SERVICENOW WEEK-4

Scripting in Servicenow

In ServiceNow, scripting refers to writing and using code to customize and automate processes, tasks, and business logic within the platform. It enhances the functionality and behavior of ServiceNow applications beyond the out-of-the-box capabilities.

ServiceNow primarily uses two types of scripts:

- **Client-side scripting**: Runs on the user's browser. It is used to control how forms, fields, and user interfaces behave. Common client-side scripts include:
- **Server-side scripting**: Runs on the server and is used to control data operations and business logic. Common server-side scripts include:These scripts use JavaScript as the programming language and allow developers to manipulate data, automate tasks, validate data, create integrations, and more.

Client-side vs. Server-side

Scripts in ServiceNow execute either on the client (user’s browser) or in the ServiceNow back end. It is important to know where a script will execute as there are different APIs for the client and server-side scripts.

Client-side

- Manage forms and form fields:
- UI Policies
- Client Scripts

Server-side

- Manage database and back-end:
- Business Rules
- Scheduled Jobs
- Script Actions
- Script include

The script types listed here are examples; this is not an exhaustive list of script types in ServiceNow.

Client Scripts

- Onload()
- Onsubmit()
- Onload()
- Onchange()

GlideForm

```
function onSubmit() {
   var tempDesc = g_form.getValue('short_description');
    tempDesc += ": " + g_form.getValue('number');
    g_form.setValue('short_description', tempDesc);
    alert("All submissions are reviewed by the Claims team.");

}
```

- g_form.showFieldMsg() - prints a message on a blue background below the field passed in the method call.
- g_form.addInfoMessage() - prints a message on a blue background to the top of the current form.
- g_form.addErrorMessage() - prints a message on a red background to the top of the current form.
- alert is a JavaScript method that opens a dialog with an OK button.
- confirm is a JavaScript method that opens a dialog with OK and Cancel buttons.
- g_form.setMandatory()
- g_form.SetReadOnly()
- g_form.setdisplay()
- g_form.set_value(‘ feild_name” , ‘value’) - sets the value of the field
- g_form.get_value(‘feild_name) - returns the value in the field

GlideUser

```
function onLoad() {
   if(g_user.hasRole('hr_agent')){
       alert("Welcome " + g_user.firstName);
       }
   }
```

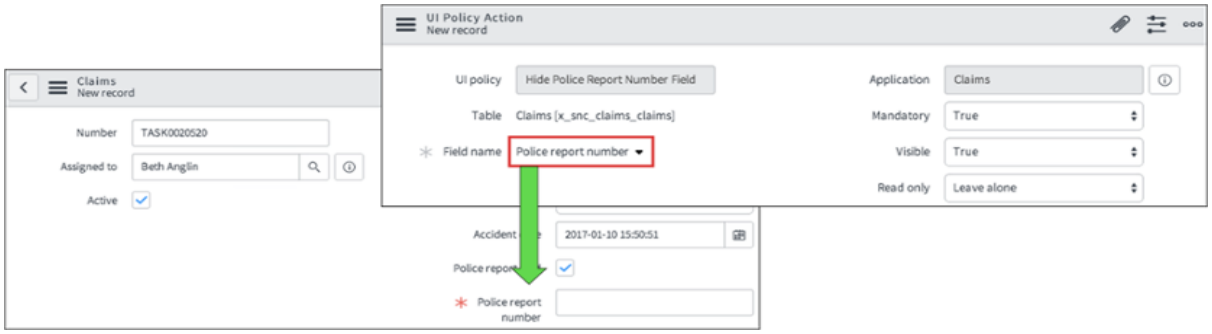
- g_user.firstname
- g_user.lastname
- g_user.userId
- g_user.username
- g_user.getfullname
- g_user.hasrole(‘role_name’)
- g_user.hasroleexactly(‘role_name’)
- g_user.hasroleFromList(‘role_name’)
- g_user.hasroles()

Scripting assistance-Press ctrl-spacebar

UI policy

Client-side logic governing form and field behavior**. UI Policies dynamically change the behavior of information** on a form and control custom process flows for tasks. you can use UI policies to make the number field on a form.

- read-only,
- field mandatory,
- hide other fields.



UI Policy Scripts

Server-side scripts

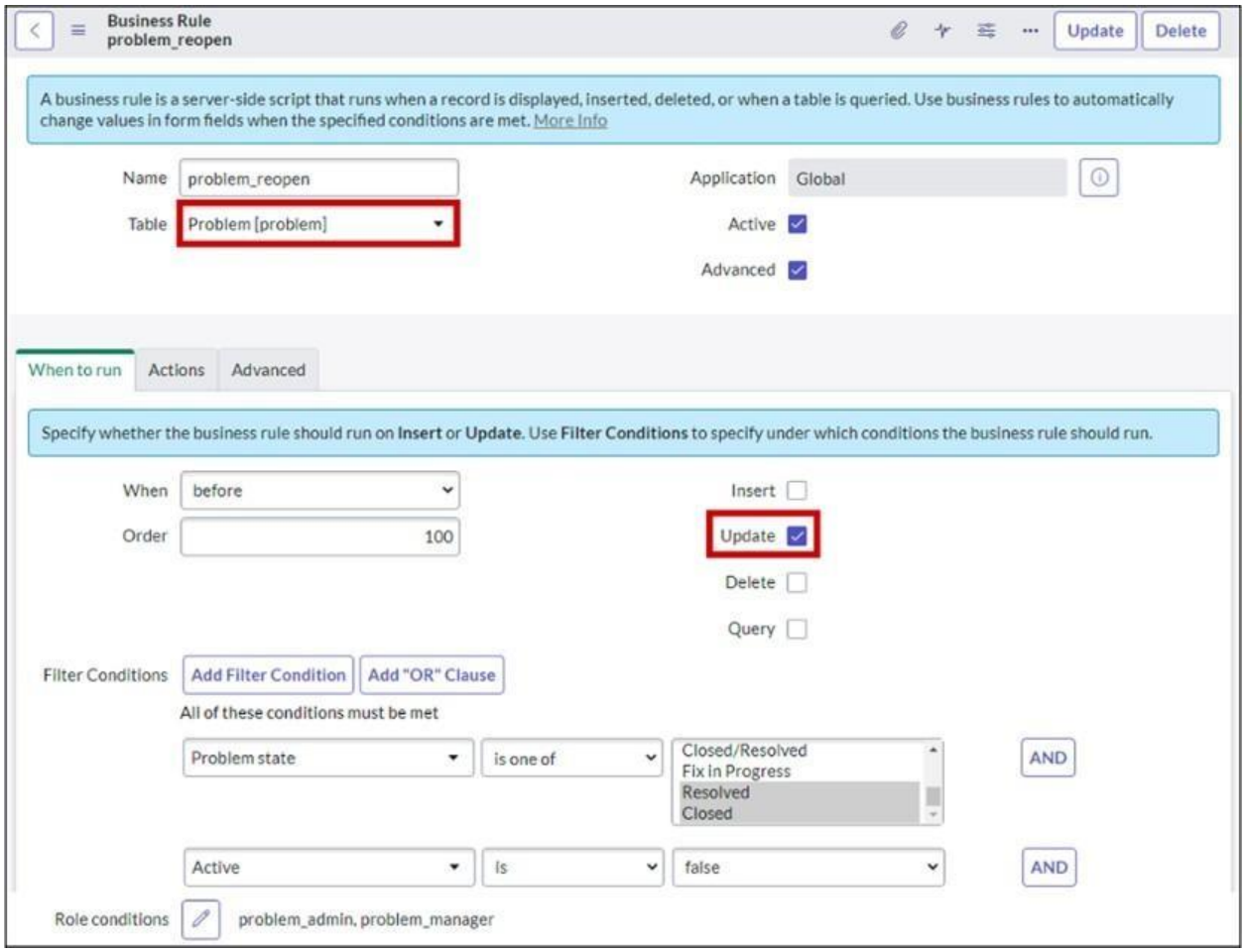
- GlideForm and GlideUser, GlideAjax classes are part of the client-side API.
- GlideRecord and GlideSystem are part of server side API.

Data Policy

- A Data Policy is a rule that enforces data consistency by setting fields as mandatory and/or read-only.
- Data Policy controls are similar to UI Policies, but UI Policies are only enforced on data entered into a form (passing through the UI).
- Data Policies are applied to all data entered into the platform: form (UI), Import Sets, or Web Services.

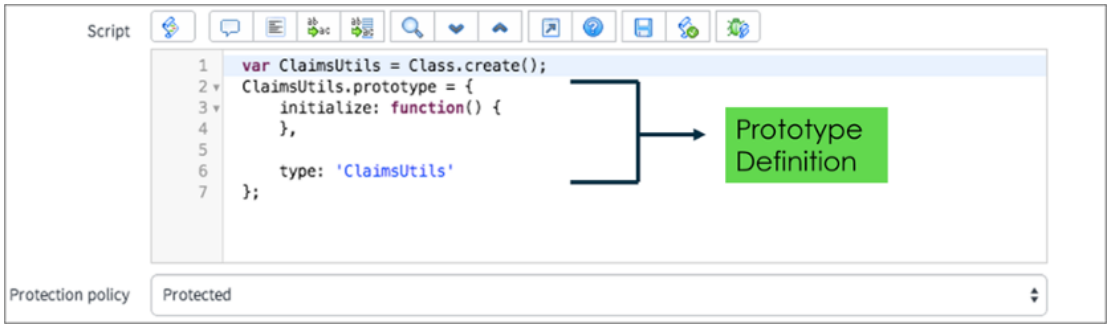
Business Rule

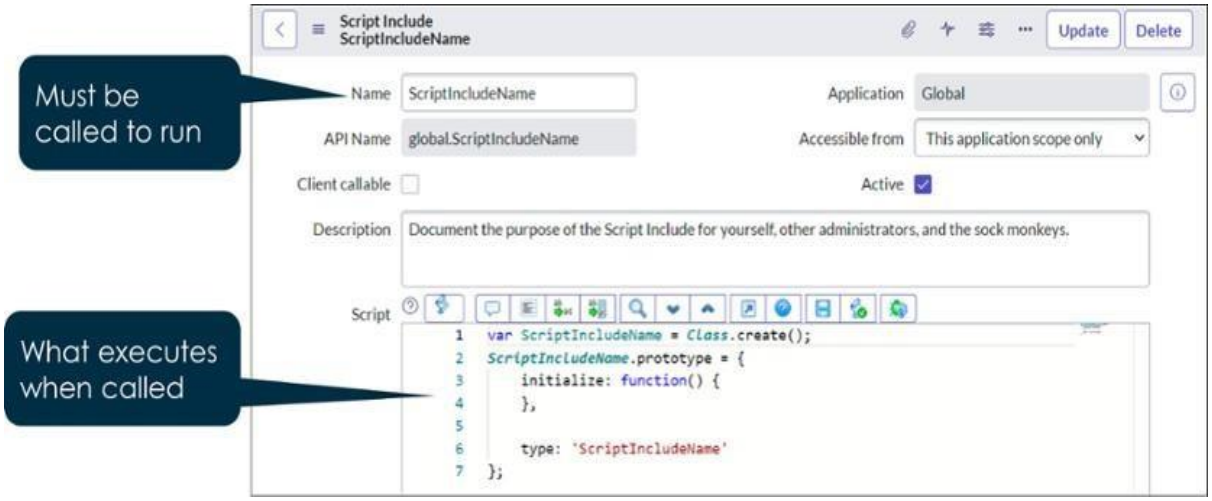
A Business Rule in ServiceNow is a **server-side script** that runs when a record is inserted, updated, deleted, displayed, or queried from a database table.



Script Include

A Script Include in ServiceNow is a reusable server-side JavaScript class or function that can be called from other server-side scripts like Business Rules, Workflow scripts, or even from the client-side via GlideAjax.





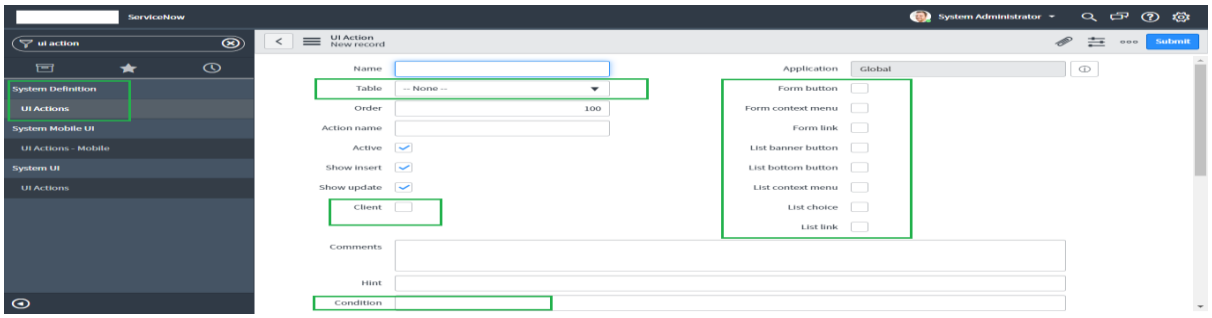
Types of Script Include

- Classless Script Include (Function-Based Script Include)
- Class-Based Script Include (Object-Oriented Script Include):
- Extend an existing class

UI Actions

User Interface (UI) Actions add buttons, links, and context menu items on forms and lists, making the UI more interactive, customizable, and specific to user activities.

The New button on the existing list of All Incidents is an example of a UI Action.



Script Actions

Script Actions in ServiceNow are server-side scripts that are triggered by system events. They are often used in conjunction with event-driven architecture, where they respond to specific events in the system by executing a script.

Key Features of Script Actions:

- Event-driven
- Server-side
- Linked to Events

Methods in Script Actions:

- gs.eventQueue()
- gs.addErrorMessage()
- Current
- event

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