 'Section label' set to 'Release Process' and 'Section layout' set to 'Two columns'. It also includes a 'Merge with section above' button and a 'Learn more about sections' section with a diagram illustrating how multiple sections can be merged into one.

Review the Form layout that I created, which seems to make sense for me – see screenshot below. Try to arrange the fields on the form in the same way.

The screenshot shows the 'Release Process' form in the 'Preview' tab of the App Engine Studio. The form contains the following fields:

- Number:** RPRC0001002
- Active:**
- Order:** (empty)
- Duration:** Days: 0, Hours: 0, Minutes: 0, Seconds: 0
- State:** Open
- Assigned to:** (empty)
- Assignment group:** (empty)
- Parent:** (empty)
- Description:** (empty)
- Additional comments (Customer visible):** (empty)
- Work notes:** (empty)

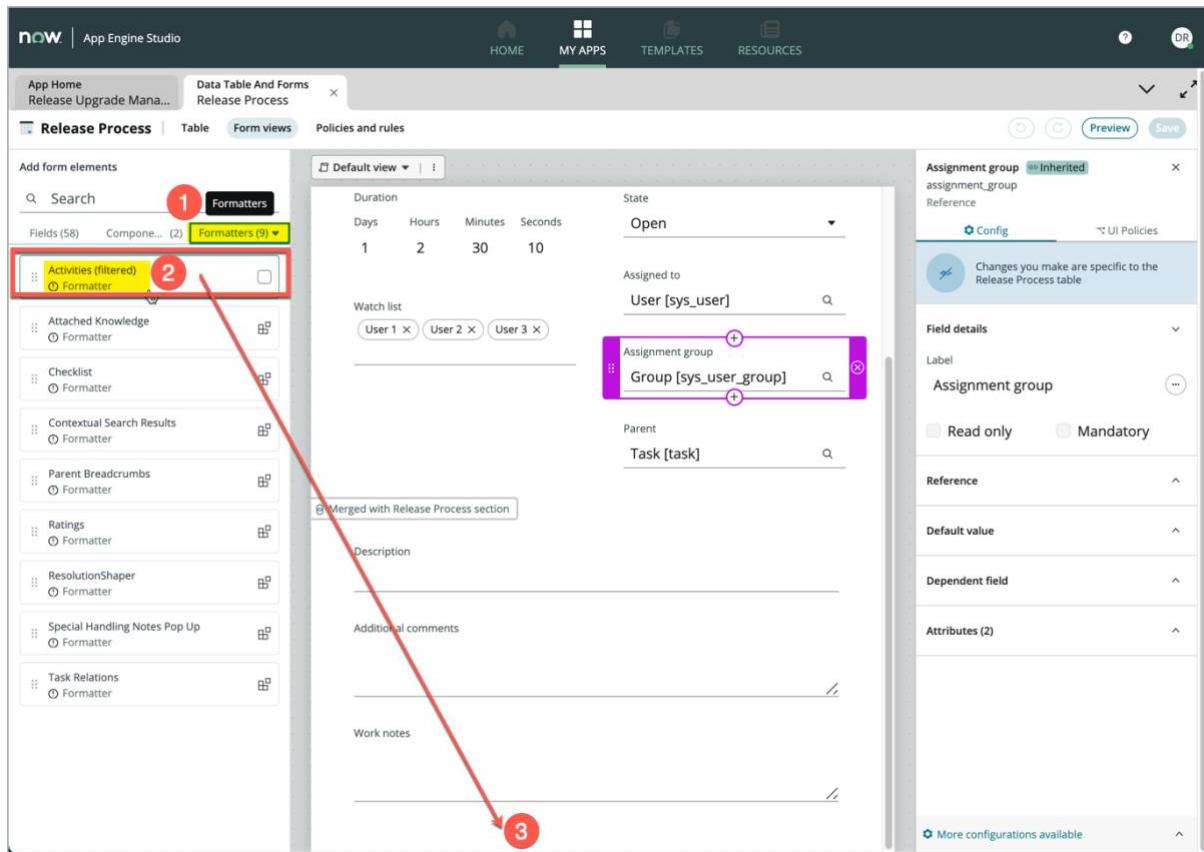
Back in Form Builder, switch to the “**Formatters**” Tab (2) in the right panel (1)

The screenshot shows the Form Builder interface with the following elements:

- Left Panel:** Shows 'Add form elements' with 'Fields (58)', 'Components (2)', and a 'More' button (circled 1).
- Middle Panel:** Shows the 'Release Process' form structure with sections for 'Release Process' and '=Release Process'.
- Right Panel:** Shows the 'Formatters' tab (circled 2) selected, displaying configuration for the 'Assignment group' field.

On the “Formatters” Tab (1) drag the “Activities (filtered)” Formatter (2) to the very bottom of the Form (3).

Click “Preview” (upper-right) again.



Close the “Table Builder” Tab here in App Engine Studio and navigate back to the App Dashboard.

From the dashboard, click “Preview” (1) on the “Release Process” table in the “Data” section.

This will open the table in List View in a new Tab in your Web Browser.

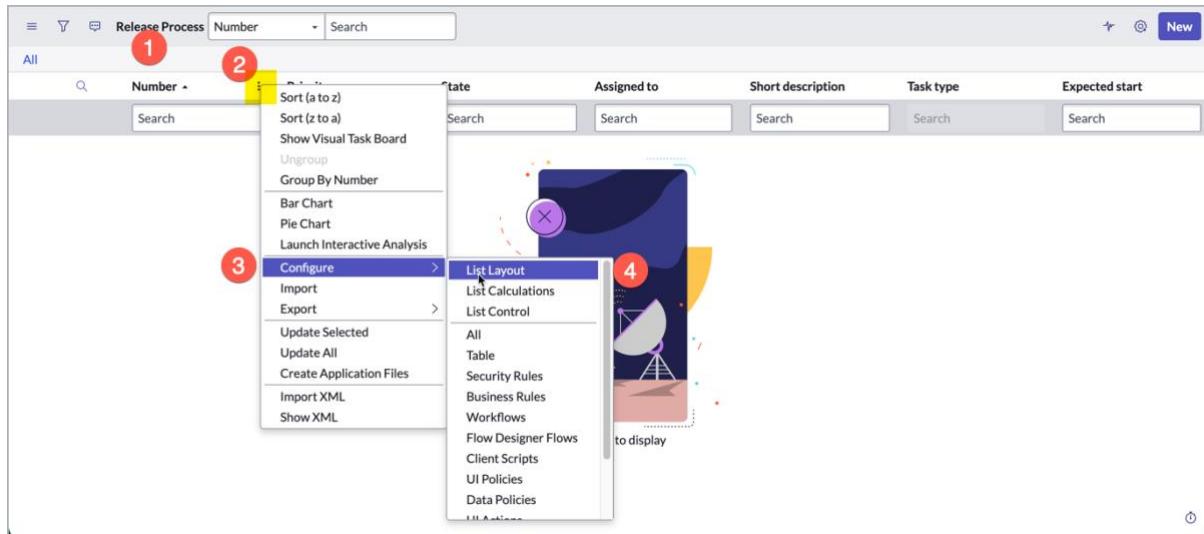
The screenshot shows the ServiceNow App Engine Studio interface. At the top, there's a navigation bar with links for HOME, MY APPS (which is highlighted in green), TEMPLATES, and RESOURCES. Below the navigation bar, the title "Release Upgrade Management" is displayed, along with various icons for configuration and control.

The main content area is divided into sections:

- Data**: Contains three tables:
 - Release Tasks Blueprint (Table)
 - Release Process Task (Table)
 - Release Process (Table)
- Experience**: Contains a placeholder for creating interfaces: "Create interfaces for users to interact with the app" and a button "Add an interface".
- Logic and automation**: Contains one item: "See all (1)".

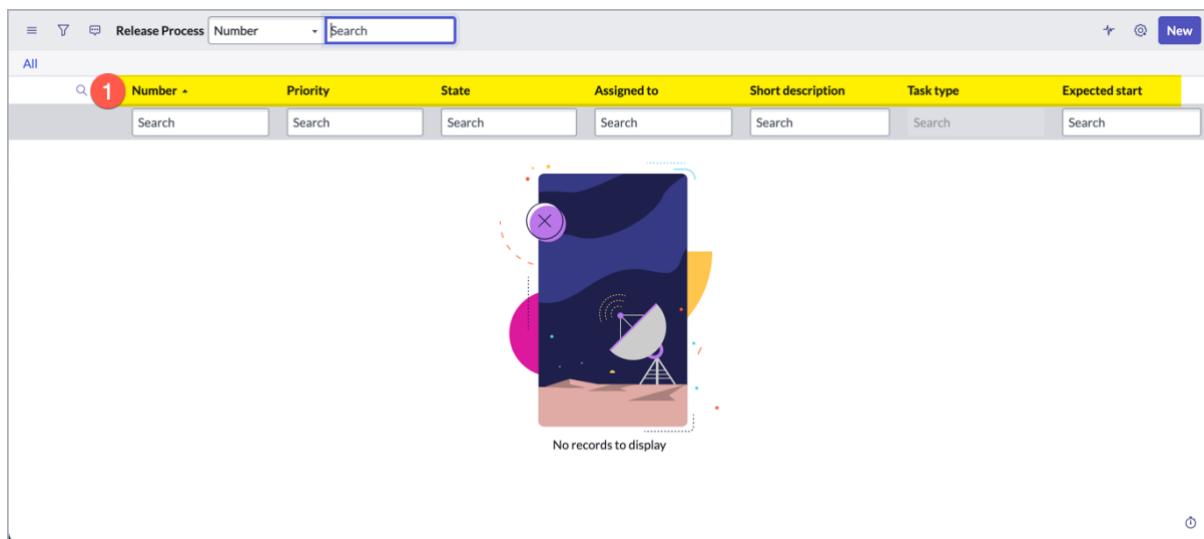
A red circle with the number "1" is overlaid on the "PREVIEW" button for the "Release Process" table, indicating it is the target for previewing.

Configure the List Layout.



Info:

Just for training purposes, try to make the List layout look (1) same or like the one shown in the screenshot below.



Click “New” in the upper-right corner and capture a new “Release Process” Record.

Fill in the form and right-click the header to “Save”.

Note:

The “Activity Stream” which is shown in the bottom of the form. It logs the changes done on the record. This gives a historical view on the data without and further coding.

The screenshot shows the 'Release Process' record creation screen. The 'Number' field is highlighted in yellow and contains 'RPRC0001008'. The 'Description' field is also highlighted in yellow and contains 'Release of the San Diego Release for ServiceNow'. The 'Activities' section at the bottom is highlighted with a red box and shows one activity entry for 'DR Dirk Redeker'.

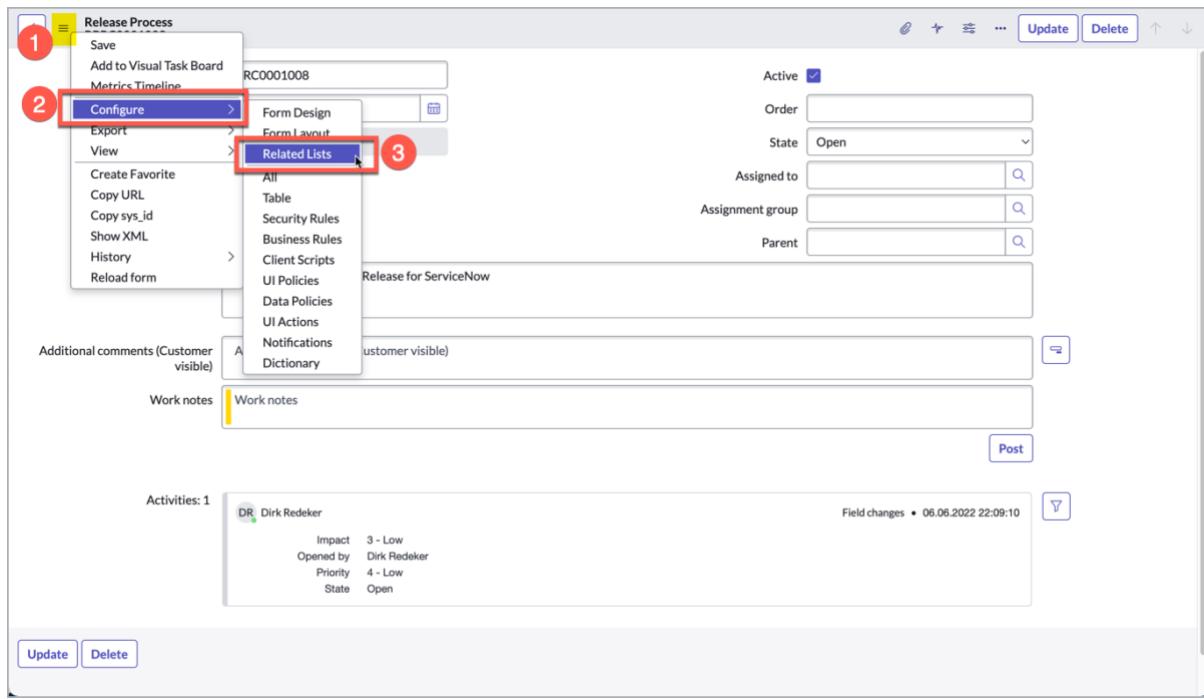
Impact	3 - Low
Opened by	Dirk Redeker
Priority	4 - Low
State	Open

Field changes • 06.06.2022 22:09:10

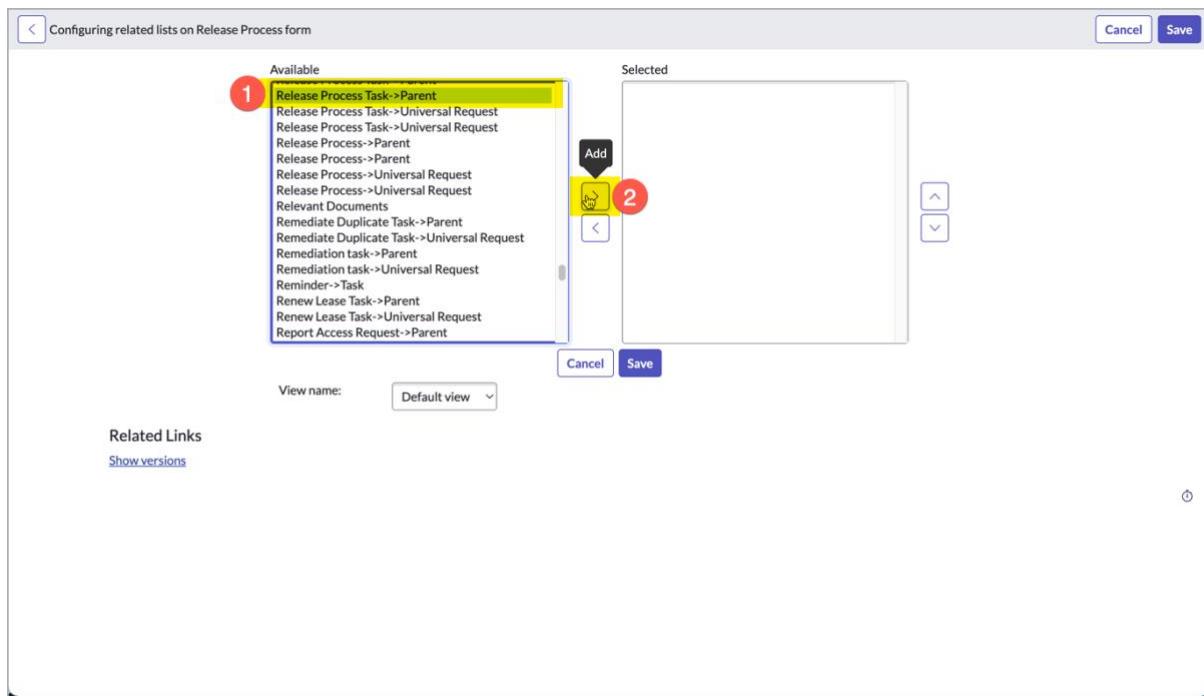
Finally, let's add a (so called) Related List to the form. The Related List will show all "Release Process Tasks", that are associated/linked to this one specific "Release Process".

Each single Release Process record can now have any number of Tasks associated to it individually.

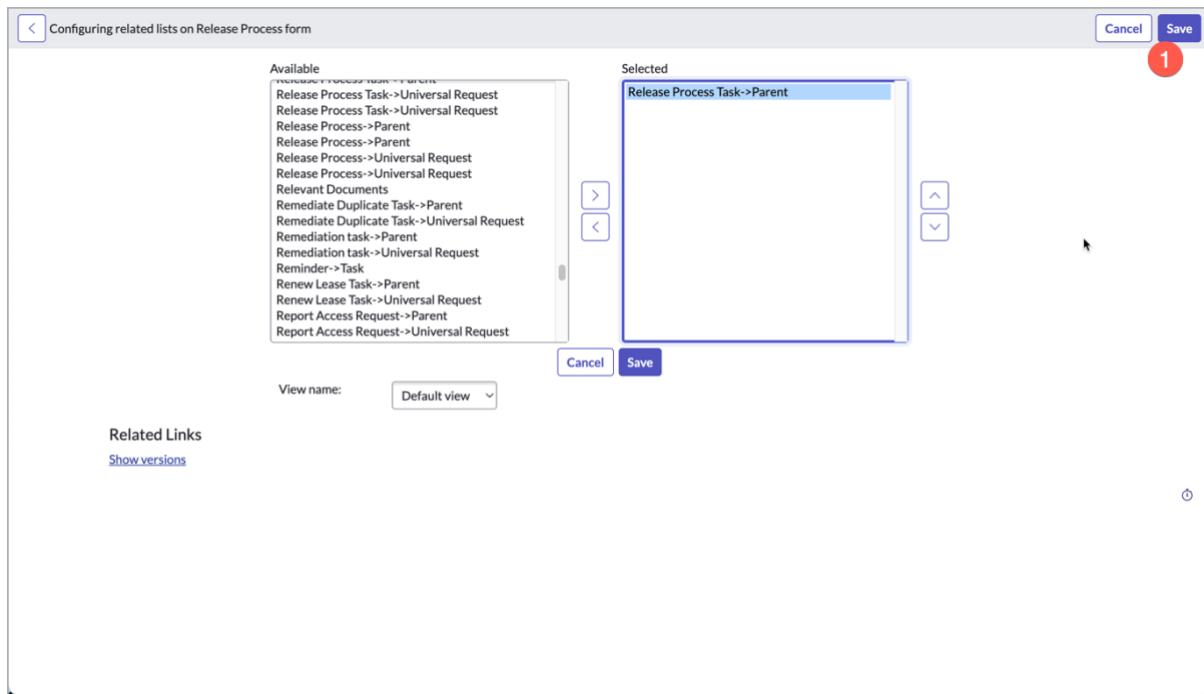
Click the Form menu (1) (hamburger menu in the top-left corner) and select "Configure" (2) and then "Related Lists" (3).



Find the entry “Release Process Task -> Parent” in the left list, select it (1) and move it to the right list using the “Add” button (2)



Click “Save” (1) to close the Dialog and make the changes permanent.



Review the Form, that there is now a list shown at the bottom of the Form.

The screenshot shows the ServiceNow Release Process Form for record RPRC0001008. The form includes fields for Number (RPRC0001008), Expected start (01.06.2022 00:00:00), Duration, Watch list, Active (checked), Order, State (Open), Assigned to, Assignment group, Parent, Description (Release of the San Diego Release for ServiceNow), Additional comments (Customer visible), Work notes (Work notes), and a Post button. Below the form is a section titled 'Activities: 1' showing a task for DR Dirk Redeker with Impact 3 - Low, Opened by Dirk Redeker, Priority 4 - Low, and State Open. At the bottom is a yellow 'Release Process Tasks' list view with columns for Number, State, Assigned to, Short description, and Expected start. The list displays the message 'No records to display'.

Finally, lets Configure the “Release Process Task” table layout

3.1.3 Layout for the “Release Process Task” table

We do not need a bunch of screenshots again.

You now learned about how to configure List and Form layouts.

Take a moment to design the List and Form layout for the “Release Proces Task” table

Note :

This step in the exercise is optional and you decide about the layout and outcome her.

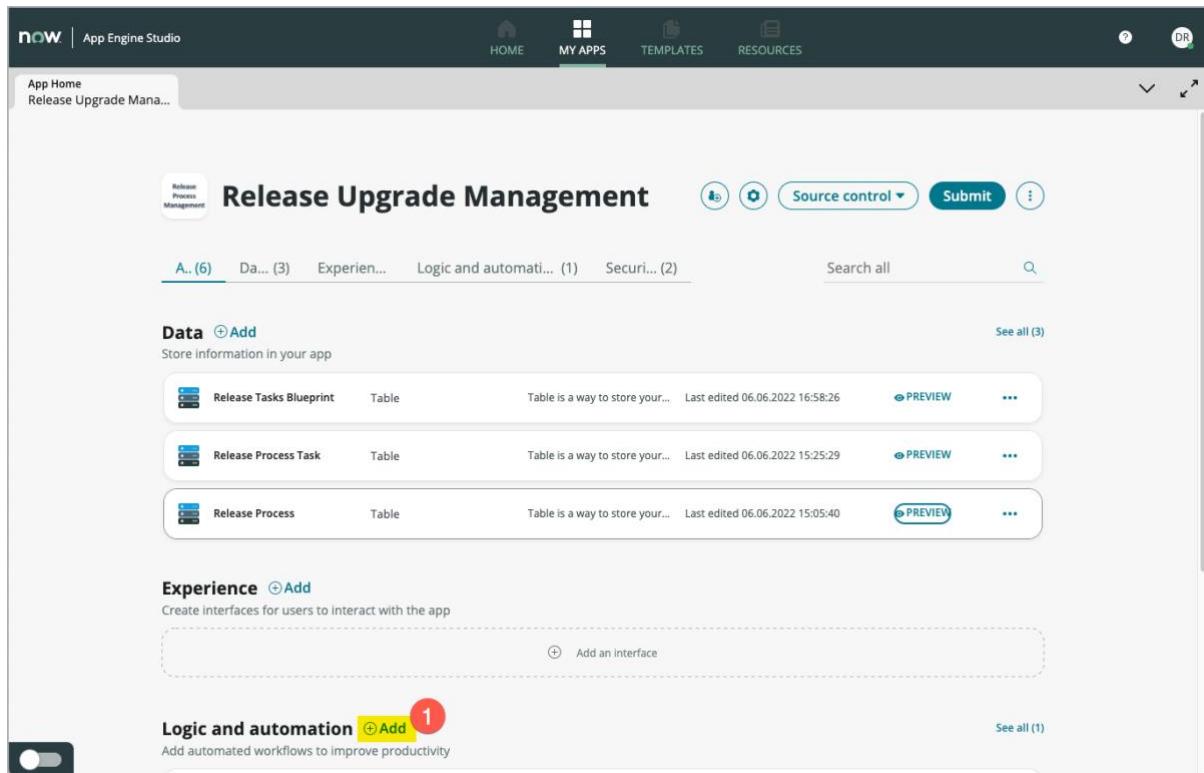
Have fun!

4 Add automation to your App

4.1 Exercise #4 – Create Automation to copy the Task Blueprint

Start from the dashboard of your App in App Engine Studio

Click “Add” in the “Logic and automation” section (1)



The screenshot shows the ServiceNow App Engine Studio interface. At the top, there's a navigation bar with links for HOME, MY APPS, TEMPLATES, and RESOURCES. Below the navigation bar, the main content area has a header "Release Upgrade Management". There are three tabs at the top of this section: "Data" (selected), "Experience", and "Logic and automation". Under the "Data" tab, there are three tables listed: "Release Tasks Blueprint", "Release Process Task", and "Release Process". Each table has a "PREVIEW" button and a "..." button. Under the "Experience" tab, there's a section for adding interfaces with a "Add an interface" button. Under the "Logic and automation" tab, there's a section for adding workflows with a "Add" button and a red circle with the number 1.

Select the left-hand card “Flow” (1).

The screenshot shows the ServiceNow App Engine Studio interface. At the top, there's a navigation bar with links for HOME, MY APPS (which is currently selected), TEMPLATES, and RESOURCES. Below the navigation bar, the main content area has a title "ADD LOGIC AND AUTOMATION". A sub-section titled "What do you want to add?" is displayed. It contains four cards: "Flow" (highlighted with a red circle containing the number 1), "Decision", "Email", and "Script". Each card has a small icon and a brief description. At the bottom of the screen, there's a dark footer bar with a toggle switch.

Click “Build from scratch” (1)

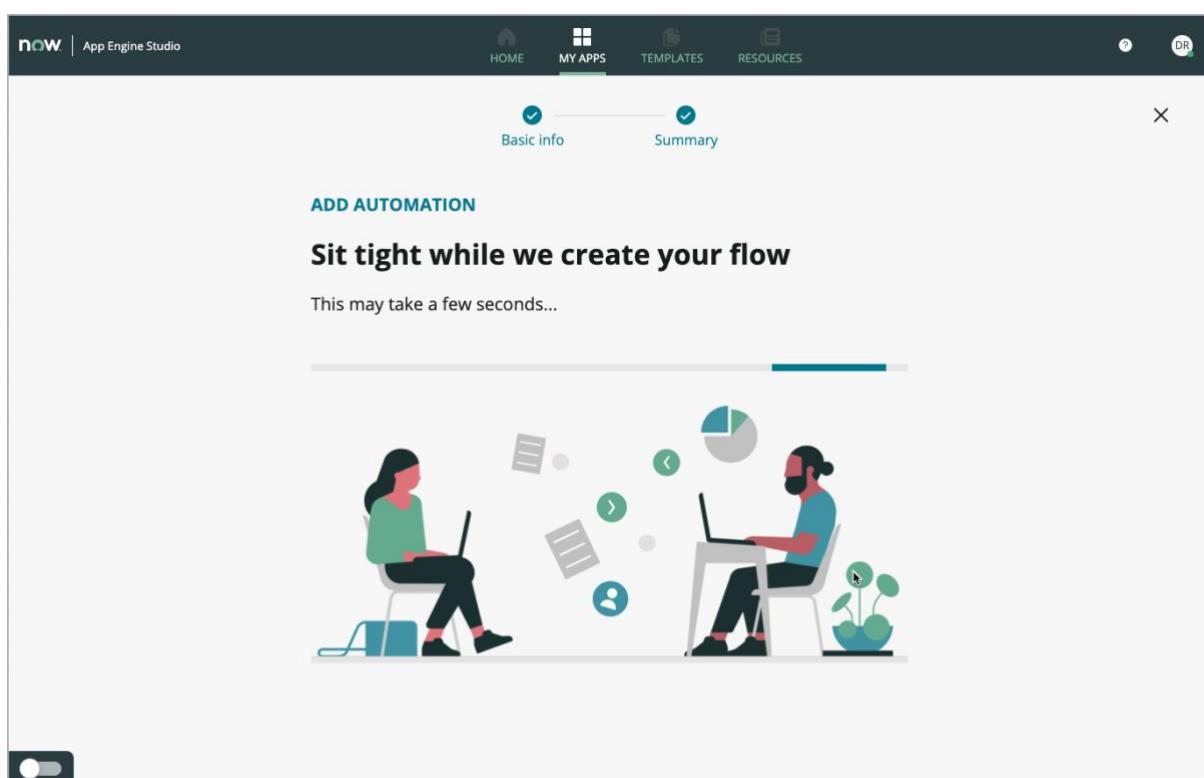
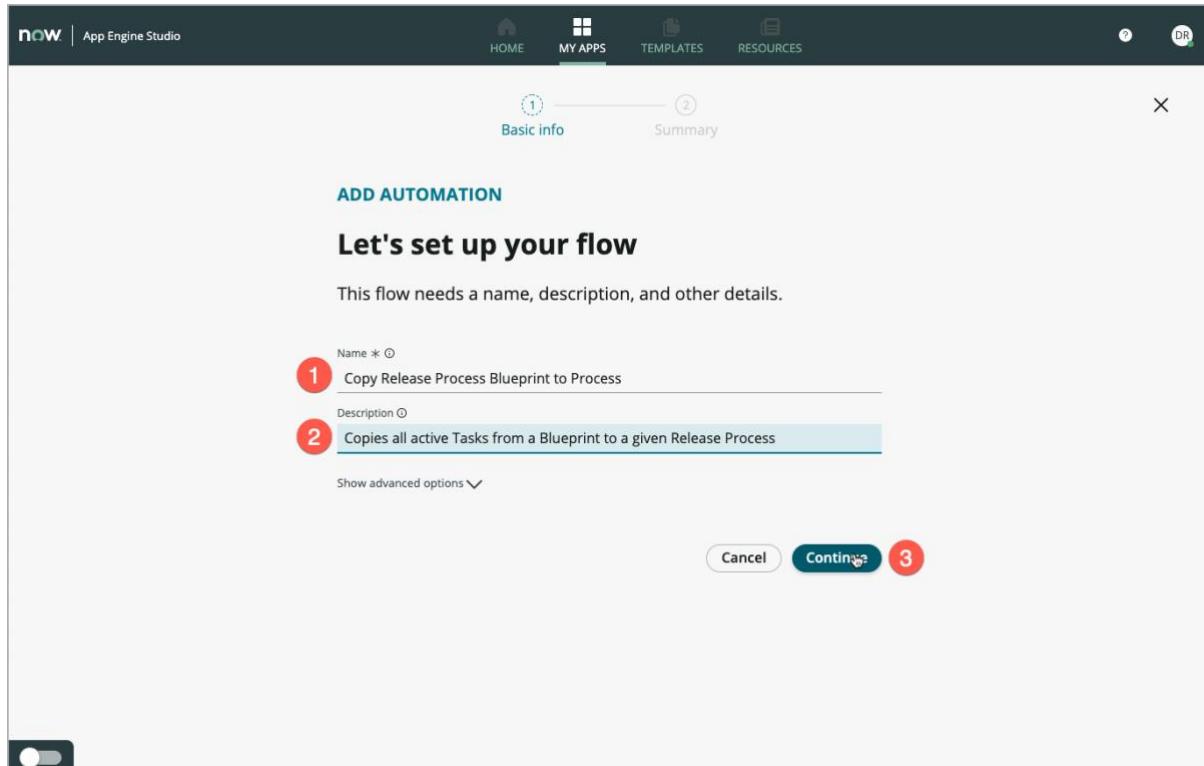
The screenshot shows the ServiceNow App Engine Studio interface. The navigation bar at the top includes links for HOME, MY APPS (selected), TEMPLATES, and RESOURCES. The main content area features a title "ADD AUTOMATION" and a sub-section titled "How do you want to add an automated workflow to your app?". Below this, there are several workflow template cards. One card, "Build from scratch", is highlighted with a red circle containing the number 1. Other visible cards include "Schedule a meeting when a Task is created or updated", "Send Survey when a Task is Completed", "Launch an RPA Job from the Service Catalog", "Launch an RPA Job on a Weekly Basis", "When an incident is closed, post a message to Twitter", "Send a notification to a", "Post a weekly reminder to", and "Create an approval for a". A dark footer bar with a toggle switch is at the bottom.

Enter a **meaningful (and unique)** name for your new Flow in the “**Name**” (1) field.
Optionally, capture a short “Description” below (2).

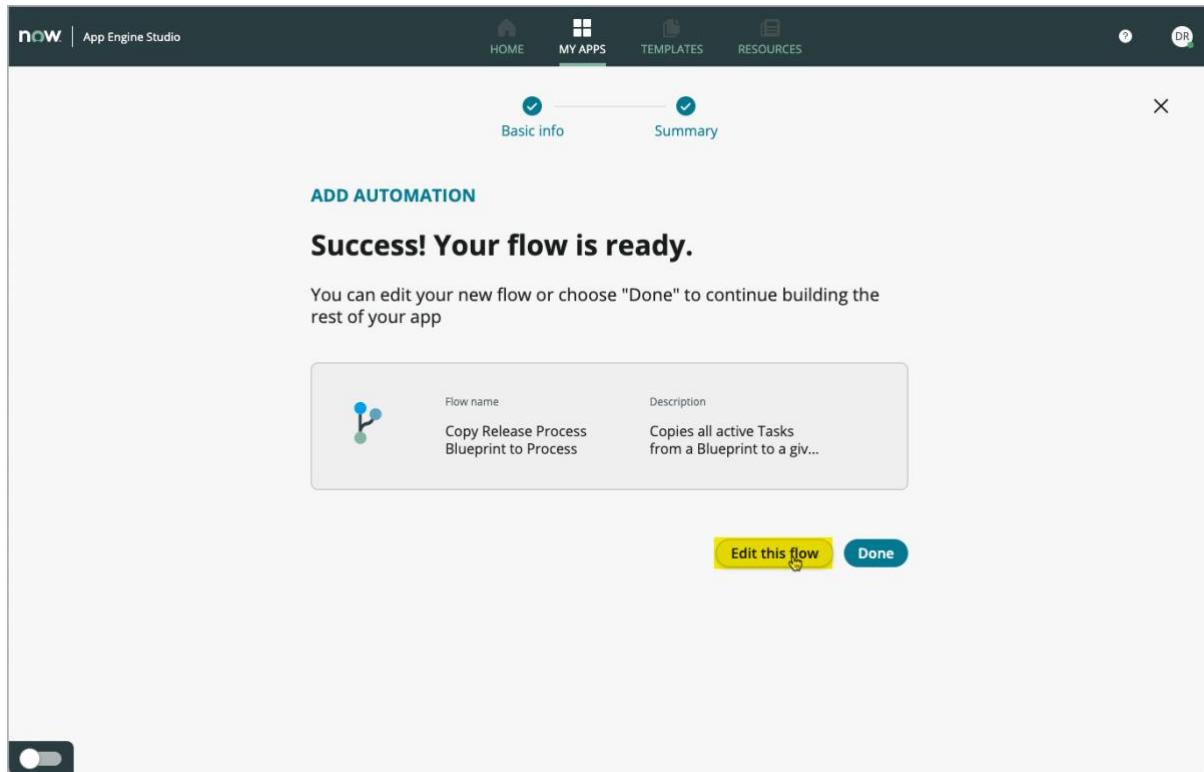
Click “**Continue**” (3) to move on.

Note:

It's a good idea, to create and define a “naming schema” for your organization, so that the overview of Flows in your instance stays clean and understandable – even if you can search and sort by Scope.

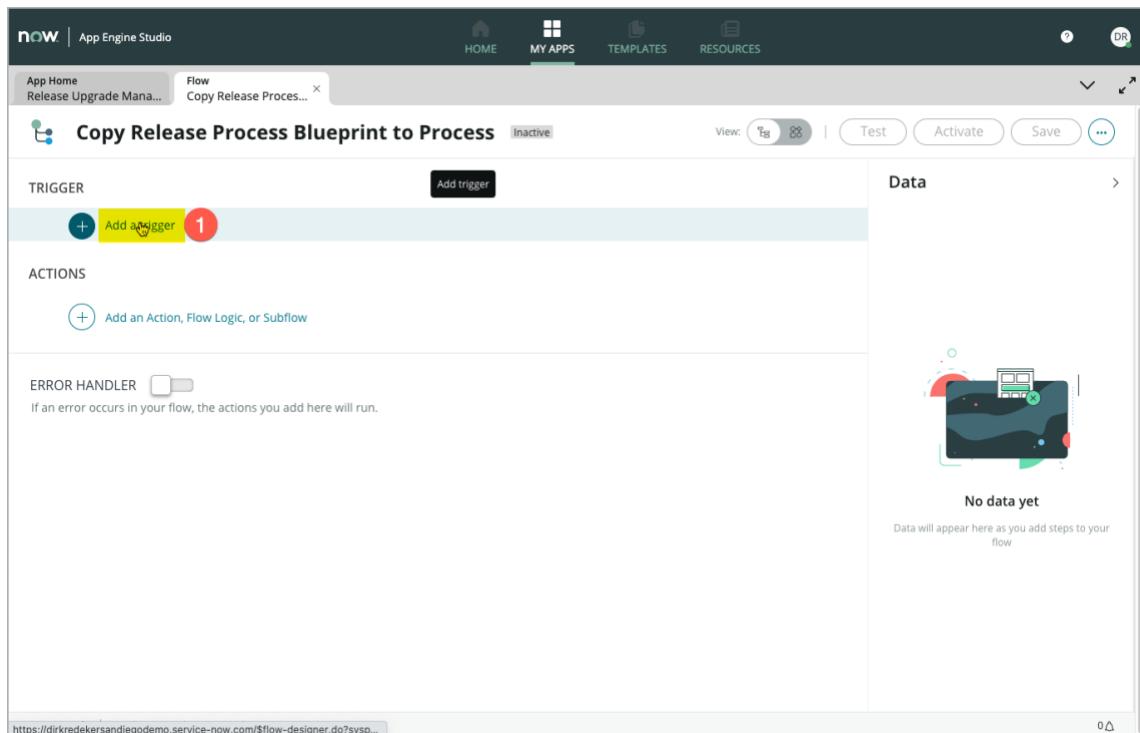


As soon as the new Flow is created click “Edit this flow” (1) to move on.



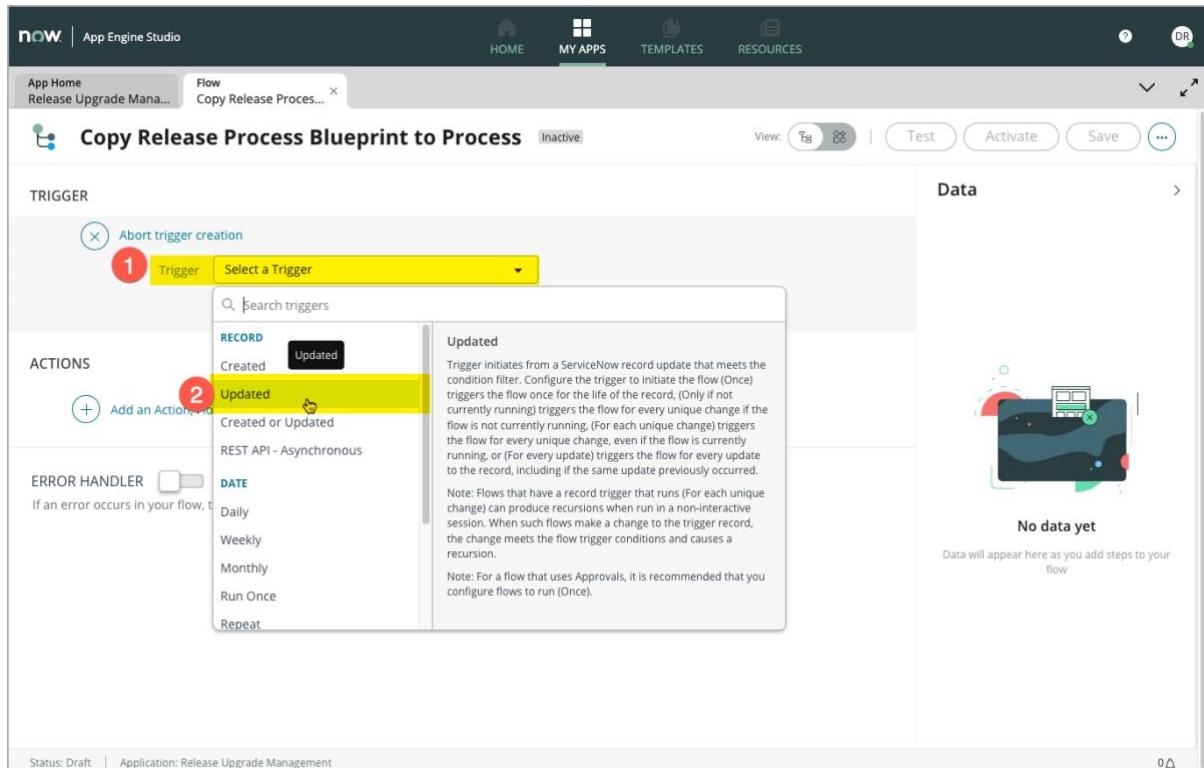
This opens Flow Designer. Wait a few seconds, while Flow Designer is loading, and the screen is ready for editing.

Click “Add a trigger” (1).



The Dropdown for the “Trigger” type field (1) opens automatically.

Select “Updated” (2) from the List.



Note: Flow designer does “heavy caching”!

This means, if your table does NOT appear in the list here, Close Flow Designer and also App Engine Studio. Re-Open both to refresh the cache – this should make new tables also appear in the list.

Click the “Table” field (1) and type “Release pr” in the filter box (2). This limits the number of shown tables in the Dropdown list, so that you easily can find your table.

Select the “Release Process” table from the List (3).

Click “Add filters” (1)

Select “**State**” in the first dropdown (1) to select the table field for the condition.
Select “changes to” in the second dropdown (2) and select “Work in Progress” from the third dropdown (3).

Do **NOT change** the “Run Trigger” field (4). Leave this to the value “Once”.

Click “Done” (5) when finished.

The screenshot shows the ServiceNow App Engine Studio interface for configuring a trigger. The trigger is named "Release Process Updated where (State changes to 1)". The condition is set to "State changes to Work in Progress". The run trigger is set to "Once". The "Done" button is highlighted with a red circle and labeled with the number 5. The sidebar on the right shows various data objects and variables.

TRIGGER

Trigger: Updated
Table: Release Process [x_snc_release_up_1_releas...]
Condition: All of these conditions must be met
1 State
2 changes to
3 Work in Progress
Run Trigger: Once

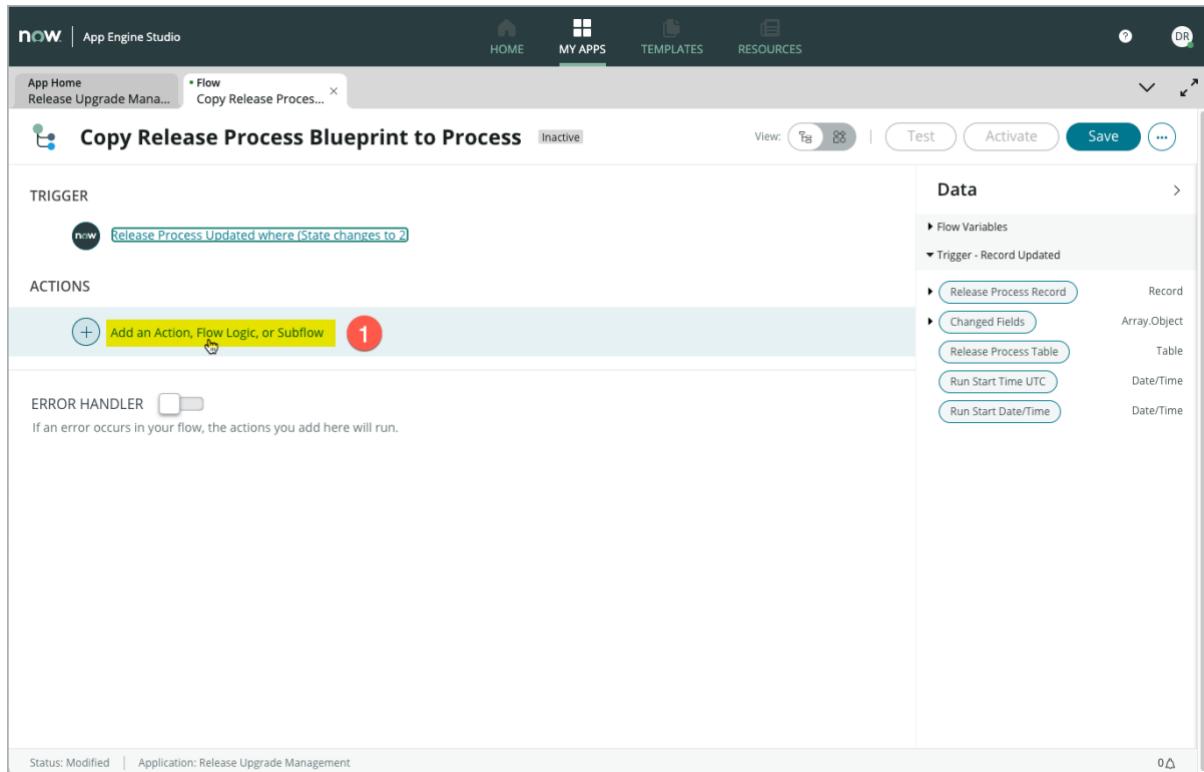
ACTIONS

Add an Action, Flow Logic, or Subflow

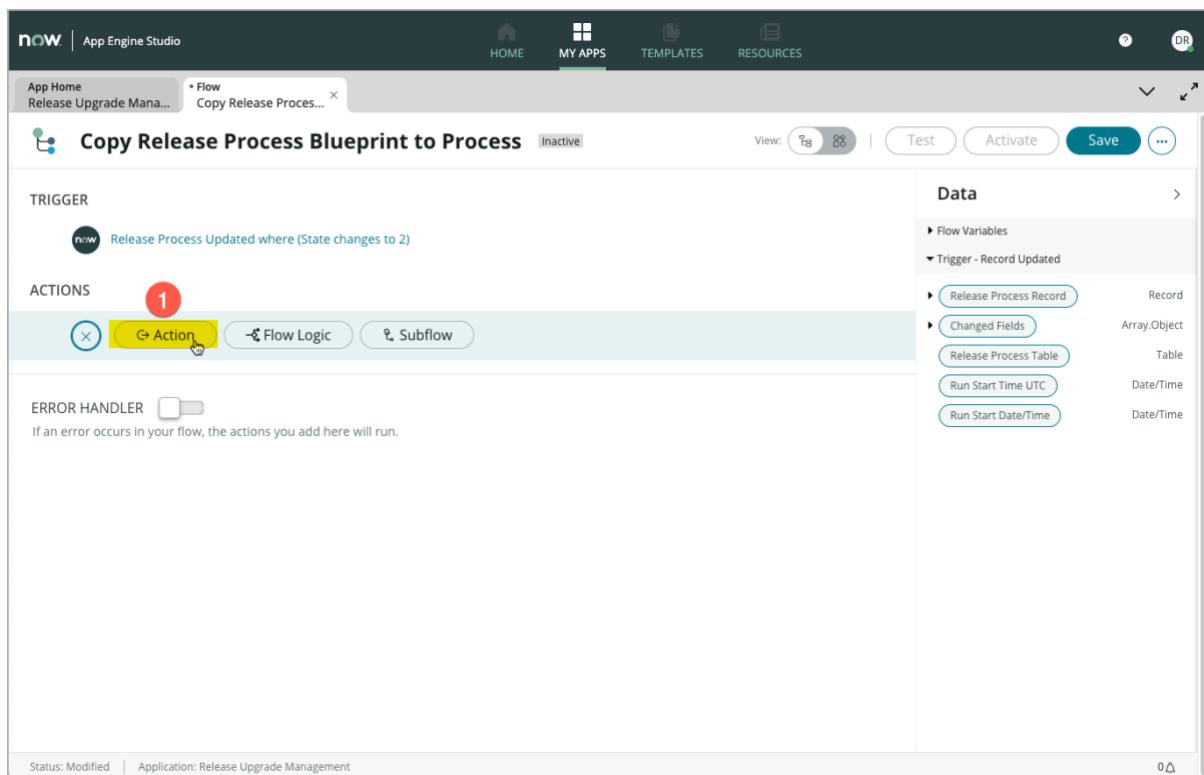
ERROR HANDLER

Status: Modified | Application: Release Upgrade Management

In the “Actions” section of Flow Designer, click “Add an Action, Flow Logic, or Subflow”



Click “Action” (1) to add an Action to your Flow.

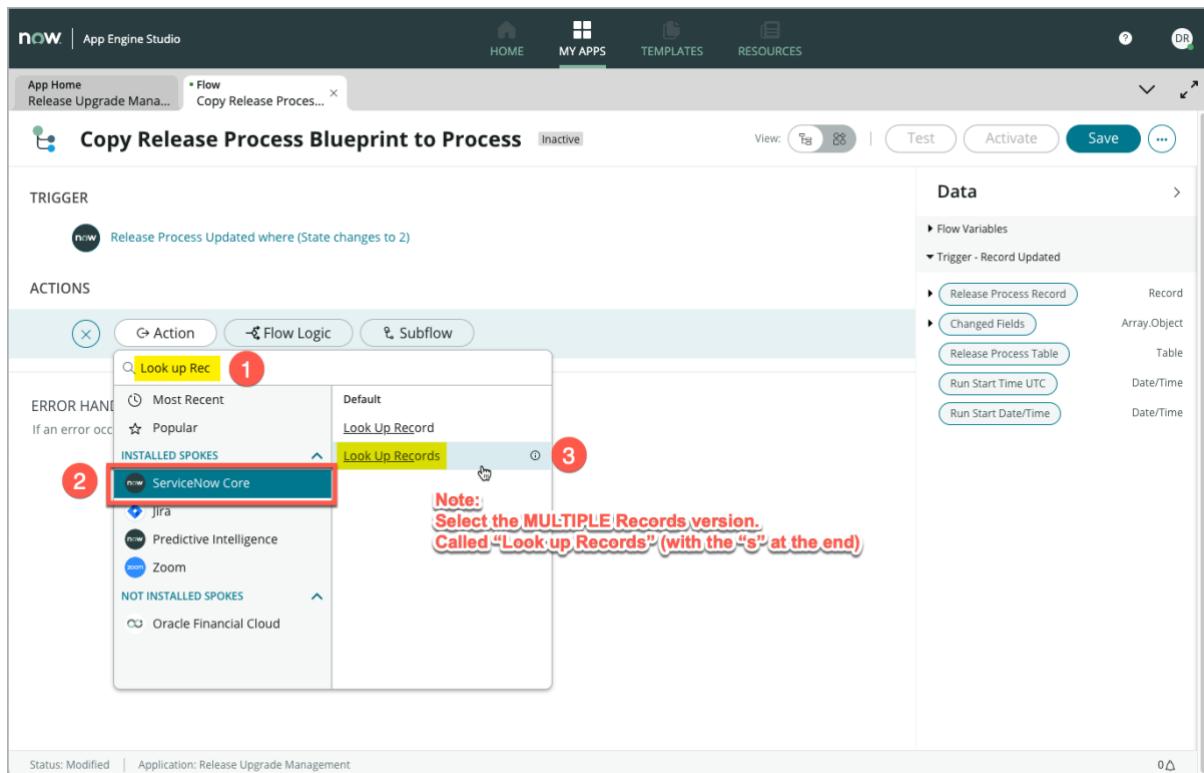


In the filter row (1) type “Look up Rec” to limit the number of shown Actions in the dropdown. Click “ServiceNow Core” (2) to further limit Action from that Spoke.

Select the “Look Up Records” Action (3).

Note:

You need to select the Action to **look up MULTIPLE Records**. This is the one, with the “s” at the end and in the Name “Look Up Records”)



The “Look Up Records” Action is inserted to your Flow.

Click the dropdown of the “Table” field (1).

TRIGGER

Release Process Updated where (State changes to 2)

ACTIONS

1 now Look Up Records

Action: Look Up Records

1 Table: Select a Table

Conditions: Select a table to configure the filter

Order by: Select a field

a to z

Max Results: 1000

Add an Action, Flow Logic, or Subflow

Data

- Flow Variables
- Trigger - Record Updated
 - Release Process Record
 - Changed Fields
 - Release Process Table
 - Run Start Time UTC
 - Run Start Date/Time
- 1 - Look Up Records
 - Records
 - Table
 - Count
 - Action Status

Type “Release task” in the filter (1) and select the “Release Task Blueprint” table (2).

TRIGGER

Release Process Updated where (State changes to 2)

ACTIONS

1 now Look Up Records

Action: Look Up Records

Table: Select a Table

Conditions: Q Release task 1

Order by: Release Tasks Blueprint
x_snc_release_up_1_release_tasks_blueprint 2

a to z

Max Results: 1000

Add an Action, Flow Logic, or Subflow

Data

- Flow Variables
- Trigger - Record Updated
 - Release Process Record
 - Changed Fields
 - Release Process Table
 - Run Start Time UTC
 - Run Start Date/Time
- 1 - Look Up Records
 - Records
 - Table
 - Count
 - Action Status

The **Condition Builder** is now shown below the Table field.

Select the field “**Active**” (which comes from the “Release Tasks Blueprint” table) in the first dropdown (1), select “**is**” in the second dropdown (2) and “**true**” in the third dropdown (3).

The screenshot shows the ServiceNow App Engine Studio interface. In the center, there's a modal window titled "Copy Release Process Blueprint to Process" which is inactive. The modal contains a "TRIGGER" section with a single trigger: "Release Process Updated where (State changes to 2)". Under the "ACTIONS" section, there is a "Look Up Release Tasks Blueprint Records" action. This action has an "Action" set to "Look Up Records" and a "Table" set to "Release Tasks Blueprint [x_snc_release_up...]" (with the rest of the name cut off). Below the table selection, there is a "Conditions" section. This section contains a condition builder with three dropdowns: "Active" (highlighted with a red circle 1), "is" (highlighted with a red circle 2), and "true" (highlighted with a red circle 3). The condition builder also includes "OR" and "AND" operators. A red box highlights this entire condition builder area. To the right of the modal, there is a sidebar titled "Data" which lists various flow variables and trigger records. At the bottom of the modal, there are "Delete", "Cancel", and "Done" buttons. The status bar at the bottom of the screen shows "Status: Modified" and "Application: Release Upgrade Management".

Optionally, select the “Order” field in the “Order by” dropdown (1).
Make sure to leave the “Max Results” field untouched (2).

Click “Done” (3) when finished.

Click “Save” (4) to make your changes to the Flow permanent!

Hint: Save often!

The screenshot shows the ServiceNow App Engine Studio interface for configuring a Flow. The flow is titled "Copy Release Process Blueprint to Process" and is currently inactive. The "Data" section is expanded, showing various variables and triggers. A red box highlights the "Look Up Records" action, specifically the "Order by" dropdown set to "Order" (1) and the "Max Results" input field set to "1000" (2). Numbered callouts (3) and (4) point to the "Done" button and the "Save" button respectively, indicating the final steps in the configuration process.

Below your first Action, click “Add an Action, Flow Logic, or Subflow” (1)

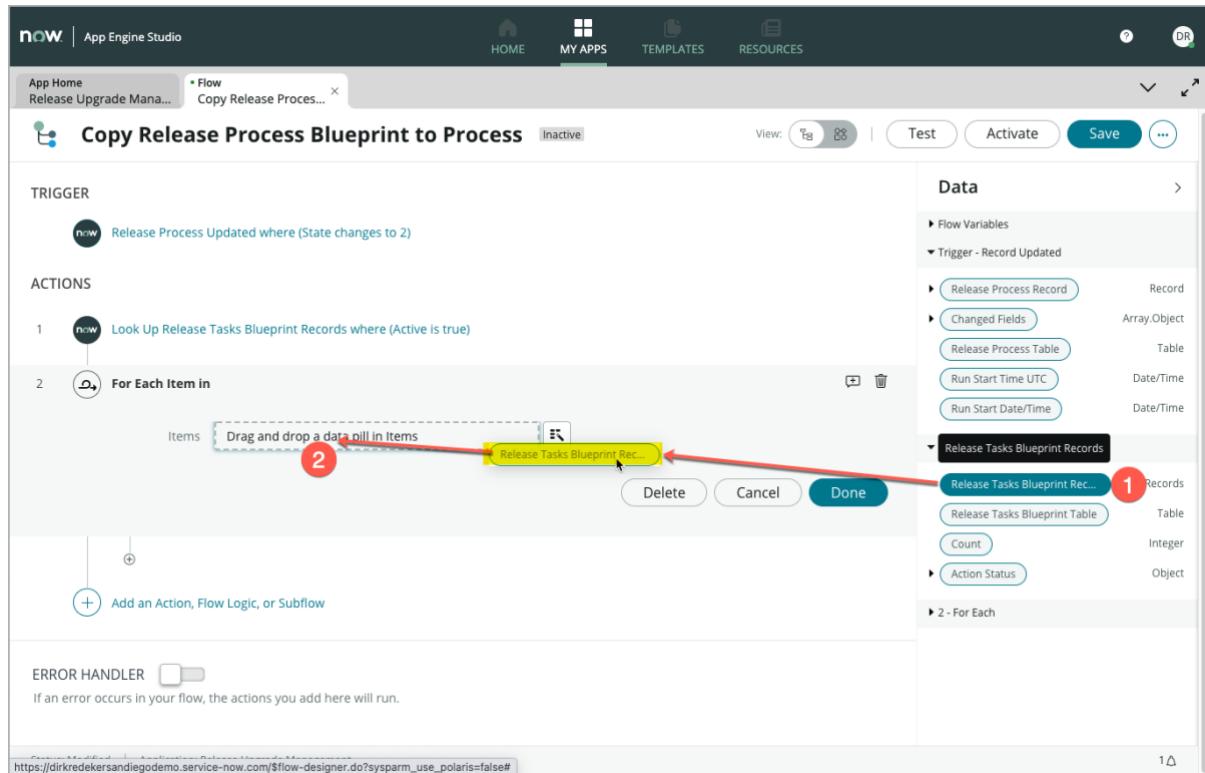
The screenshot shows the ServiceNow App Engine Studio interface. A flow blueprint named "Copy Release Process Blueprint to Process" is active. In the Actions section, there is one action: "Look Up Release Tasks Blueprint Records where (Active is true)". Below this, there is a placeholder action labeled "Add an Action, Flow Logic, or Subflow" (1), which is highlighted with a red circle. A dropdown menu is open over this placeholder, showing options like "If", "For Each", and "Subflow". The right panel displays various data-related components such as "Flow Variables", "Trigger - Record Updated", and "1 - Look Up Records".

This time, select “Flow Logic” (1) and from the dropdown, select “For Each” (2).

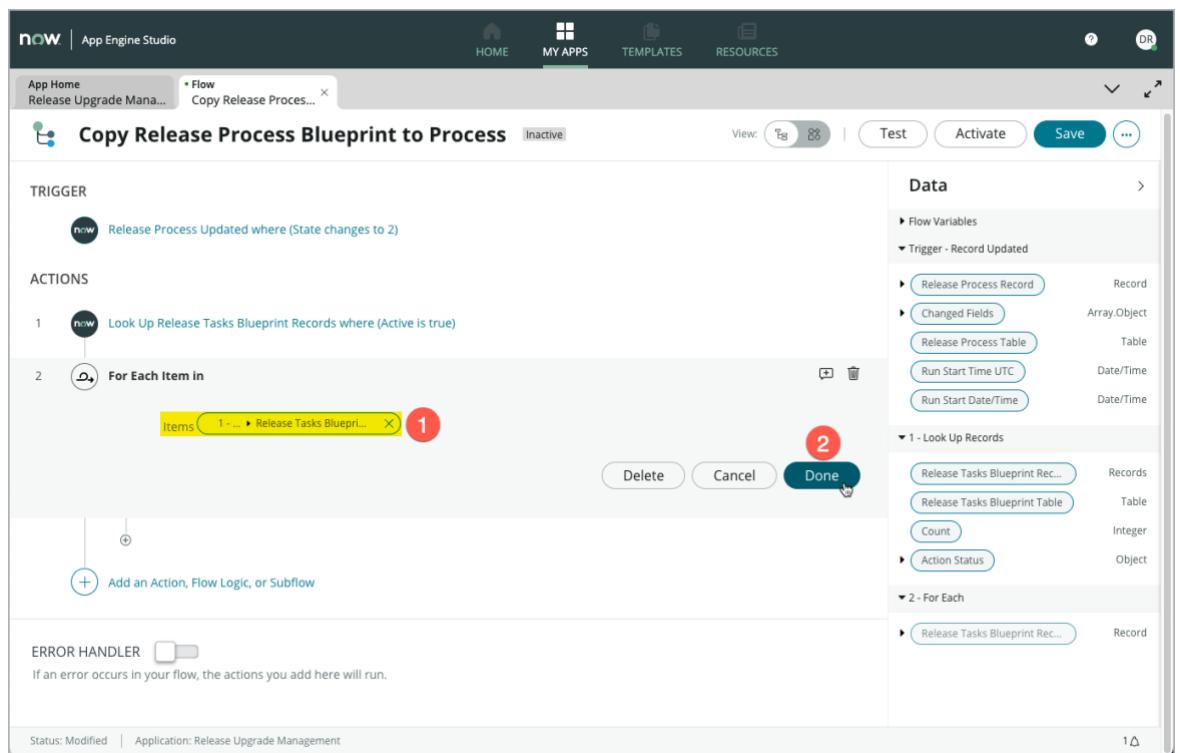
The screenshot shows the ServiceNow App Engine Studio interface again. The flow blueprint "Copy Release Process Blueprint to Process" is active. The Actions section now contains two actions: "Look Up Release Tasks Blueprint Records where (Active is true)" and a new "Flow Logic" action (1). A dropdown menu is open over the "Flow Logic" action, showing options like "If", "Else If", "Else", and "For Each". The "For Each" option is selected and highlighted with a red circle (2). The right panel displays data-related components.

The “For Each” Flow Logic will be added to your flow

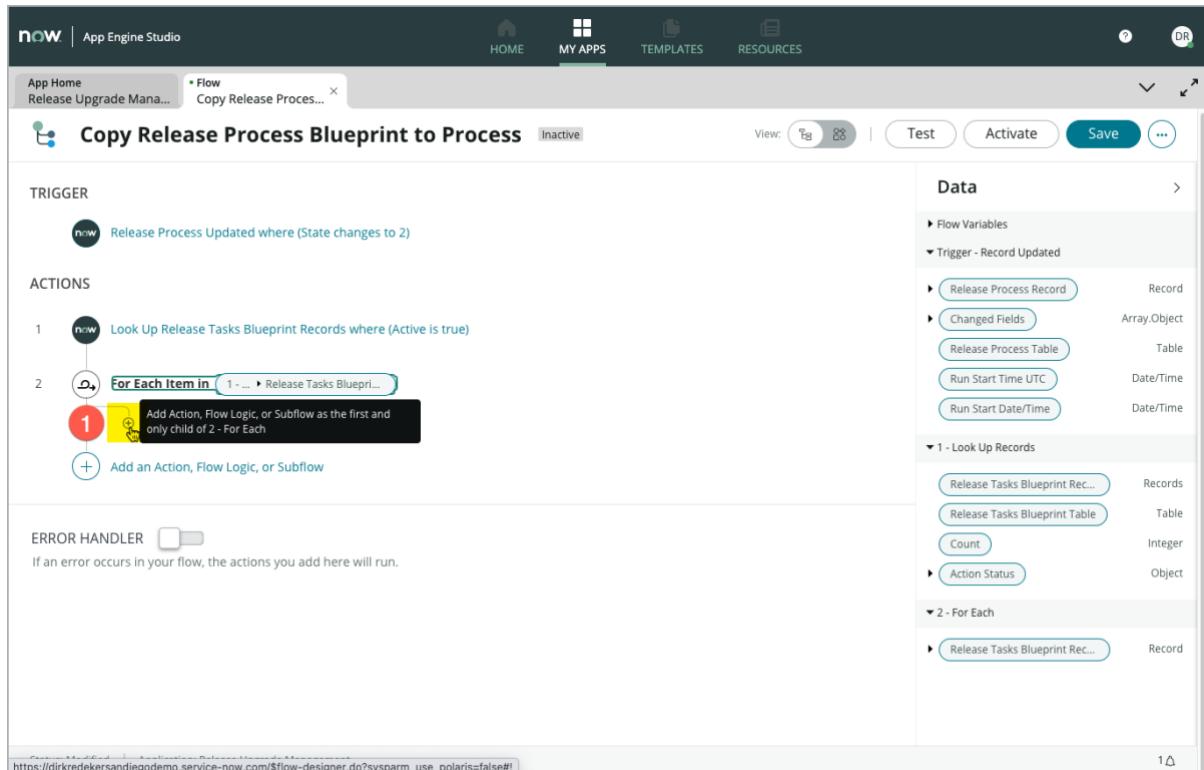
Next, **drag and drop** the “Release Tasks Blueprint Records” data pill (1) from the right-hand data panel to the “Items” field of your “For Each” Flow logic (2) – see screenshot below.



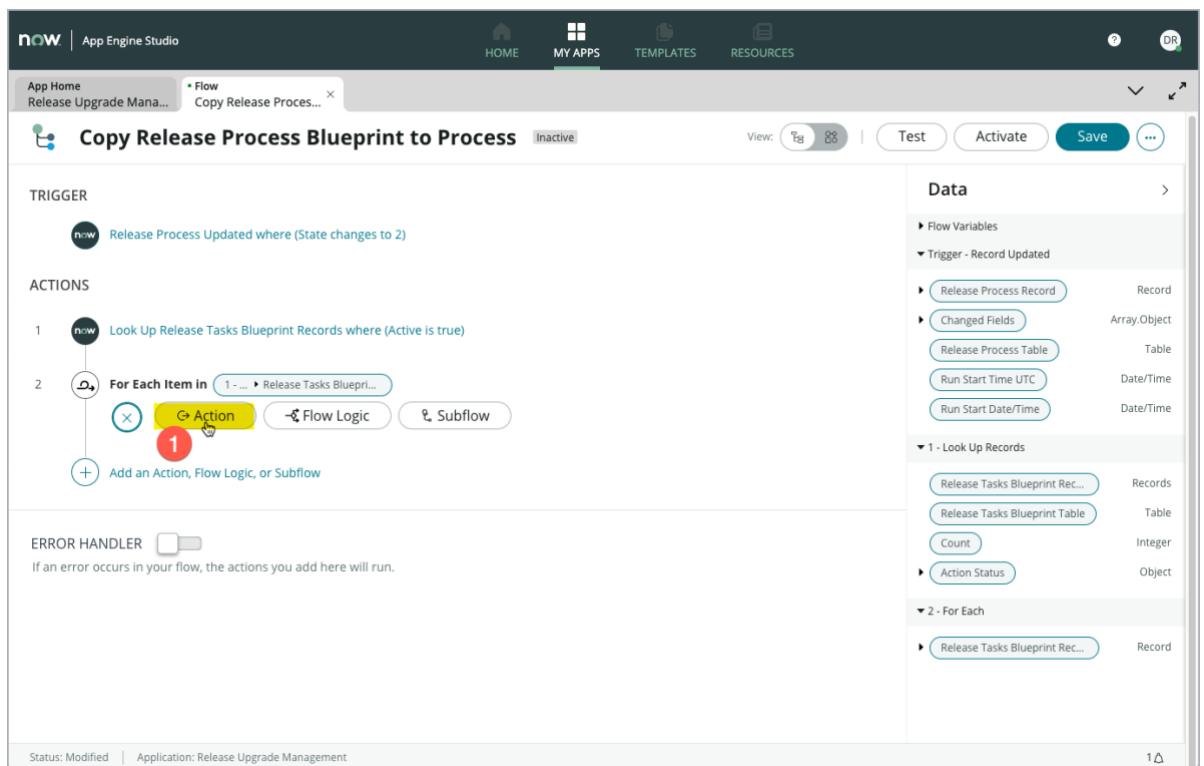
In the next screenshot you can see that the data pill is now used for the Items in the “For Each” Flow logic (1). Click “Done” (2) when finished.



Click the small (+) plus icon (1) below the “For Each Item In” Flow Logic.
This will add an action that will run for EACH item (Record) used in the “For Each” loop.



Select “Action” (1) to insert an Action at this point in the Flow.



Type “Create re” in the filter (1) and select the “ServiceNow Core” Spoke in the left-side list (2). Find and select the “Create Record” Action in the right-side list (3).

The screenshot shows the ServiceNow App Engine Studio interface. On the left, the 'ACTIONS' section contains a 'For Each Item in' loop. Inside this loop, there is a 'Create Record' action. A red circle labeled '1' is over the search bar 'Create re'. A red circle labeled '2' is over the 'ServiceNow Core' entry in the 'INSTALLED SPOKES' dropdown. A red circle labeled '3' is over the 'Create Record' action in the 'Data' pane.

That inserts the “Create Record” Action to your Flow. Note, that this Action is indented below the “For Each” Flow Logic.

Click the dropdown of the “Table” field (1).

The screenshot shows the 'Create Record' action configuration. The 'Action' dropdown is set to 'Create Record'. The 'Table' dropdown is highlighted with a red circle labeled '1'. The 'Fields' dropdown is below it. The 'Done' button is at the bottom right of the configuration panel.

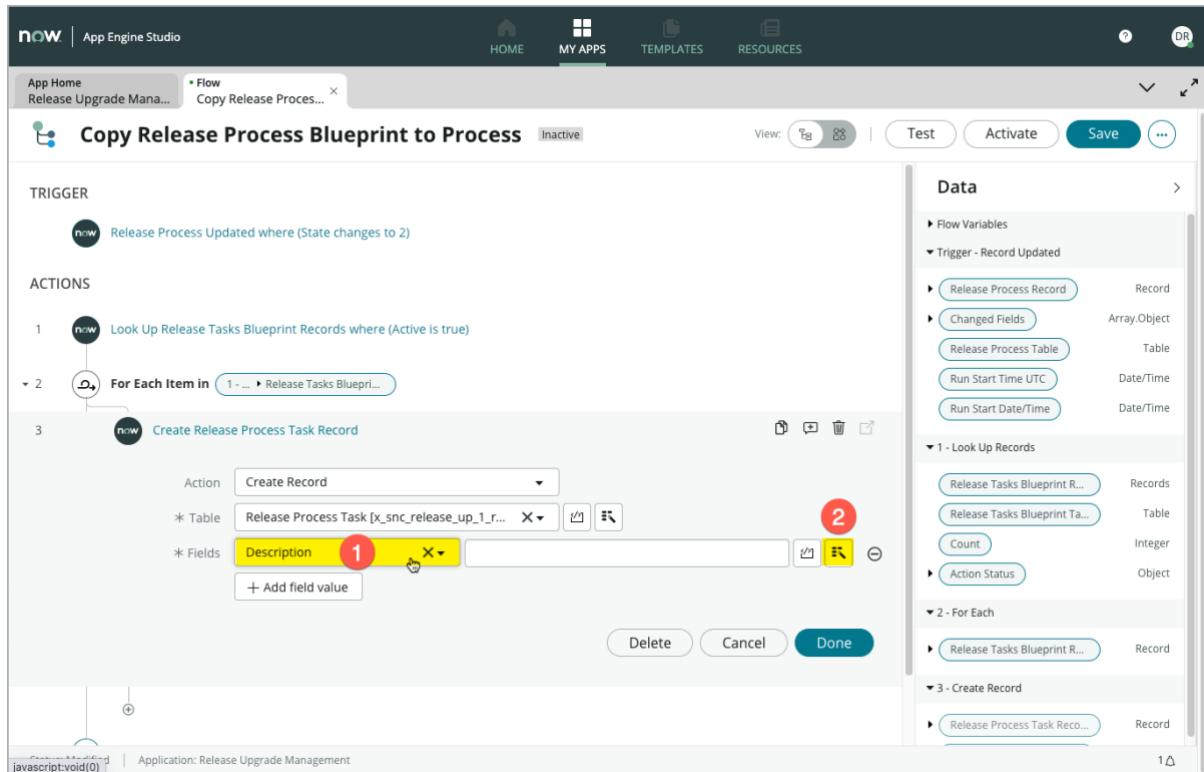
Type “Release process” into the filter (1) and select the “Releaser Process Task” (2) table.

The screenshot shows the ServiceNow App Engine Studio interface. The top navigation bar includes 'HOME', 'MY APPS', 'TEMPLATES', and 'RESOURCES'. The main area displays a flow titled 'Copy Release Process Blueprint to Process' with the status 'Inactive'. The 'ACTIONS' section contains three steps: 1. 'Look Up Release Tasks Blueprint Records where (Active is true)', 2. 'For Each Item in [1 ... Release Tasks Blueprint ...]', and 3. 'Create Record'. Step 3 is expanded, showing an 'Action' dropdown set to 'Create Record', a 'Table' dropdown set to 'Select a Table', and a 'Fields' dropdown. The 'Fields' dropdown is open, showing a search result for 'Release process' (1), which is then selected as 'Release Process Task' (2). A 'Done' button is visible at the bottom right of the modal. The right side of the screen shows a 'Data' panel with various flow variables and records listed under sections like 'Trigger - Record Updated' and '1 - Look Up Records'.

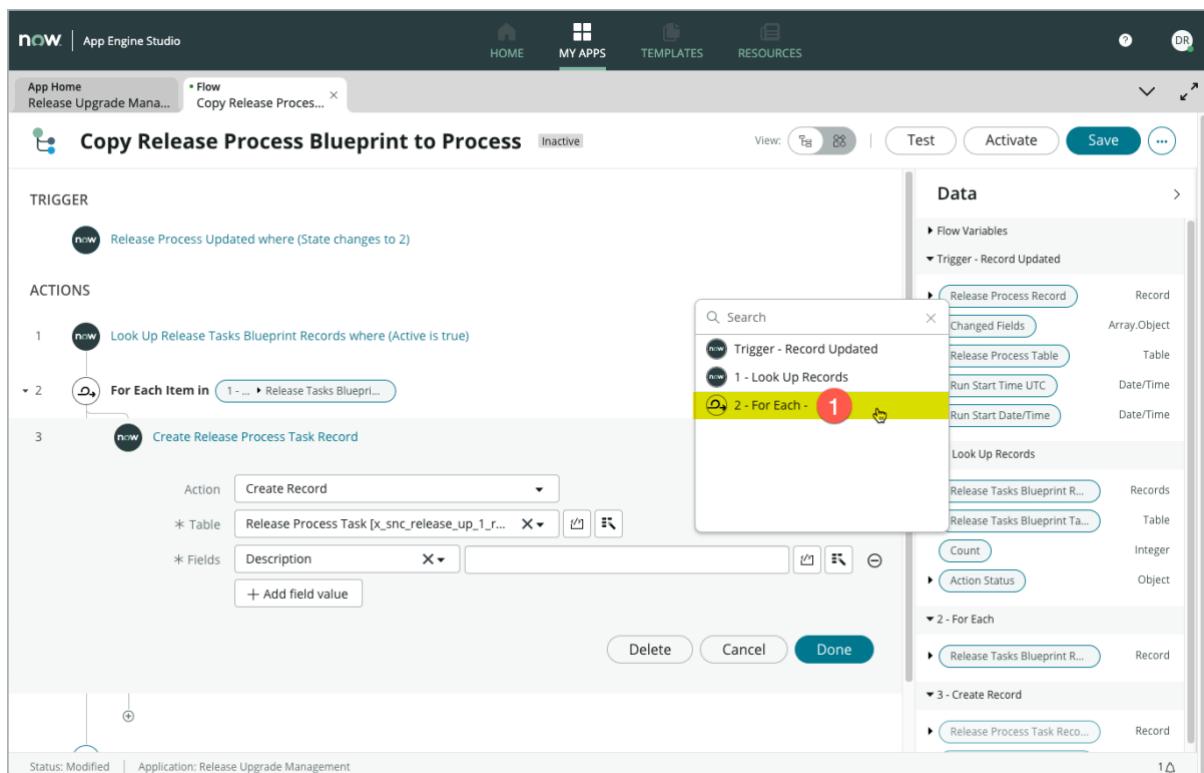
Click “+ Add field value” (1)

This screenshot shows the same flow as the previous one, but the 'Fields' dropdown in step 3 is now open, with the option '+ Add field value' highlighted (1). The rest of the interface and data panel are identical to the first screenshot.

Select the “Description” field (1) from the List and click the “data pill picker” symbol (2).

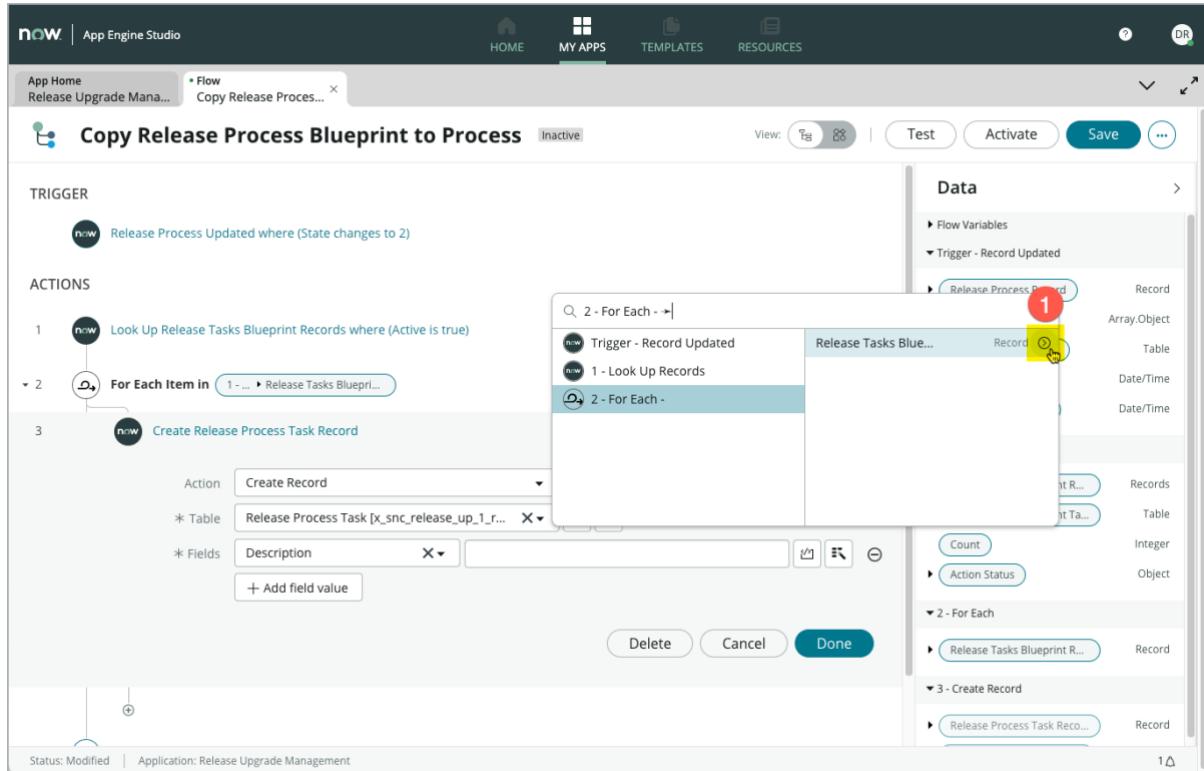


In the Popup Dialog that opens, select the “For Each” entry (1)



You can see, that the popup dialog expands and shows another list to the right of the selection in the left list. Each list to the right shows' options for the selection of its right-hand list.

In this case, the “For Each” Flow Logic allows to access the “Release Tasks Blueprint” records – one in each loop. **Do NOT click the NAME “Release Task Blueprint”** in the right-side list. This would SELECT this record. **Instead, click the small “>” symbol at the right edge (1).**



Another list opens to the right in the popup dialog.

From this list, find the “Description” field (1) and select it.

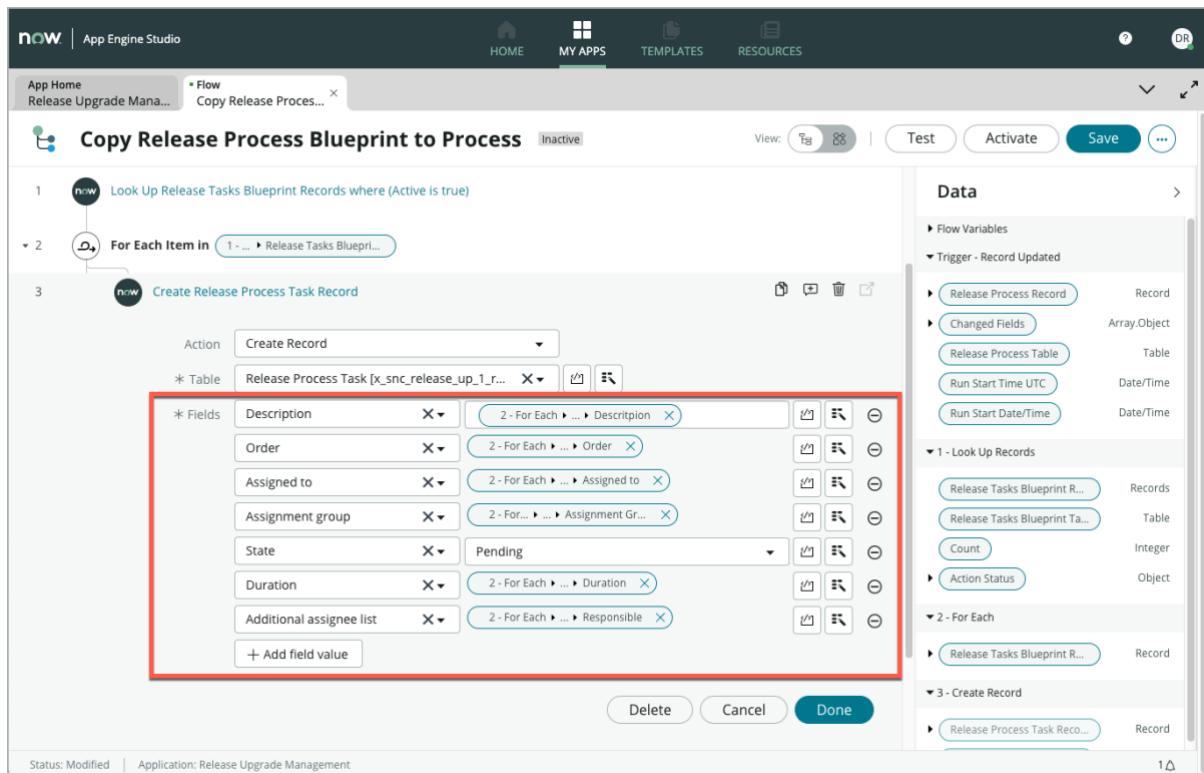
You now have defined, that the Field “Description” (1) in the new record (you are going to create with the “Create Record” Action) is filled with the “Description” (2) field of the “Release Task Blueprint” record in the current Loop.

Now let's **add more fields** for the new record to be created. Click "**+ Add field value**" for each field to fill with the "Create Record" Action.

Look at the screenshot below to review on which and how to fill the fields.

Note:

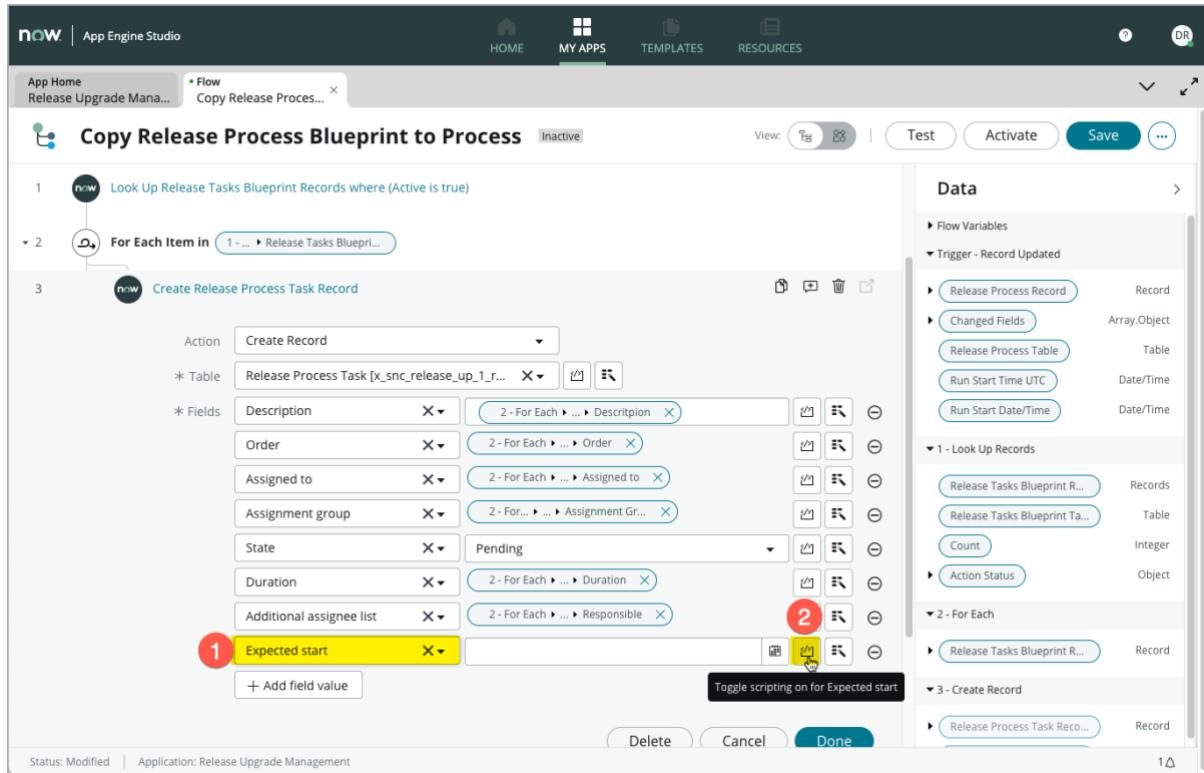
As there are no step-by-step screenshots for the other field assignments, try to assign them according to the use case. Ask questions in the team, if you need some help.



CHALLENGE

This step is optional: You can also fill in the “Expected start” DATE & TIME, which can be calculated, based on the “Expected start date” of the “Release Process” PLUS the number of Days in the “On Day” field in the “Blueprint” table record

Select the “Expected start” field (1) and click the “Toggle scripting” button (2).



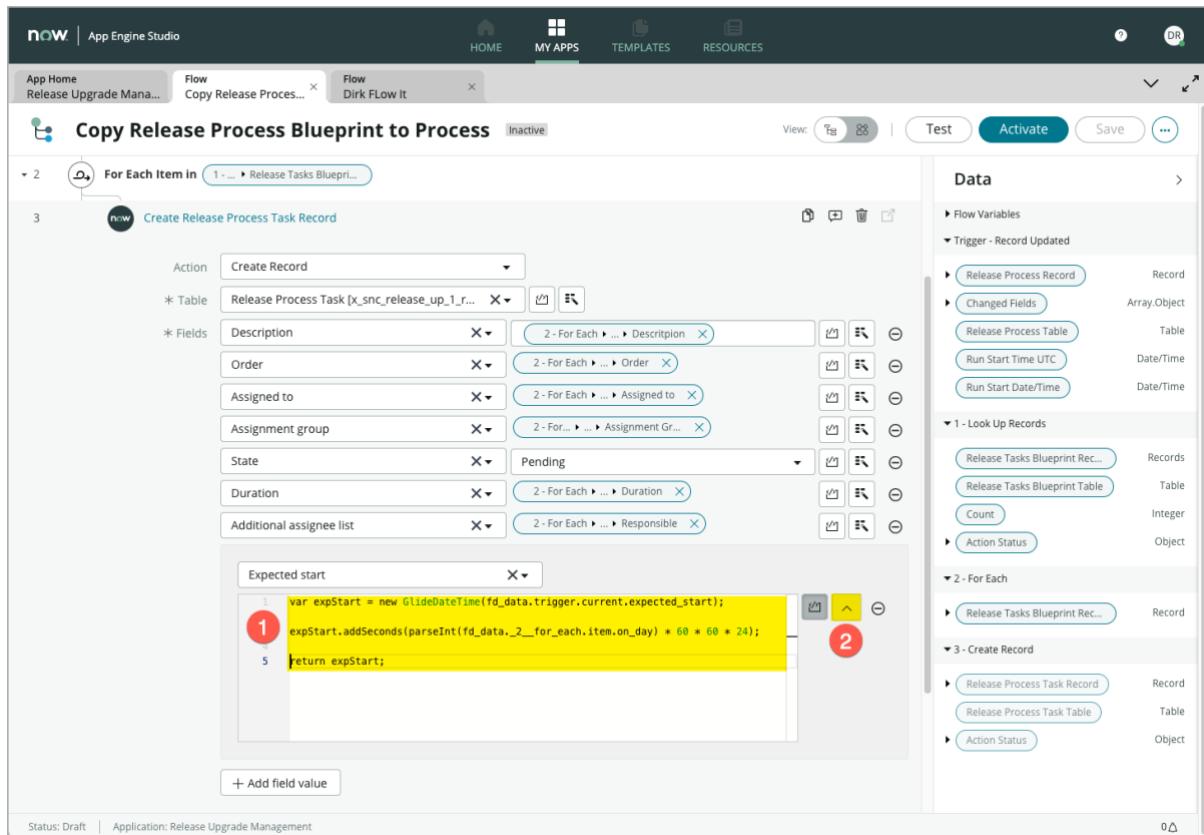
Type or copy the following code into the script field (1).

```
var expStart = new GlideDateTime(fd_data.trigger.current.expected_start);

expStart.addSeconds(parseInt(fd_data._2_for_each.item.on_day) * 60 * 60 * 24);

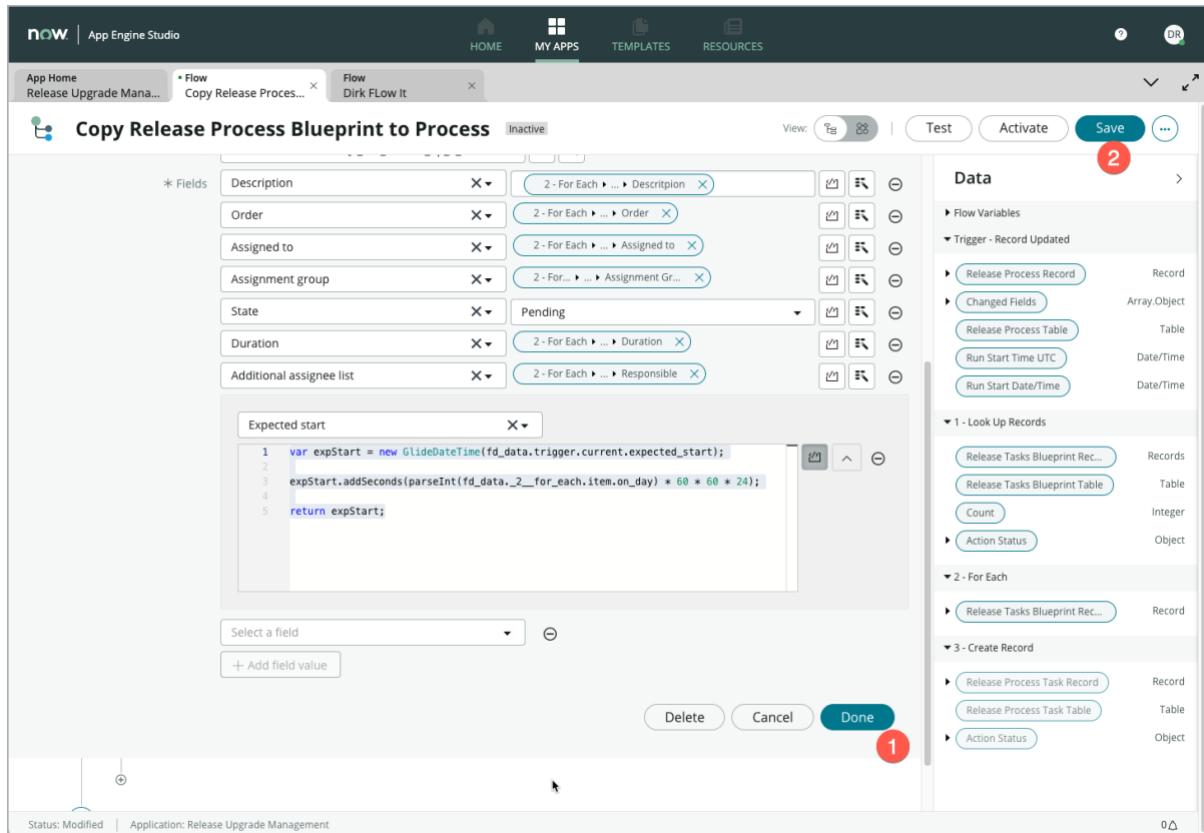
return expStart;
```

You can open/close the script field using the button indicated in the screenshot below (2).



Click “Done” (1) when finished.

Save your changes clicking “Save” (2) in the upper-right corner



END OF OPTIONAL STEP

NOTE:

This assignment is essential to link the “Release Process Task” Records to the main “Release Process” Record (as “child” records – so that the will appear in the Related List)

The next step links the Task Record to the main Release Process using the “Parent” field.

Flow Details:

- Trigger:** Release Process Updated where (State changes to 2)
- Action 1:** Look Up Release Tasks Blueprint Records where (Active is true)
- Action 2:** For Each Item in [Release Tasks Blueprint Table]
- Action 3 (Expanded):** Create Release Process Task Record

Create Release Process Task Record Dialog:

- Parent:** Trigger - Record Updated (3) → Release Process Record (4)
- Release Process Record Fields:**
 - Short description
 - Skills
 - State
 - Sys ID (5)
 - Tags
 - Task type
 - Time worked

You can now Test (1) your Flow or Activate (2) it.

For now, we just click “Activate” (2) to allow triggering the Flow in your App at runtime.

The screenshot shows the ServiceNow App Engine Studio interface. At the top, there are tabs for HOME, MY APPS, TEMPLATES, and RESOURCES. Below the tabs, the title bar shows 'Flow Copy Release Process...' and 'Inactive'. On the left, the flow diagram is visible with three main steps: 1. Look Up Release Tasks Blueprint Records where (Active is true), 2. For Each Item in (Release Tasks Blueprint...), and 3. Create Release Process Task Record. Step 2 is expanded to show its loop logic. On the right, a sidebar titled 'Data' lists various flow variables and actions, such as 'Release Process Record', 'Changed Fields', and 'Create Release Process Task Record'. Buttons for 'Test' (highlighted with a red circle '1') and 'Activate' (highlighted with a red circle '2') are located at the top right of the editor area.

Click “Activate” (1) to confirm your selection

This screenshot shows the same ServiceNow App Engine Studio interface as the previous one, but with a modal dialog box in the foreground. The dialog box has a title 'Are you sure you want to activate the flow?' and a message below it stating 'Your flow will start running when the trigger conditions are met.' There is a checkbox labeled 'Don't show me this again' and two buttons: 'Cancel' and 'Activate'. The 'Activate' button is highlighted with a red circle containing '1'. The background of the dialog box is semi-transparent, allowing the flow editor and its components to be seen.

Test the new Flow in the App

From the App dashboard click “PREVIEW” (1) on the “Release Process” table (in the “Data” section).

The screenshot shows the ServiceNow App Engine Studio interface. At the top, there's a navigation bar with links for HOME, MY APPS, TEMPLATES, and RESOURCES. Below the navigation bar, the main content area is titled "Release Upgrade Management". The "Data" section is currently active, indicated by a blue underline. It contains three tables:

- Release Tasks Blueprint**: Last edited 06.06.2022 16:58:26. A yellow "PREVIEW" button is visible.
- Release Process Task**: Last edited 06.06.2022 15:25:29. A yellow "PREVIEW" button is visible.
- Release Process**: Last edited 06.06.2022 15:05:40. A yellow "PREVIEW" button is highlighted with a red circle containing the number 1.

Below the Data section, there are sections for "Experience" and "Logic and automation".

Click “New” (1) in the upper-right corner.

The screenshot shows the "Release Process" list view. The top navigation bar includes a search bar and a "New" button, which is highlighted with a red circle containing the number 1. The list table has columns for Number, Priority, State, Assigned to, Short description, Task type, and Expected start. Each column has a search input field. The table body displays a single row with a decorative graphic of a satellite dish and a purple circle with an 'X'. Below the table, a message says "No records to display".

Fill at least the fields indicated in the screenshot below.

Click “**Submit**” (4) to create the record.

Release Process

Number: RPRC0001009

Active:

Order: 100

State: Open

Assigned to: Fred Luddy

Assignment group: Database

Parent:

Description: San Diego Release / ServiceNow

Additional comments (Customer visible):

Work notes:

Submit

You will be **navigated back to the List of “Release Processes”**.

Note: The Number field of your Record may be different to the one shown in the screenshot below.

Click the record in the **first column** (1) to open the Record in the Form view.

Release Process

All

Number	Priority	State	Assigned to	Short description	Task type	Expected start
RPRC0001009	4 - Low	Open	Fred Luddy	Release Process	01.07.2022 00:00:00	

...service-now.com/x_snc_release_up_1_release_process.do?sys_id=0dc...

Review the newly created Record.

Note, the Activities automatically logged for your Release Process.

Note, that the Related List is still empty.

The screenshot shows two main panels. The top panel is the 'Release Process' record for RPRC0001009. It includes fields like Number, Expected start (01.07.2022 00:00:00), Duration, Watch list, Active (checked), Order (100), State (Open), Assigned to (Fred Luddy), Assignment group (Database), Parent, Description (San Diego Release / ServiceNow), Additional comments (Customer visible), and Work notes. A red circle labeled '1' points to the 'Activities' section, which lists one activity for user DR (Dirk Redeker) assigned to Fred Luddy with impact 3 - Low, opened by Dirk Redeker, priority 4 - Low, and state Open. The bottom panel is the 'zzz Release Process Tasks' list, showing a single row for the record with columns: Number, State, Assigned to, Short description, and Expected start. A red circle labeled '2' points to this list. Both panels have 'Update' and 'Delete' buttons at the bottom.

Change the value of the “State” field (1) to “Work in Progress” (2) and click “Update” (3) the Record.

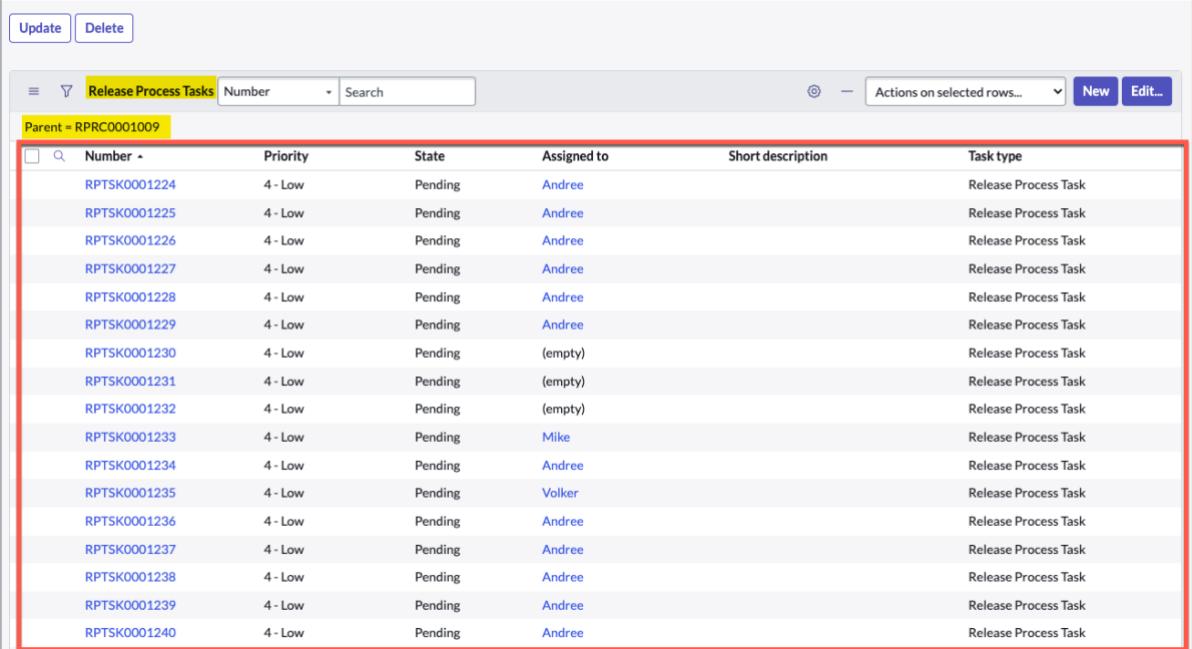
This will start/trigger the Flow we created (State changes to “Work in progress”).

The screenshot shows the 'Release Process' record for RPRC0001009. The 'State' field is highlighted with a yellow box and a red circle containing '1'. A dropdown menu is open over the 'State' field, showing options: Pending, Open (selected), Work in Progress (highlighted with a blue background and a red circle containing '2'), Closed Complete, Closed Incomplete, and Closed Skipped. The 'Update' button at the top right is highlighted with a red circle containing '3'.

Re-Open the Record from the list (1)

The screenshot shows the 'Release Process' list view. The first record, RPRC0001009, is highlighted with a yellow box and a red circle containing '1'.

The Related List now contains the new Tasks copied from the Blueprint – see screenshot below.



The screenshot shows a ServiceNow list view titled "Release Process Tasks". The list includes the following columns: Number, Priority, State, Assigned to, Short description, and Task type. The "Number" column is sorted by priority. The "Task type" column is consistently "Release Process Task". The "Assigned to" column shows names like Andree, Mike, and Volker. The "Short description" column is mostly empty or contains "(empty)". The "State" column shows all entries as "Pending". The "Priority" column shows all entries as "4 - Low". The "Assigned to" column shows all entries as "Andree". The "Short description" column shows all entries as "(empty)". The "Task type" column shows all entries as "Release Process Task".

Number	Priority	State	Assigned to	Short description	Task type
RPTSK0001224	4 - Low	Pending	Andree		Release Process Task
RPTSK0001225	4 - Low	Pending	Andree		Release Process Task
RPTSK0001226	4 - Low	Pending	Andree		Release Process Task
RPTSK0001227	4 - Low	Pending	Andree		Release Process Task
RPTSK0001228	4 - Low	Pending	Andree		Release Process Task
RPTSK0001229	4 - Low	Pending	Andree		Release Process Task
RPTSK0001230	4 - Low	Pending	(empty)		Release Process Task
RPTSK0001231	4 - Low	Pending	(empty)		Release Process Task
RPTSK0001232	4 - Low	Pending	(empty)		Release Process Task
RPTSK0001233	4 - Low	Pending	Mike		Release Process Task
RPTSK0001234	4 - Low	Pending	Andree		Release Process Task
RPTSK0001235	4 - Low	Pending	Volker		Release Process Task
RPTSK0001236	4 - Low	Pending	Andree		Release Process Task
RPTSK0001237	4 - Low	Pending	Andree		Release Process Task
RPTSK0001238	4 - Low	Pending	Andree		Release Process Task
RPTSK0001239	4 - Low	Pending	Andree		Release Process Task
RPTSK0001240	4 - Low	Pending	Andree		Release Process Task

4.2 Exercise #5 – Challenge - Add an Approval for the Release Process

If time permits, this Exercise will be discussed interactively during the Hackathon.

5 Integrate your App in the Service Portal

5.1 Exercise #6 – Release Process Request Catalog Item

Was determined to be of minor interest for the Hackathon.
Can be presented during the workshop if desired.

5.2 Exercise #7 – Request a new Task for the Release Process

Was determined to be of minor interest for the Hackathon.
Can be presented during the workshop if desired.

6 Create a great Workspace for your App

6.1 Exercise #8 – Create a Workspace for the Release Process App

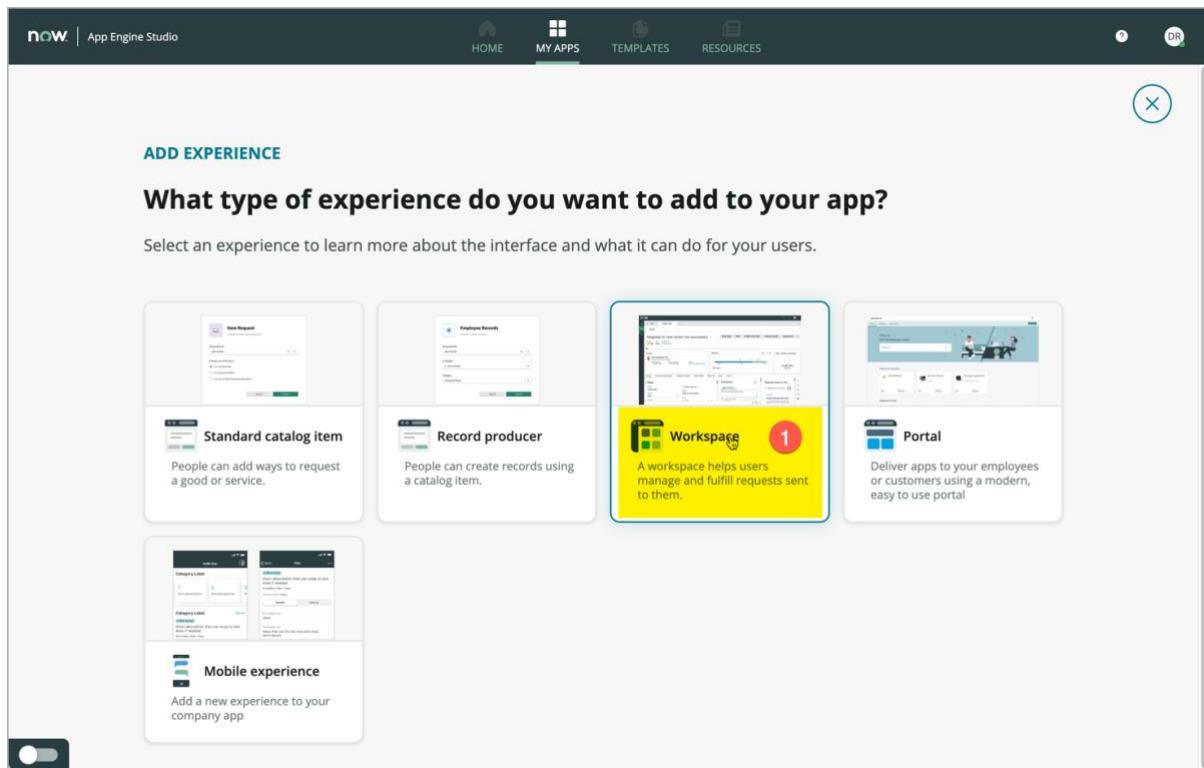
Start the creation of your Workspace from the Dashboard of your App in App Engine Studio.

Click “Add” in the “Experience” section. (1)

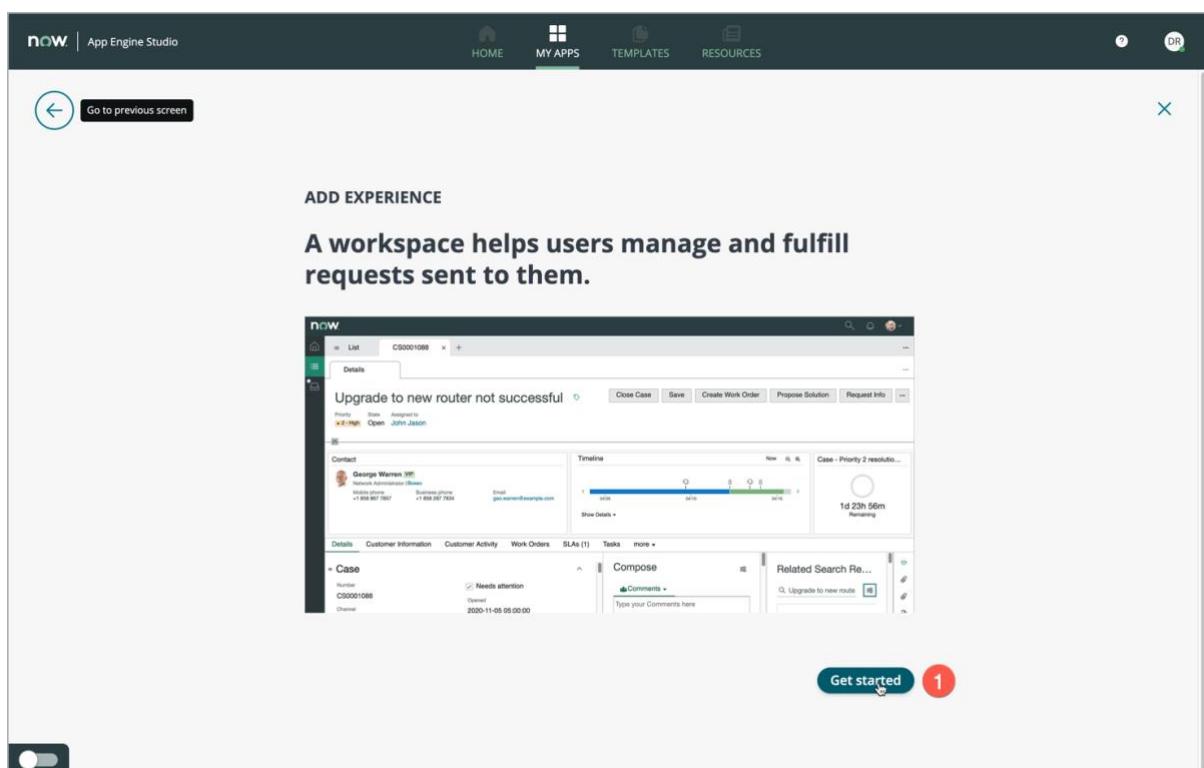
The screenshot shows the ServiceNow App Engine Studio interface. At the top, there's a navigation bar with links for HOME, MY APPS (which is currently selected), TEMPLATES, and RESOURCES. Below the navigation bar, the main content area has a title "Release Upgrade Management". There are tabs for "Data" (7 items) and "Experience" (1 item). The "Data" tab is active, displaying three items: "Release Tasks Blueprint", "Release Process Task", and "Release Process". Each item has a preview button and a more options button. The "Experience" tab is highlighted with a yellow box and a red circle containing the number "1", indicating a new item. A sub-section titled "Create interfaces for use Add Interact with the app" contains a dashed box with a plus sign and the text "Add an Interface". The "Logic and automation" tab is also visible, showing one item: "Copy Release Process Blueprint".

The wizard to create new Experiences (User Interfaces) opens.

Select the “**Workspace**” (1) card to continue.

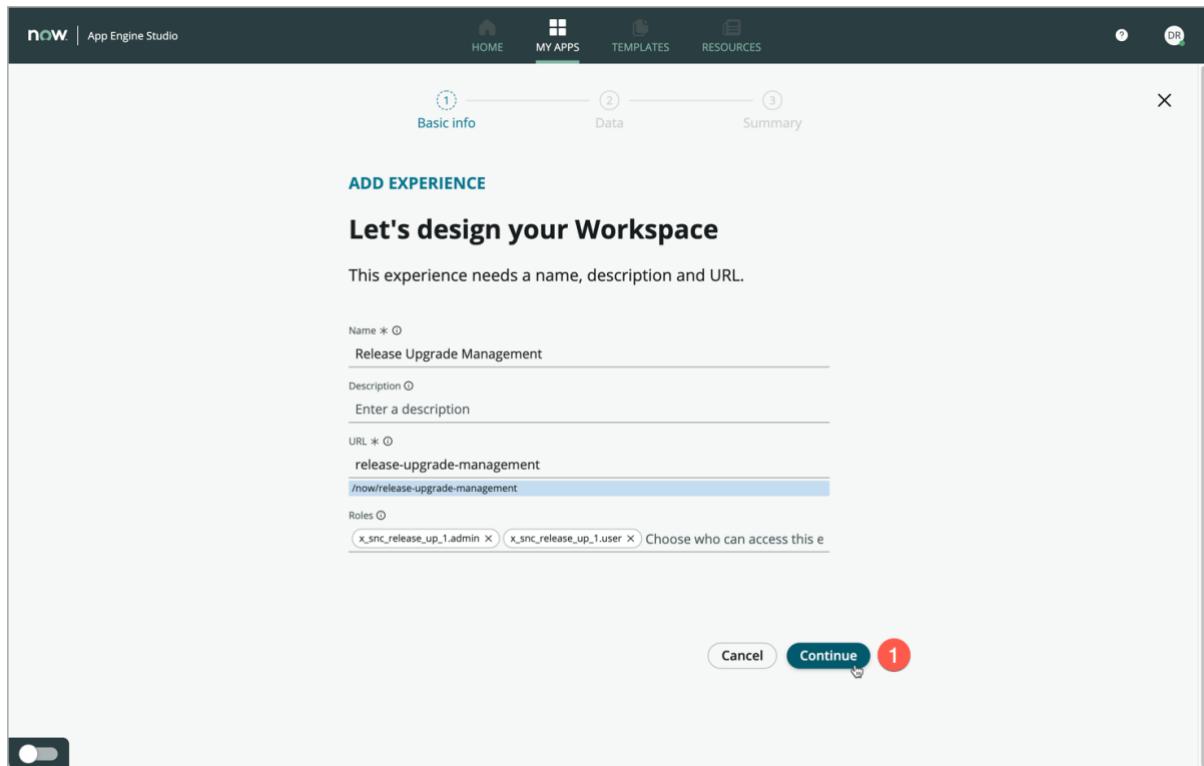


Click “**Get started**”



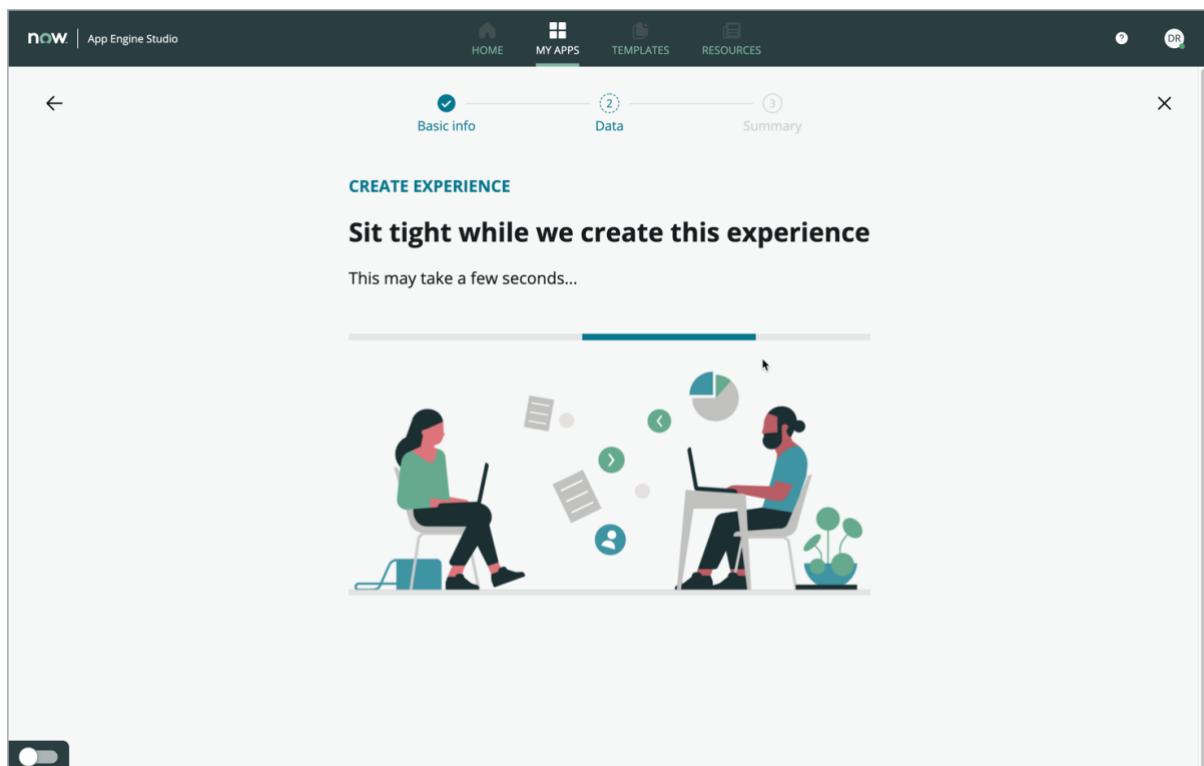
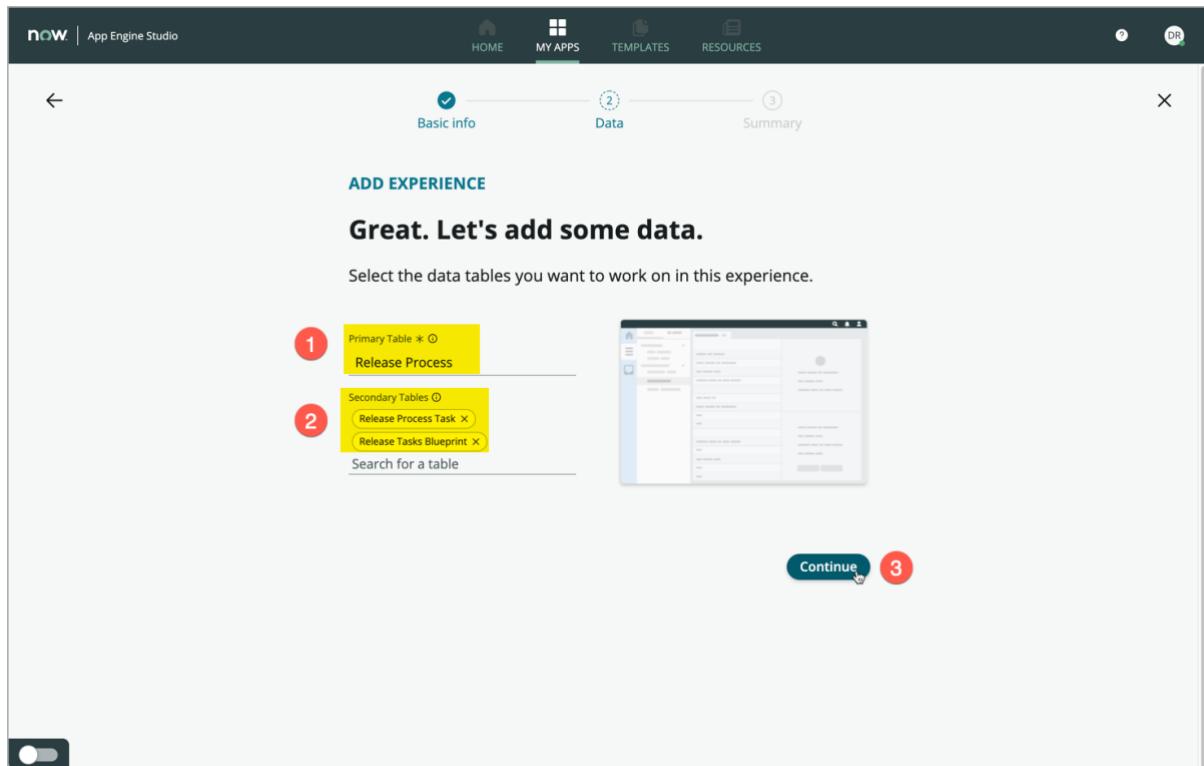
Review the default Name and Description for your Workspace.

Click “**Continue**” (1)

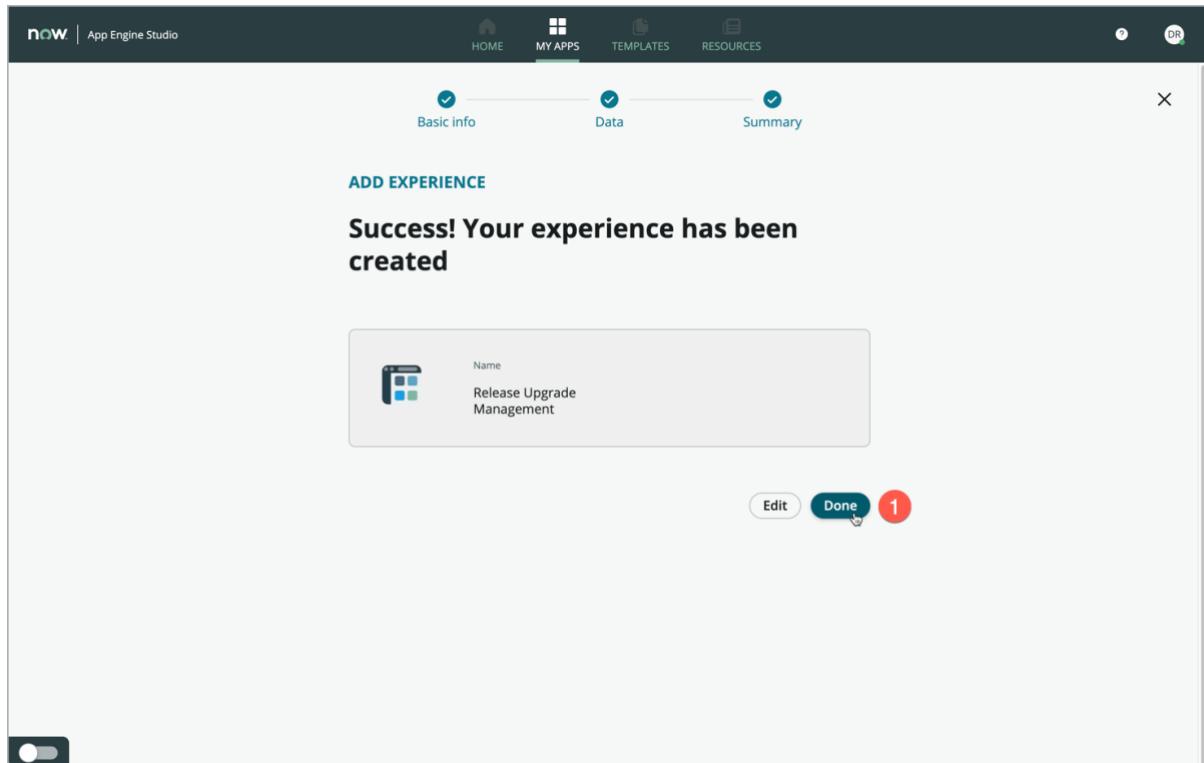


In this step, you can select which tables to set up as Lists in your Workspace.

Make sure, the “Release Process” table is the “Primary Table” (1), and select the “Release Process Task” and “Release Tasks Blueprint” tables as “Secondary Tables” (2).
Click “Continue” (3)



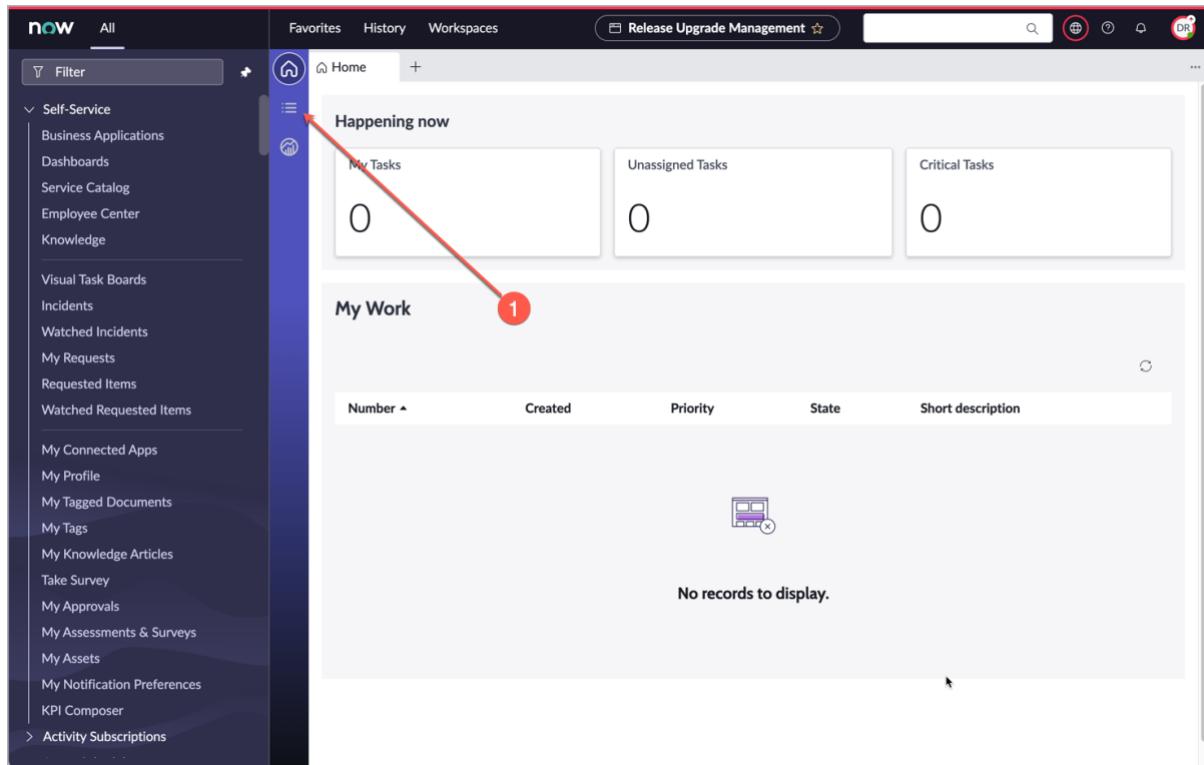
As soon as the wizard finishes, click “Done” (1) to return to your App’s Dashboard inside App Engine Studio.



You can find the new Workspace (shown as “Now Experience”) in the “Experience” section . Click “PREVIEW” (1) to open a new tab for the Workspace just created.

The screenshot shows the ServiceNow App Engine Studio interface with the "Experience" section selected. The top navigation bar includes HOME, MY APPS (selected), TEMPLATES, and RESOURCES. The main content area is titled "Release Upgrade Management". It features three categories: "Data", "Experience", and "Logic and automation". The "Experience" category is highlighted with a red border and contains one item: "Release Upgrade Management" (Now Experience). This item has a yellow "PREVIEW" button with a red circle containing the number "1", which corresponds to the step in the previous screenshot. The "Data" and "Logic and automation" sections each have two items listed.

On the Workspace, click the “Lists” icon in the left side navigation panel (1).



The Lists tree view will be shown and you can select an entry (2) in the tree view to show the corresponding list of records in the right main part (3).

Click the first column of any record (4) in the list to open a new tab inside your Workspace showing the details of your record.

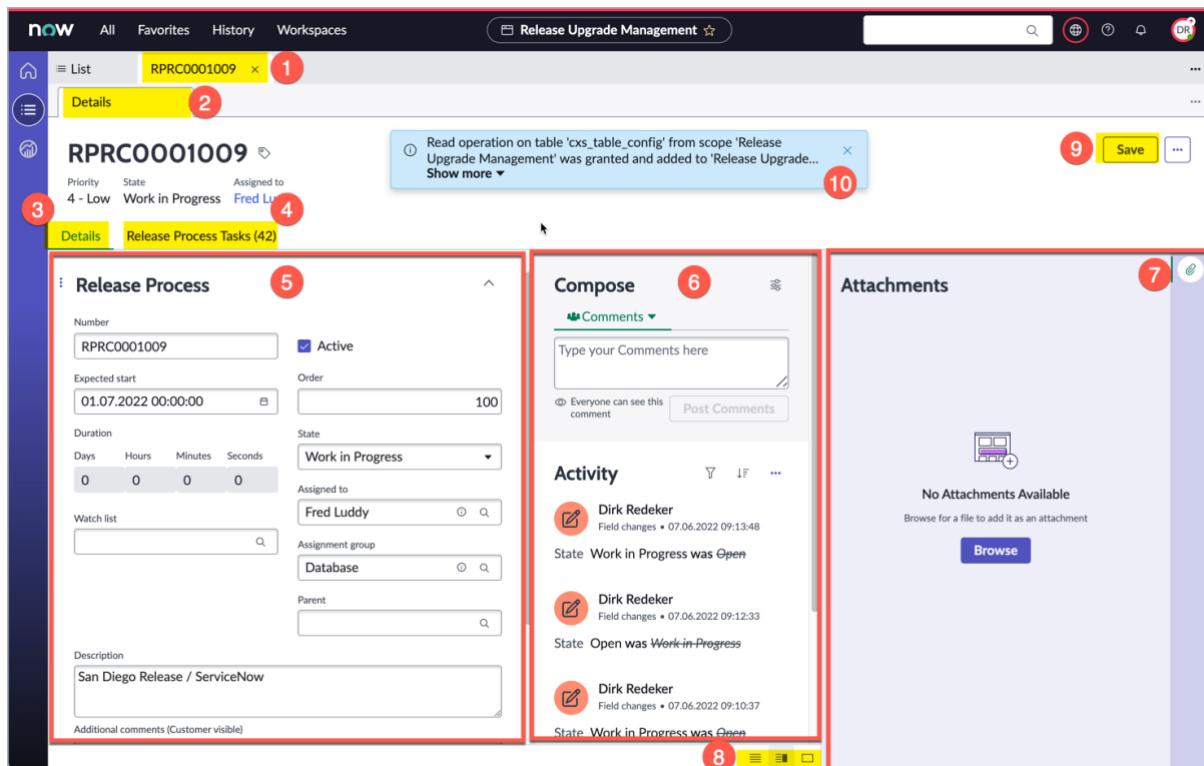
The screenshot shows the ServiceNow interface with the following elements:

- Left Sidebar:** Contains a "Filter" bar, a "List" icon (highlighted with a red circle labeled 1), and a "Lists" section with a tree view:
 - Release Process:** Open, Unassigned, Closed, All (highlighted with a red circle labeled 2)
 - Release Process Task:** Open, Unassigned, Closed, All
 - Release Tasks Blueprint:** All
- Top Bar:** Favorites, History, Workspaces, Release Upgrade Management, search bar, and various icons.
- Right Main Area:** A table view titled "All" (highlighted with a red circle labeled 3) showing one record:

Number	State	Description	Assigned to
RPRC0001009	Work in Progress	San Diego Release / ServiceNow	Fred Luddy
- Bottom:** Pagination and "rows per page" dropdown.

The workspace is build in some hierarchical structure.

- In the top row (1), you can find any record opened from the lists tree view.
- Each Record opened from the lists tree view can have one or more tabs (2) with records relating to the current “main” record.
- By default, one tab (3) is opened (“Details”) showing the Form view of the Record selected.
- The Related Lists (4) defined in the Classic UI are also shown on separate Tabs for the current record.
- The Details of the main Record are shown in the left part of the screen (5), where all Form sections are arranged in vertical order
- The “Compose” pane (6) shows the Activity log of the Record. This panel is only available, when you added the Activity Formatter to the Form View in the Platform UI. Users can review the change history of the record, but also can add “Comments” and “Work notes” here.
- If there are Attachments available for this record, they will be listed in the right part. But the right panel (the “Contextual Side Panel”) can hold different Information, which can be configured and selected from the side navigator at the right side (7).
- Change the layout of the form using the buttons at the bottom (8)



You can switch the way the form is shown, like e.g. shown in the screenshot below.

The screenshot shows a ServiceNow application window titled "Release Upgrade Management". The main content area displays a form for a release process with the number "RPRC0001009". The form includes fields for Number, Active status, Expected start date (01.07.2022 00:00:00), Duration (0 days, 0 hours, 0 minutes, 0 seconds), State (Work in Progress), Assigned to (Fred Luddy), Assignment group (Database), and Parent. A "Description" field contains "San Diego Release / ServiceNow". A note at the bottom says "Additional comments (Customer visible)". A red banner at the top right of the form area says "Change and adjust layout". The top navigation bar has tabs for "List" and "Details", with "Details" currently selected. The top right corner of the window has a "DR" icon.

6.2 Exercise #9 – Configure the Landing page to a nice dashboard

Start from the Dashboard of your App

Open the Workspace in UI Builder inside App Engine Studio by

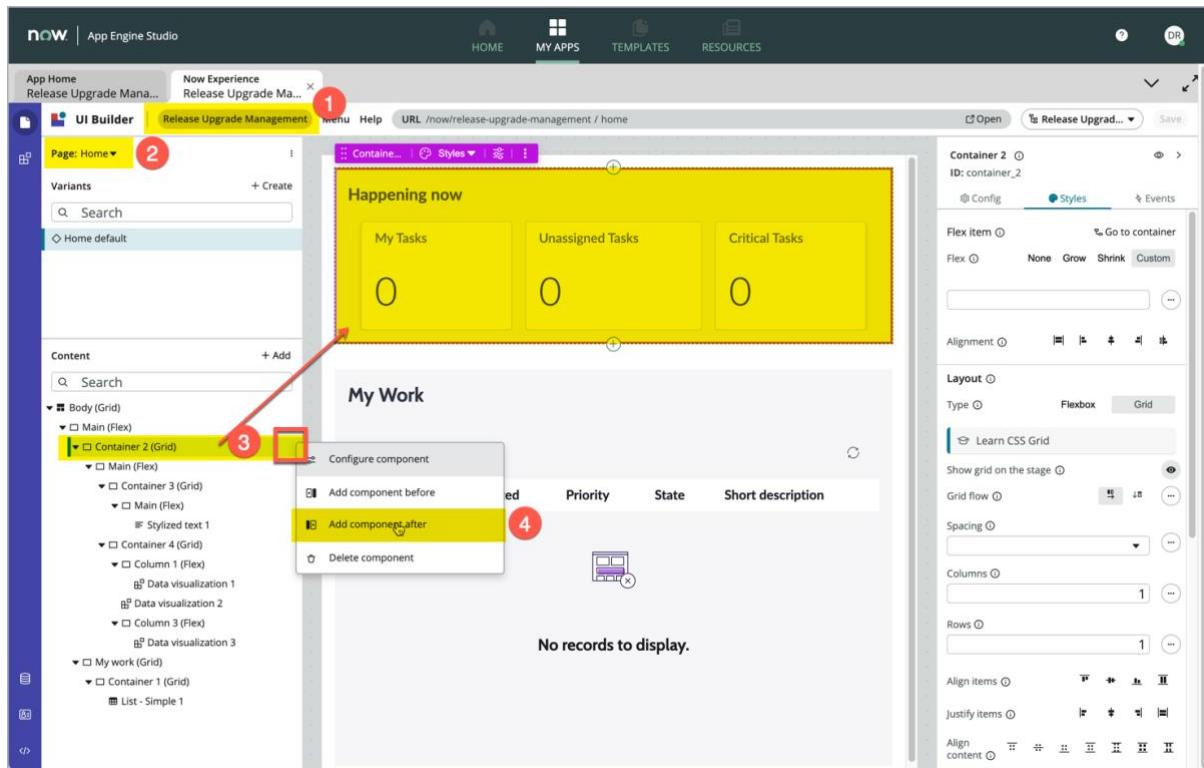
- (1) Clicking the name of the Workspace, OR
- (2) Clicking the dot-menu on the right side and select “Edit”

The screenshot shows the ServiceNow App Engine Studio interface. At the top, there's a navigation bar with links for HOME, MY APPS, TEMPLATES, and RESOURCES. Below the navigation is a search bar and a 'Source control' dropdown. The main content area is titled 'Release Upgrade Management'. It contains three sections: 'Data', 'Experience', and 'Logic and automation'. The 'Data' section lists three tables: 'Release Tasks Blueprint', 'Release Process Task', and 'Release Process'. The 'Experience' section lists one item: 'Release Upgrade Management' (marked with a red circle '1'). The 'Logic and automation' section lists one flow: 'Copy Release Process Blueprint...'. A context menu is open over the 'Release Upgrade Management' item in the 'Experience' section, with the 'Edit' option highlighted (marked with a red circle '2').

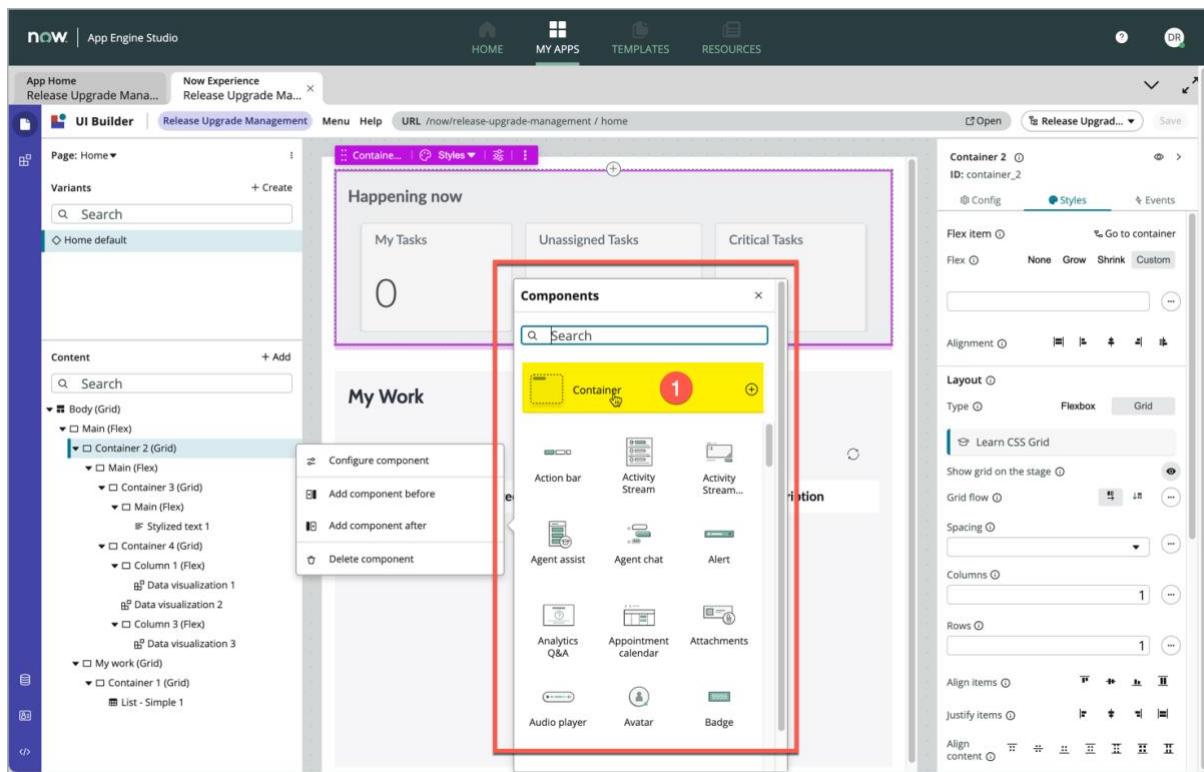
UI Builder opens with the Now Experience (“Release Upgrade Management”) Landing Page – here “Home” (2).

The left panel (3) shows the structure of the Screen in the middle.

Click the three dots menu at the end of the line “Container 2 (Grid)” – see screenshot below, and select “Add component after” (4)

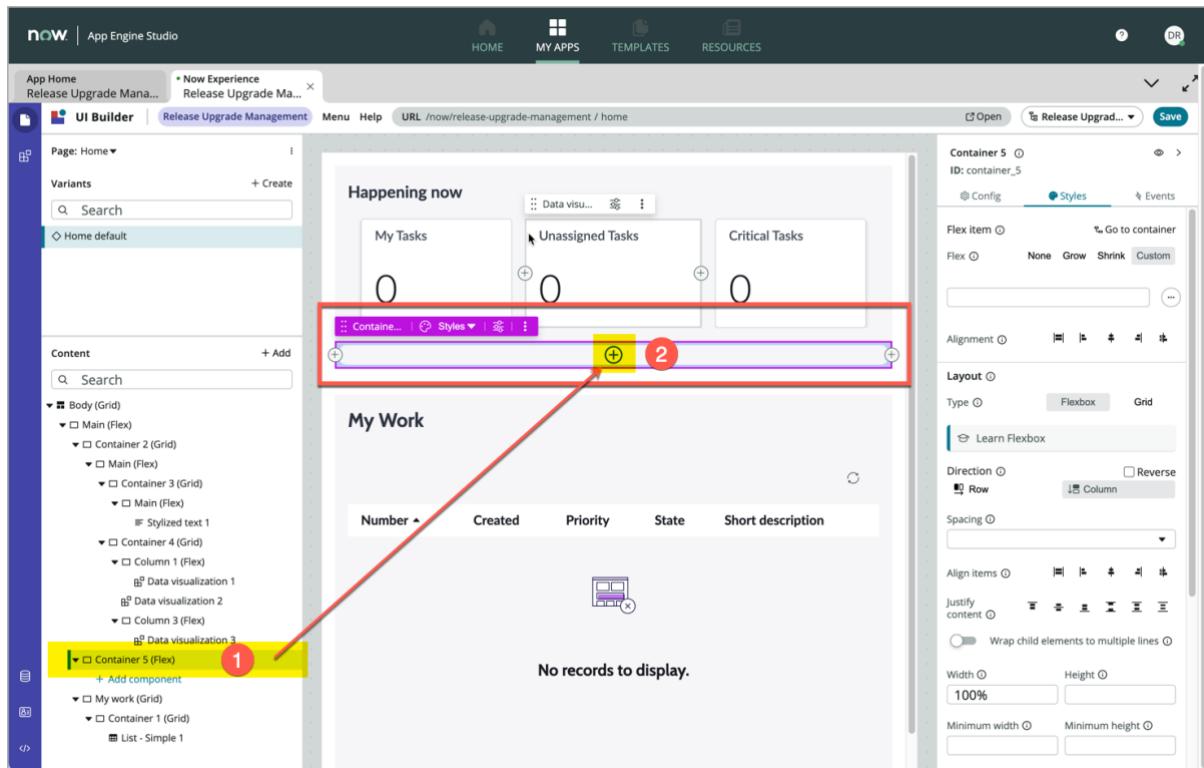


A popup dialog opens, where you can select, which component to add to your screen.
Select the “Container” Component (1).

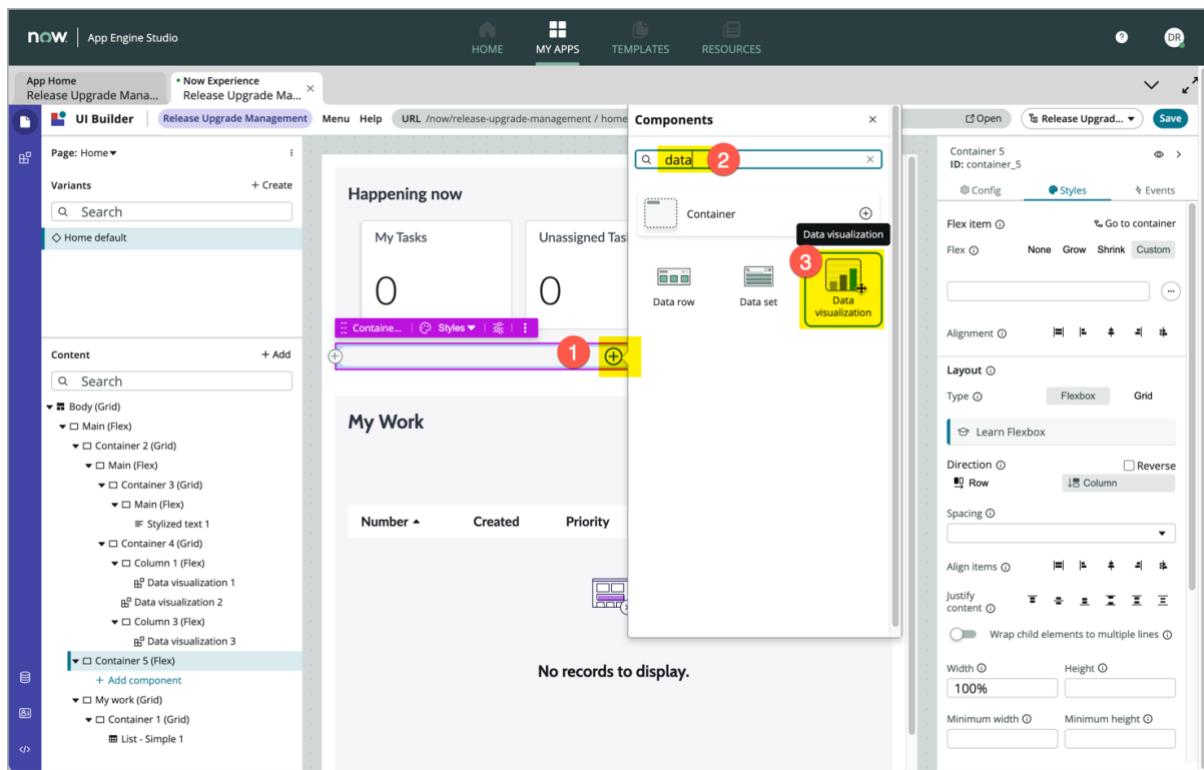


This adds “Container 5 (Flex)” to your page structure (1) and also shows an empty area on the page canvas in the middle of the screen (2).

Click the plus (+) sign (2) inside the new container to add a component INSIDE of that container.

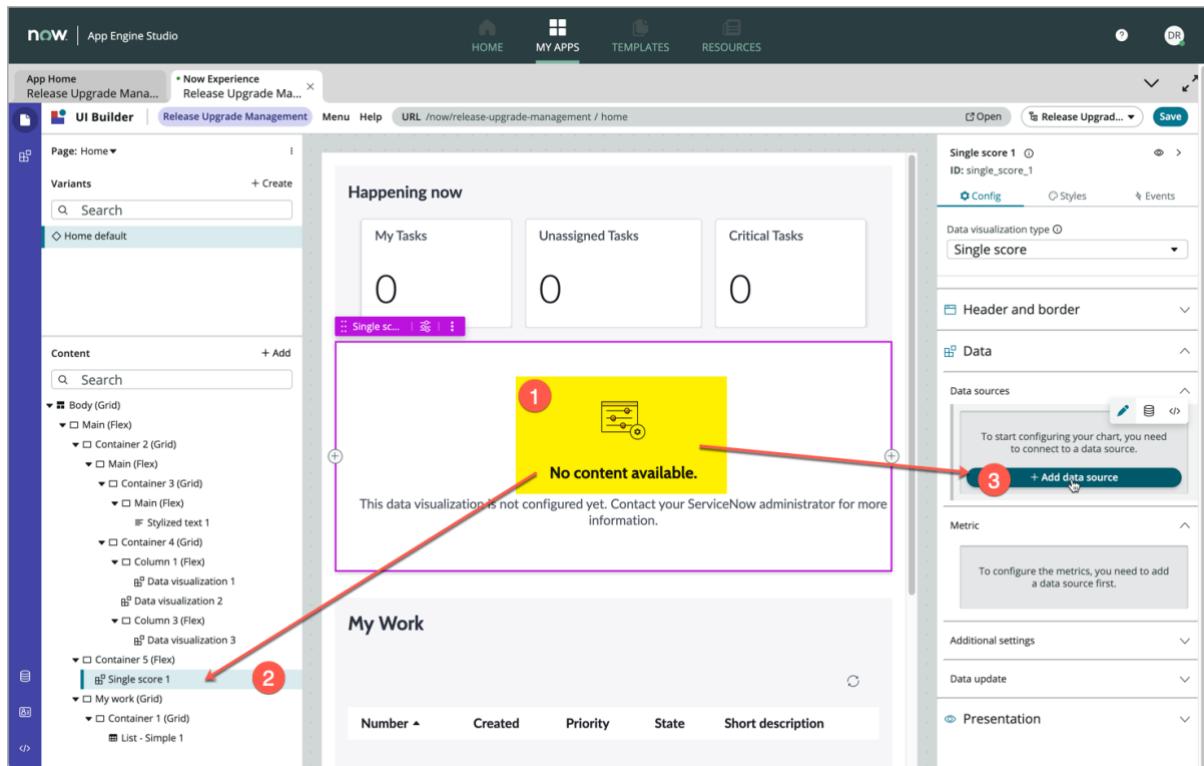


Again, the Popup dialog appears. Type “data” in the search field (2) at the top of the popup and find the “Data visualization” Component (3). Click that Icon (3) to insert it into the Container.



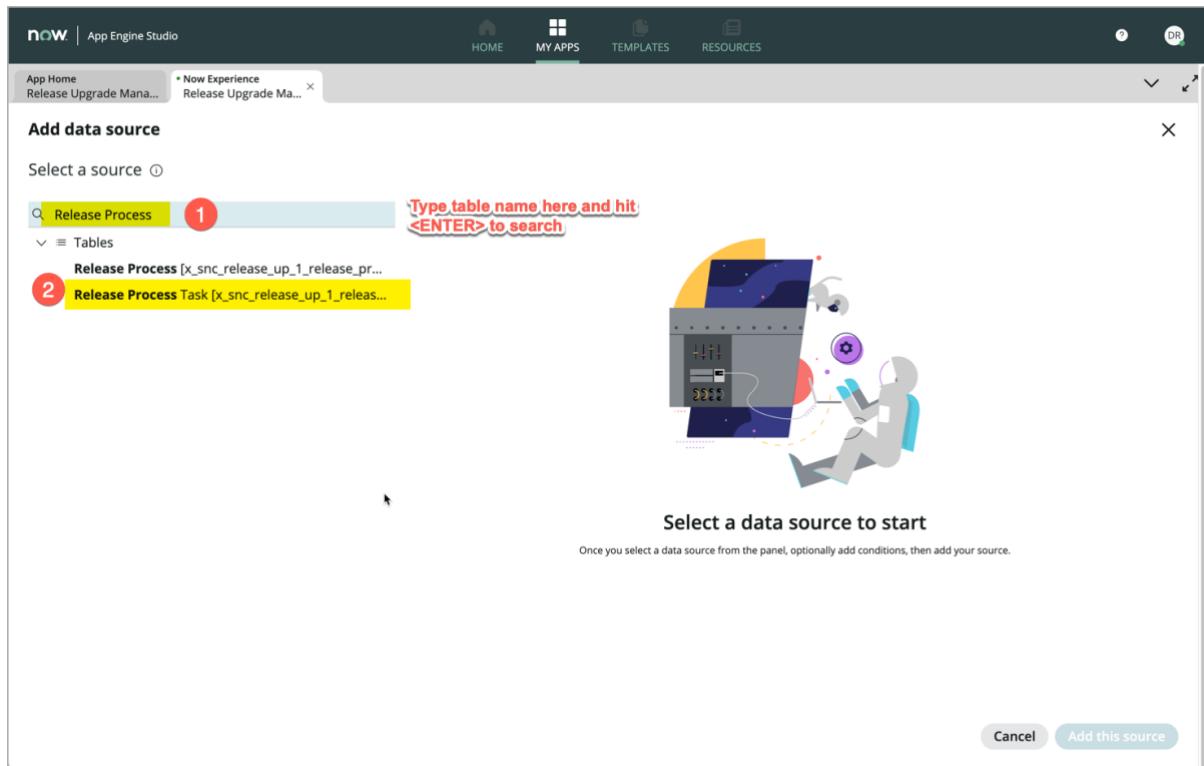
Now, you can see the “Single score 1” added to the content tree (2) and also an empty “Data Visualization” component on your page (1).

Click “+ Add data source” (3) in the right properties panel.



An overlay window opens where you can easily select, which data to show in your data visualization. Type the name of your table into the search field (1) and press <ENTER>.

Select your data table (here the “Release Process Task”) form the search results (2) below.



The Filter area (2) appears, where you can configure a filter for the data used to fill the “Data Visualiozation” component. Do not add any filter yet. You find a preview of the data below the Filter (3).

Click “Add this source” (4) to close the overlay window and select the data source.

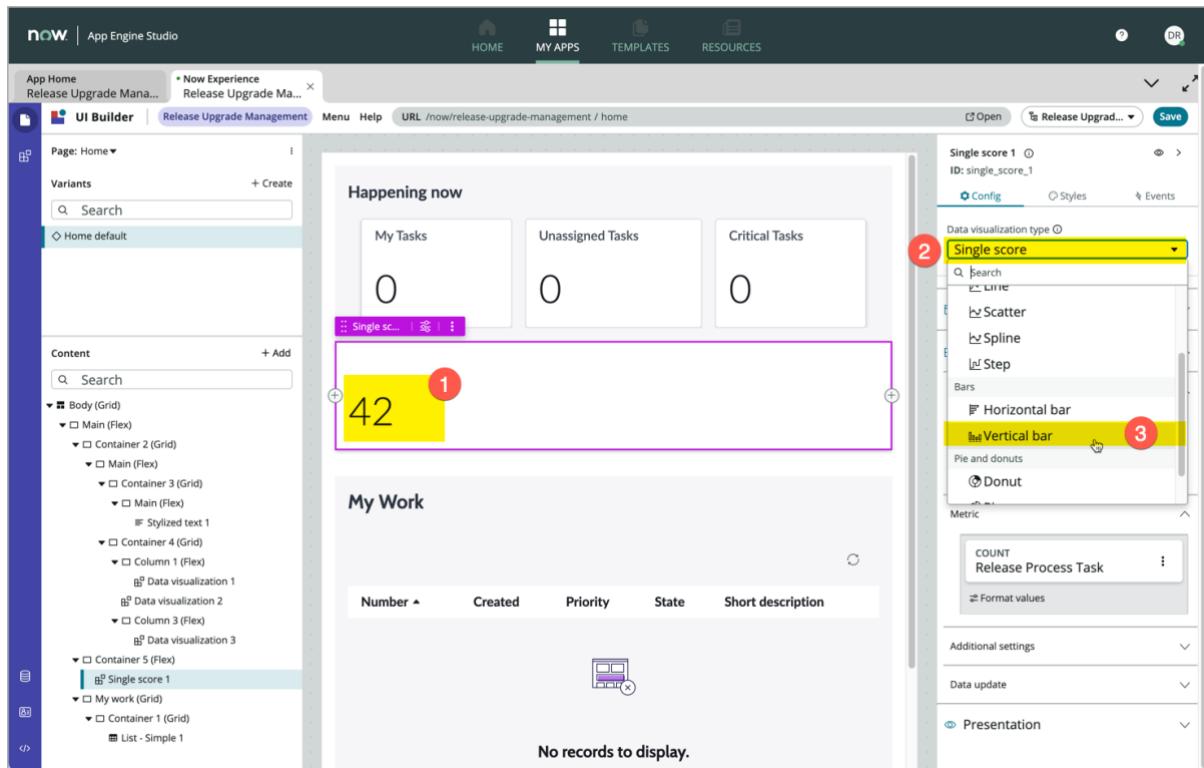
The screenshot shows the 'Add data source' overlay window in the ServiceNow App Engine Studio. The window has a dark header bar with the 'App Engine Studio' logo and navigation tabs for HOME, MY APPS, TEMPLATES, and RESOURCES. Below the header, the title 'Add data source' is displayed. A search bar says 'Select a source'. On the left, there's a sidebar with a tree view under 'Release Process' showing 'Tab1' and 'Release Process Task [x_snc_release_up_1_release_process_task]'. A red circle labeled '1' is on the 'Release Process Task' node. To the right, a main panel shows 'Selected table: Release Process Task [x_snc_release_up_1_release_process_task]'. It contains a 'Filters' section with a red box around it, a 'Predefined conditions' message, and a '+ Add custom conditions' button. A red circle labeled '2' is on the '+ Add custom conditions' button. Below this is a 'Preview record list' section with a red box around it, showing a table of records. A red circle labeled '3' is on the top-left of this section. The table has columns: Number, Priority, State, Assigned to, and Short description. The records listed are:

Number	Priority	State	Assigned to	Short description
RPTSK0001224	4 - Low	Pending	Andree	
RPTSK0001225	4 - Low	Pending	Andree	
RPTSK0001226	4 - Low	Pending	Andree	
RPTSK0001227	4 - Low	Pending	Andree	
RPTSK0001228	4 - Low	Pending	Andree	
RPTSK0001229	4 - Low	Pending	Andree	
RPTSK0001230	4 - Low	Pending	(empty)	

At the bottom right of the preview section is a red circle labeled '4' next to a 'Cancel' button and a blue 'Add this source' button.

The value shown in UI builder immediately changes Data Visualization (1) shown in the design canvas in the middle. This is a WYSIWYG style of designing your pages.

As the default “Data visualization type” (2) is “Single score”, open the dropdown and change it to “Vertical bar” (3).



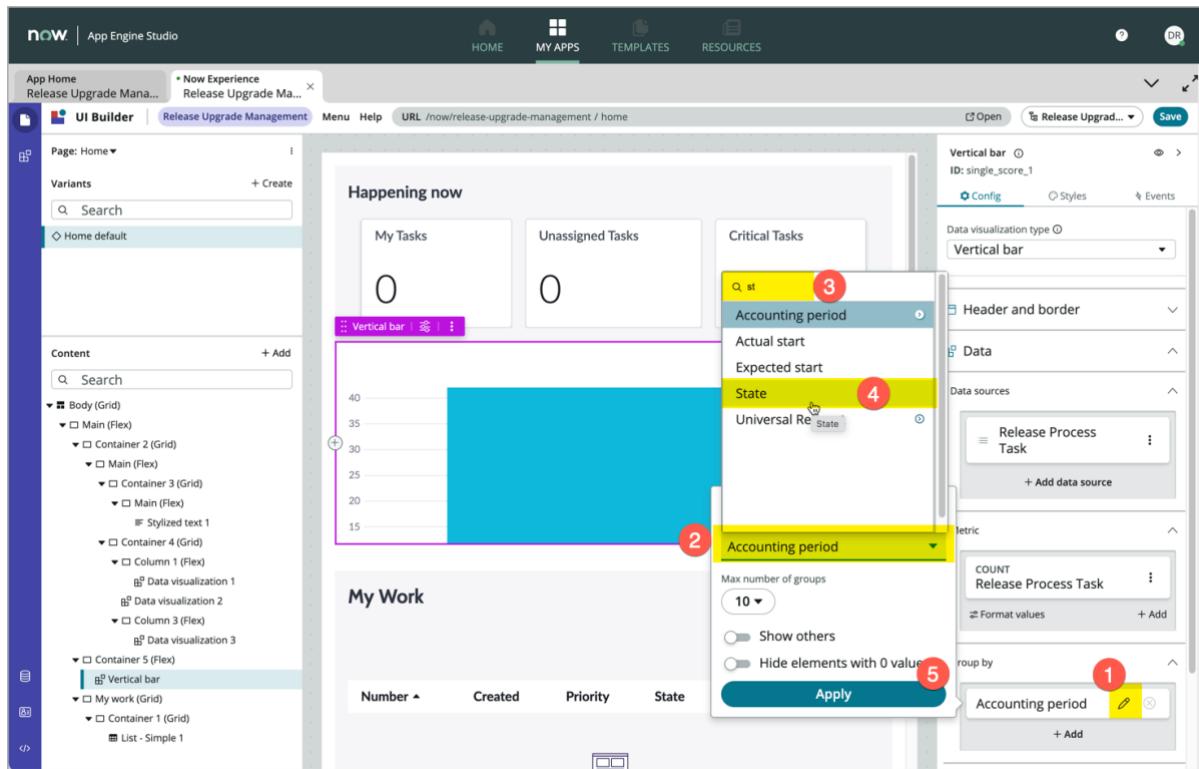
Review the change of the appearance from the Component (1), which happens instantly.

Scroll down in the right panel and find the “Group by” field. Click the Edit icon (2) to open the popup window for configuring the way, how the bar chart component groups records to build its bars.

The screenshot shows the ServiceNow UI Builder interface. On the left, the page structure is defined with components like 'Variants' and 'Content'. In the center, there's a visualization titled 'Happening now' with three sections: 'My Tasks' (0), 'Unassigned Tasks' (0), and 'Critical Tasks' (0). Below this is a large green bar chart component labeled 'Vertical bar' with a value of 40. A red circle with the number '1' highlights this chart. To the right, the configuration panel is open for the 'Vertical bar' component. It shows the configuration tab is selected, and the 'Data visualization type' is set to 'Vertical bar'. Under the 'Metric' section, there's a COUNT node for 'Release Process Task'. At the bottom of the configuration panel, there's a 'Group by' section where 'Accounting period' is listed, with a red circle containing the number '2' highlighting the edit icon next to it.

Click the Dropdown Box (2) to select a different field for the grouping of the bar chart.
Type “St” in the search field (3) to quickly find and select the “State” field (4).

Click “Apply” (5)to close the popup and use the settings selected.



Click “Save” in the upper-right corner (1) to make all your changes permanent.

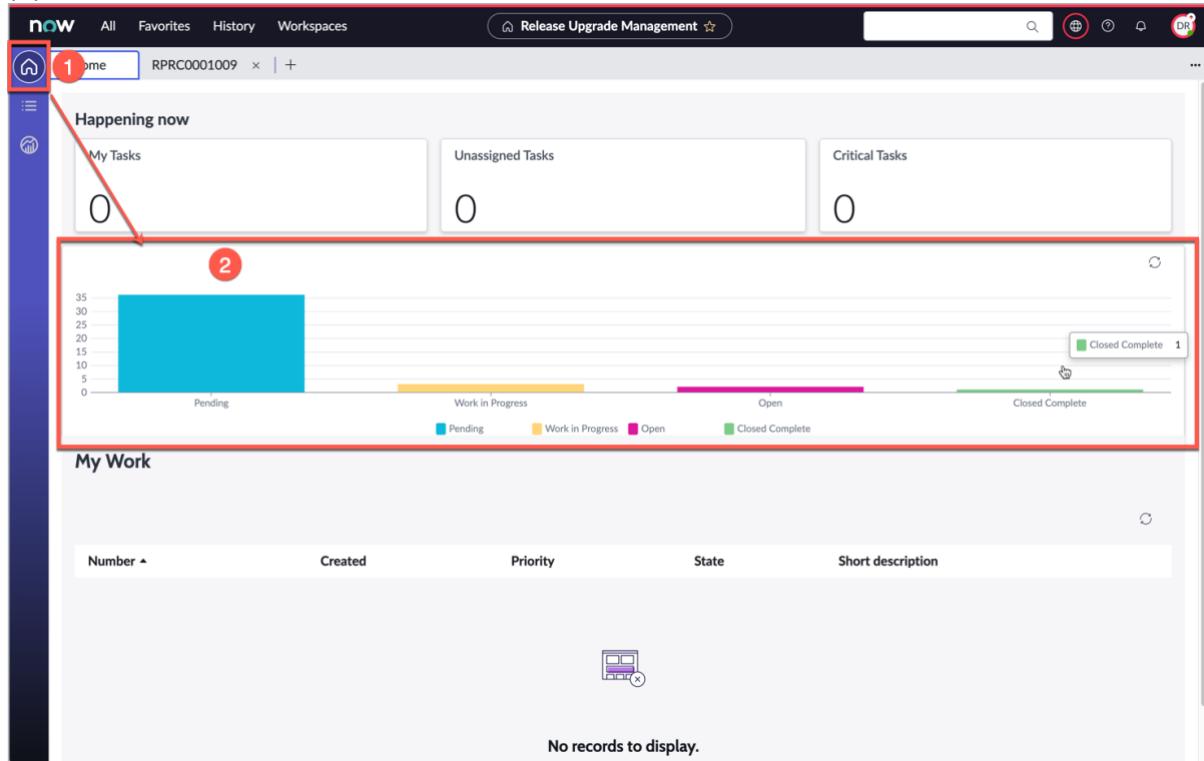
The screenshot shows the ServiceNow App Engine Studio UI Builder interface. The main area displays a dashboard page titled "Happening now" and "My Work". The "Happening now" section includes three cards: "My Tasks" (0), "Unassigned Tasks" (0), and "Critical Tasks" (0). Below these is a vertical bar chart with a single blue bar reaching the value of 40. The "My Work" section is a grid table with columns: Number, Created, Priority, State, and Short description. The "Content" sidebar on the left shows the page structure with various components like Body (Grid), Main (Flex), and Data visualizations. A red circle with the number 1 is overlaid on the "Save" button in the top right corner of the editor interface.

Go back to your workspace and switch to the Related List tab “Release Process Tasks” (1). Manually change some of the “Release Process Tasks” **State** values (2) – see screenshot below.

The screenshot shows the ServiceNow interface for the 'Release Upgrade Management' workspace. The title bar includes the 'now' logo, 'All', 'Favorites', 'History', 'Workspaces', and a search bar. Below the title bar, the page header shows 'Home' and 'RPRC0001009'. The main content area displays a table titled 'Release Process Tasks (42)' with 1 row selected. The table has columns: Number, Priority, State, Assigned to, Short description, Task type, Expected start, and Duration. A red circle with the number '1' is over the 'Release Process Tasks' tab, and another red circle with the number '2' is over the 'State' column header. The selected row shows the task 'RPTSK0001224' with state 'Open' assigned to 'Andree'. The bottom of the table shows pagination from 1 to 20 rows per page.

Number	Priority	State	Assigned to	Short description	Task type	Expected start	Duration
RPTSK0001224	4 - Low	Open	Andree		Release Process Task	01.07.2022 00:00:00	9 Hours

Return to your Landing page (1) of your Workspace and review the results of the changes (2).

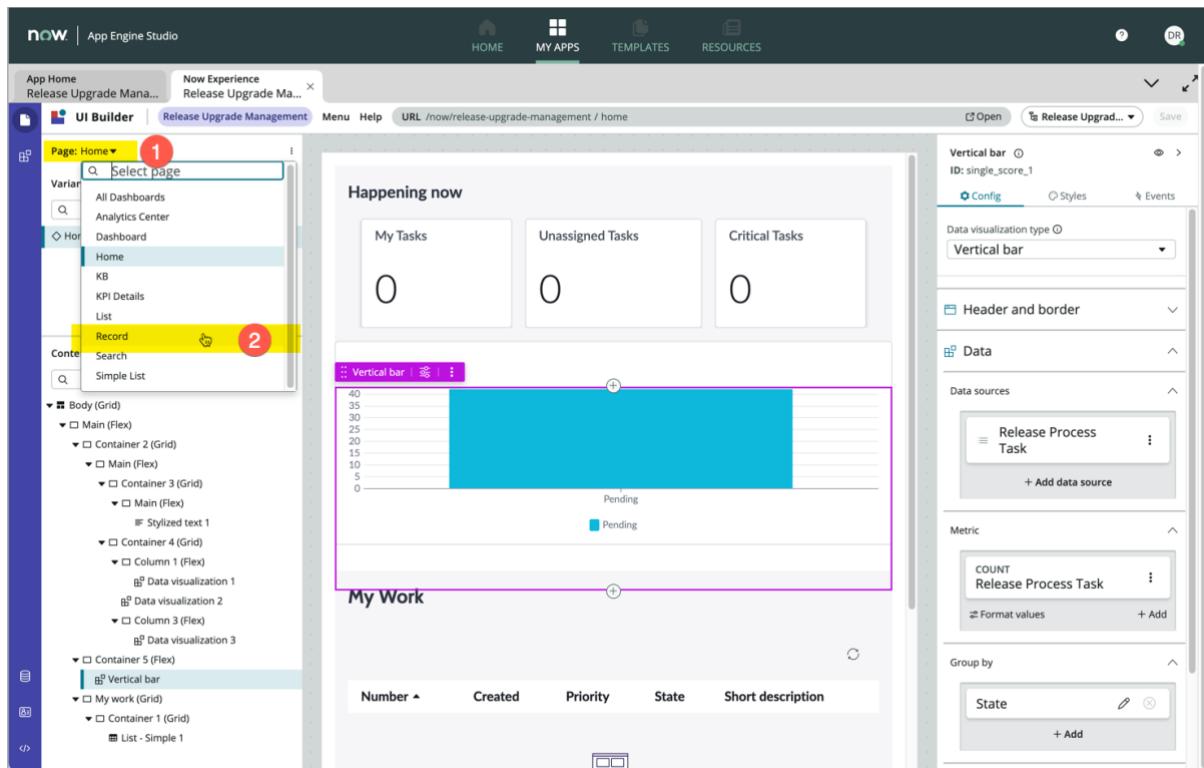


CHALLENGE:

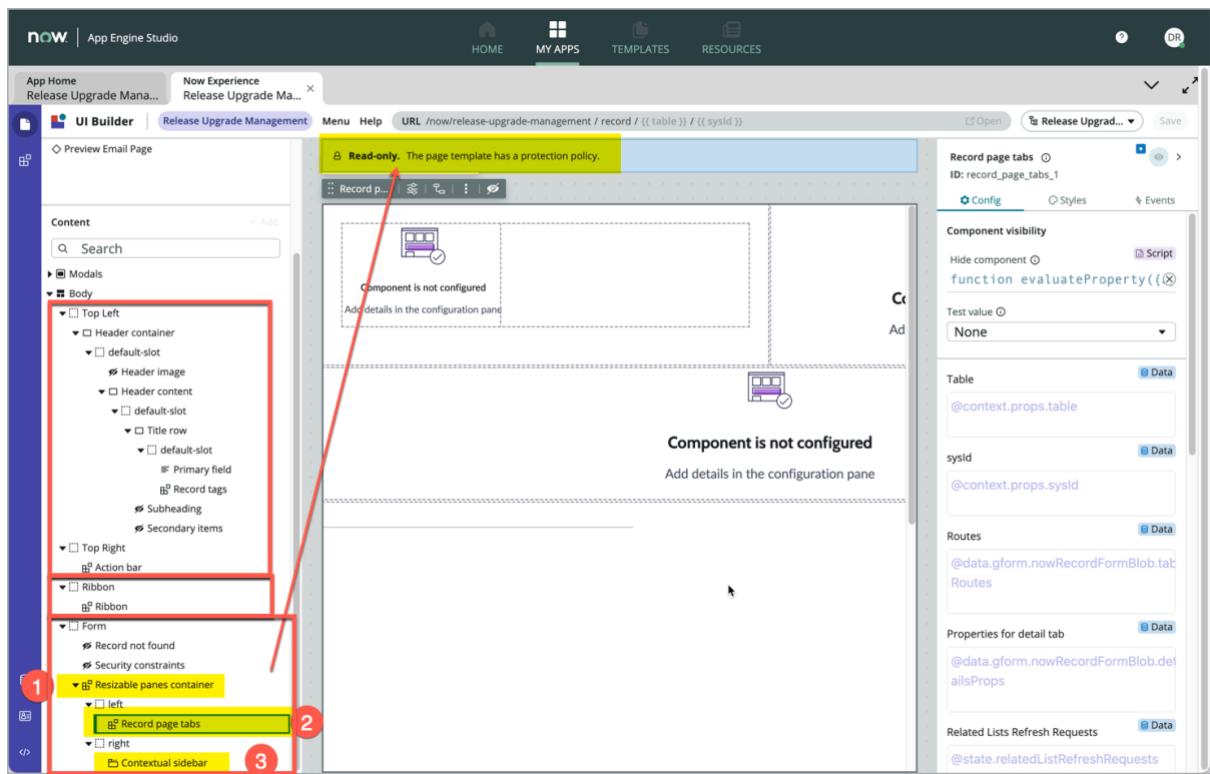
- Add more diagrams to your Landing/Home Page.
- Change more Layout-Options for your new Chart (e.g. Set a Title for the chart)

6.3 Exercise #10 - Review the “Form” Page of the Workspace

In UI Builder, select the “Record” page (2) in the Page dropdown list (1).



Review the layout tree for the “Record” page, especially the “Resizable panes container” (1), the “Record page tabs” (2) and the “Contextual sidebar” (3)



Context for the Form and the Contextual Sidebar can be configured as well

