

Calculating Family Expenses Using Service Now

Problem Statement

In a project of managing family expenses is often challenging due to the lack of a centralization system for tracking income, expenses, and savings. Families typically rely on manual methods such as spreadsheet, paper records, or multiple apps, which can lead to errors, duplication, and difficulty in analyzing financial patterns.

Objective

Simplify Expense Tracking- provide a centralization system for recording and categorizing all family expenses

Improve Financial Awareness-offer real-time dashboards and reports to give clear insights into spending patterns

Enhance Budget Planning-support better financial planning by identify high-spending categories and opportunities to save

Skills: Servicenow Development, Workflow&Automation, Scripting in Servicenow, Reporting&Dashboards, Integration Skills

TASK INITIATION

Update

Activity 1:

1. Open Service now

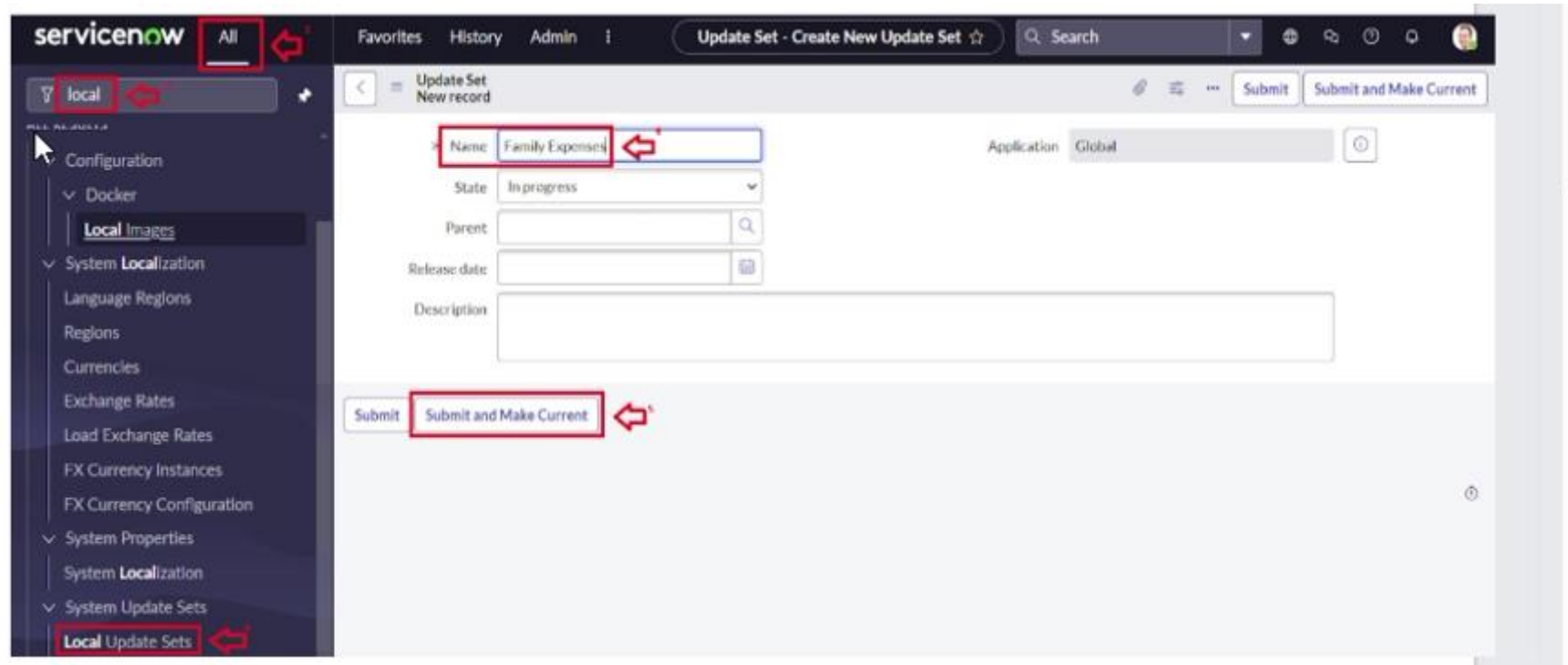
2.Go to All>>search for Local Update Set>Click on New



3.Enter the Details as:

Name:Family Expenses

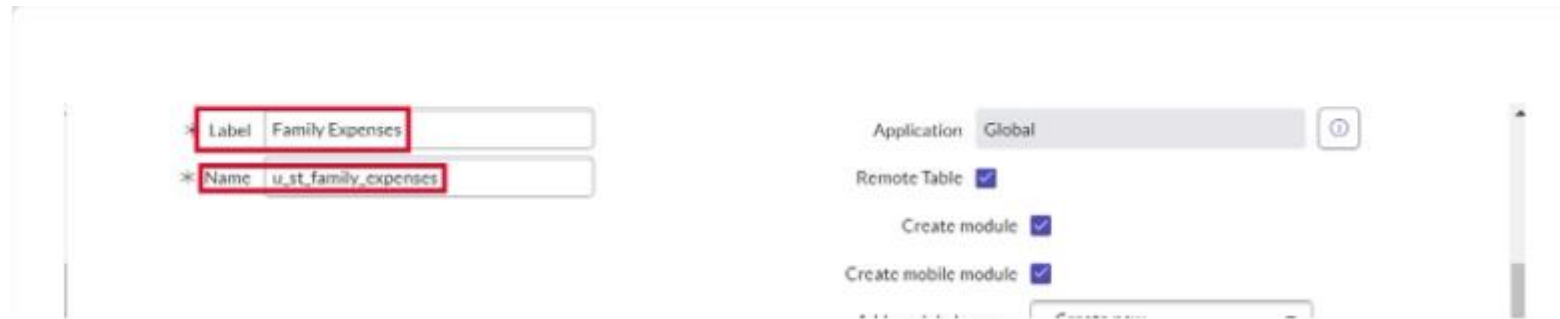
4.And then click on Submit and make current



Table

Activity 2:

1. Open Service now
2. Go to all>search for Tables>Click on New
3. Enter the Details:
Label: Family Expenses
Name: Auto-Populated
New menu name: Family Expenditure



4.Click on save

Activity 2:

1.Open Service now

2.Near Columns Double Click near insert a new row

Give the details as:

Column label:Number

Type:String

3.Double click on insert a new row again

Give the details as:

Column label:Date

Type:Date

4.Double click on insert a new row again

Give the details as:

Column label:Amount

Type:Integer

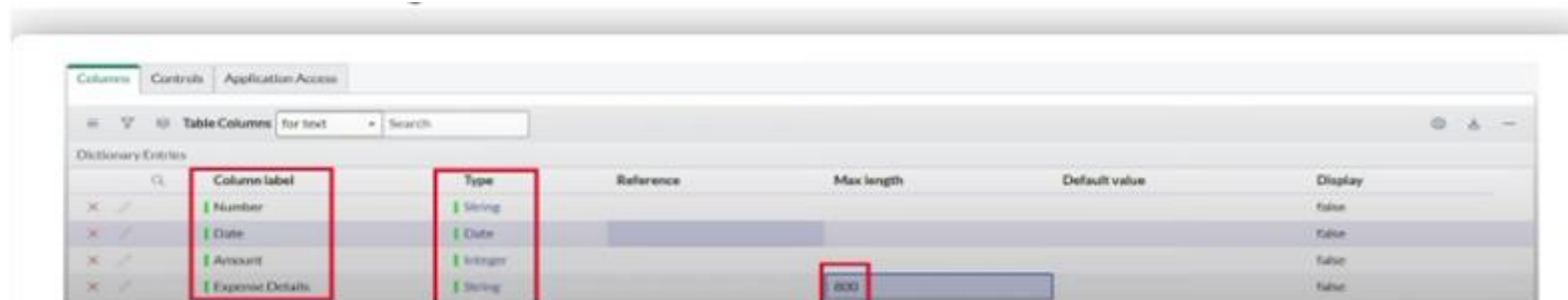
5 .Double click on insert a new row again

Give the details as:

Column label:Expense Details

Type:String

Max length:800



6.Click on save

Activity 2:

1.Open Service now

2.Double click on the Number field/Column

3.Go down and double click on Advanced view

4.In Default Value:

Use dynamic default:check the box

Dynamic default value:Get Next Padded Number

5.click on update

6.Go to all>>search for Number Maintenance>>select number maintenance

7.click on new

8.Enter the details:

Table:Family Expenses

Prefix:MFE

Number MFE

Table: Family Expenses

Prefix: MFE

* Number: 1,000

Application: Global

Number of digits: 7

Update Delete

8. Click on Submit

Activity 2:

1. Open Service now
2. Go to all >> search for Family Expenses >> Open family Expenses
3. Click on new
4. Go to header and click there >> click on configure >> Select Form Design
5. Drag Drop the form as requirement

Family Expenses [u_family_expenses] 2 Column

Number Date

Amount Expense Details

1 Column

6. Make Number Read-Only Field by Clicking
7. Make Date, Amount Mandatory field by Clicking
8. Click on save

Table(Daily Expenses)

Activity 3

1. Open Service now
2. Go to all>search for Tables>Click on New
3. Enter the Details:

Label: Daily Expenses

Name: Auto-Populated

Add Module to menu : Family Expenditure

The screenshot shows the 'New Table' configuration page in ServiceNow. On the left, the 'Label' field is set to 'Daily Expenses' (marked with a red box and arrow 1) and the 'Name' field is set to 'u_daily_expenses' (marked with a red box and arrow 2). The 'Extends table' field is empty. On the right, the 'Application' is set to 'Global'. The 'Create module' and 'Create mobile module' checkboxes are both checked. Below these, the 'Add module to menu' section is expanded, showing 'Family Expenditure' selected (marked with a red box and arrow 3). An 'Application Menu' button is also visible.

4. click on save

Activity 3:

1.Open Service now

2.Near Columns Double Click near insert a new row

Give the details as:

Column label:Number

Type:String

3.Double click on insert a new row again

Give the details as:

Column label:Date

Type:Date

4. Double click on insert a new row again

Column label:Amount

Type:Integer

5 .Double click on insert a new row again

Column label:Expense Details

Type:String

Max length:800

6.Double click on insert a new row again

Give the details as:

Column label:Comments

Type:String

Max length:800

6.Click on save

Activity 3:

1.Open Service now

2.Double click on the Number field/Column

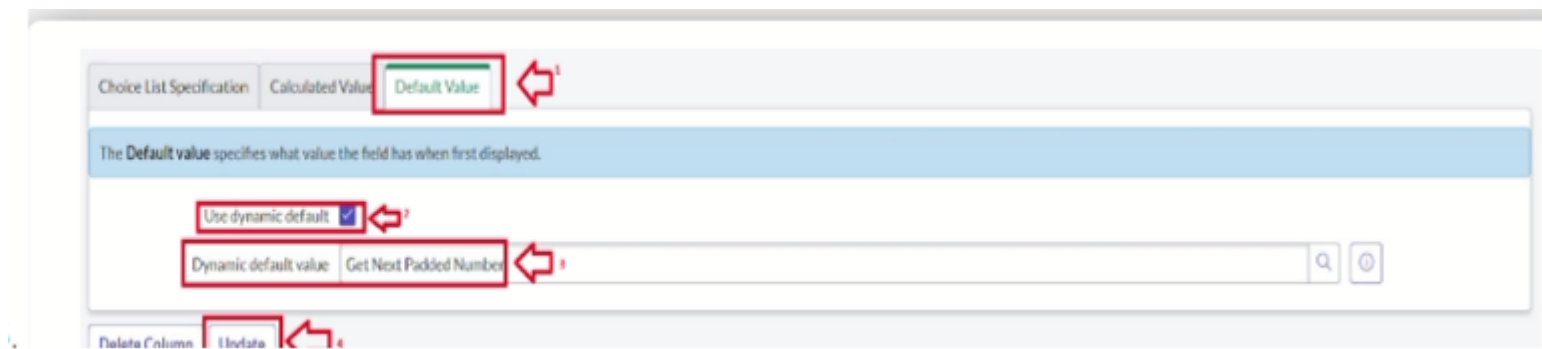
3.Go down and double click on Advanced view

4.In Default Value:

Use dynamic default:check the box

Dynamic default value:Get Next Padded Number

5.click on update



6.Go to all>>search for Number Maintenance>>select number maintenance

7.click on new

8.Enter the details:

Table:Daily Expenses

Prefix:MFE

The screenshot shows a 'Number New record' form with the following fields and annotations:

- Table:** 'Daily Expenses' (highlighted with a red box and arrow 1)
- Prefix:** 'MFE' (highlighted with a red box and arrow 2)
- Number:** '1,000' (with a red asterisk icon to the left)
- Application:** 'Global' (with an information icon to the right)
- Number of digits:** '7' (in a blue field)
- Submit button:** Located at the bottom left, highlighted with a red box and arrow 3.

9.click on submit

Activity 3:

1.Open Service now

2.Go to all>>search for Daily Expenses>>Open Daily Expenses

3.Click on new

4.Go to header and click there>>click on configure>>Select Form Design

5.Drag Drop the form as requirement

6.Make Number Read-Only Field by Clicking

7.Make Date,Family Member Name Mandatory field by Clicking

8.Click on save

Relationship

Activity 4:

1.Open Service now

2.Go to all>>search for relationships>>open relationships

3.click on new

4.Enter the details:

Name:Daily Expenses

Applies to table:select Family Expenses

Daily Expenses:select Daily Expenses

5.click save

Configuring Related List

Activity 5:

- 1.open Service now
2. .Go to all>>search for Family Expenses>>Open FamilyExpenses
- 3.Click on new
- 4.Go to header and click there>>click on configure>>select Related Lists
- 5.Add Daily Expenses to selected area
- 6.click on save



Business rule

Activity 6:

1. Open Service Now
2. Go to all >> search for Business Rules
3. Under system definition select business rules then click new

4. Enter the Details:

Name: Family Expenses BR

Table: Select Daily Expenses

Check Advanced

The screenshot shows the 'Business Rule' configuration form in Service Now. The form has a header 'Business Rule' and a sub-header 'New record'. Below the header is a blue informational bar that reads: 'A business rule is a server-side script that runs when a record is displayed, inserted, deleted, or when a table is queried. Use business rules to automatically change values in form fields when the specified conditions are met'. The form contains several fields: 'Name' with the value 'Family Expenses BR', 'Table' with the value 'Daily Expenses [u daily_expenses]', 'Application' with the value 'Global', 'Active' with a checked checkbox, and 'Advanced' with a checked checkbox. Red boxes and arrows highlight the 'Name' and 'Table' fields, and the 'Advanced' checkbox. A red arrow points to the 'Advanced' checkbox.

5. In when the run check insert and update

When to run

Advanced

Specify whether the business rule should run on Insert or Update. Use Filter Conditions to specify under which conditions the rule should run.

When: before

Order: 100

Insert ☒

Update ☒

Delete ☐

Query ☐

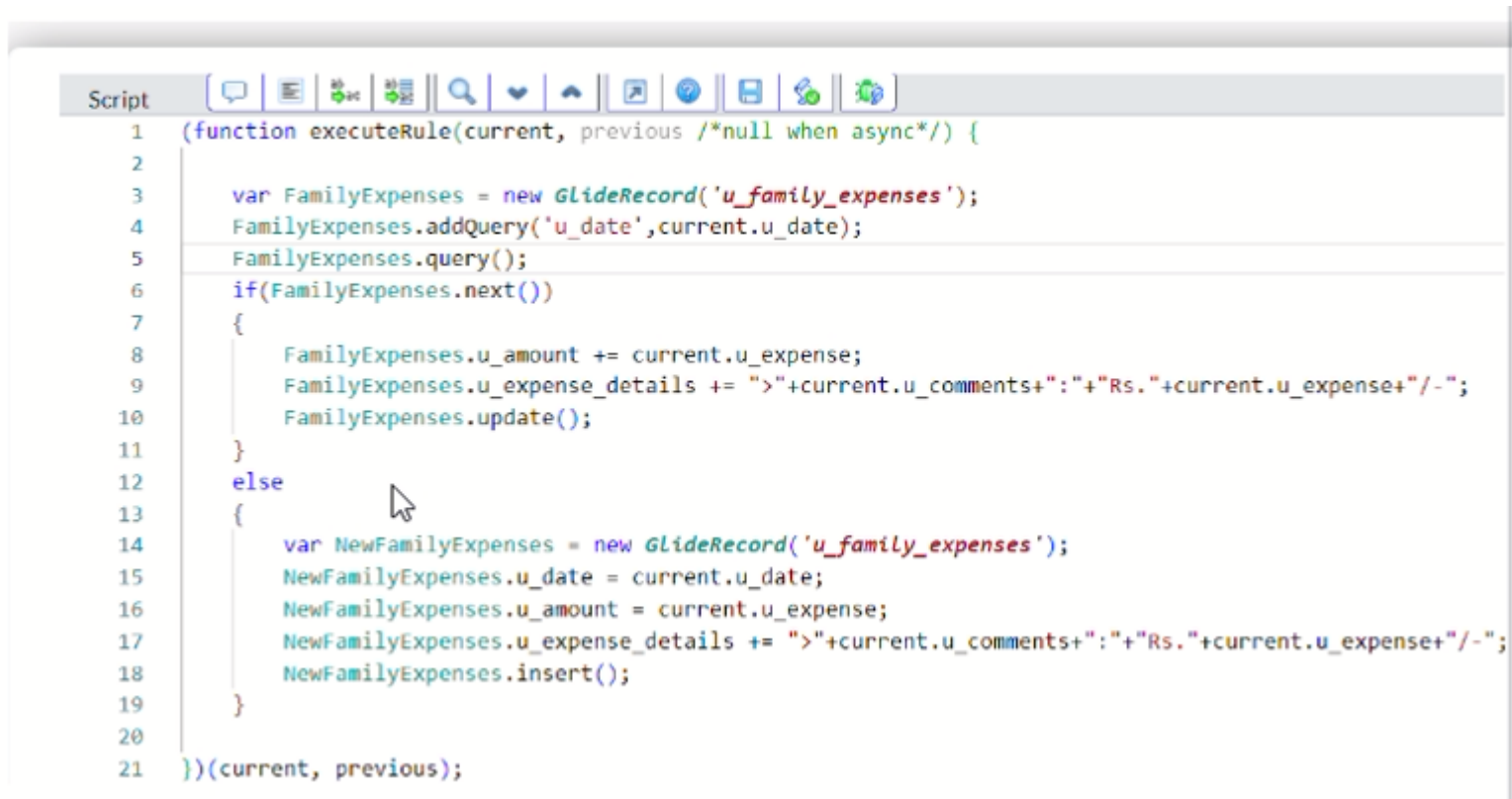
Filter Conditions

Add Filter Condition Add "OR" Clause

-- choose field -- -- oper -- -- value --

Role conditions

6. In Advance (we write the code)



```
Script
1 (function executeRule(current, previous /*null when async*/) {
2
3     var FamilyExpenses = new GlideRecord('u_family_expenses');
4     FamilyExpenses.addQuery('u_date',current.u_date);
5     FamilyExpenses.query();
6     if(FamilyExpenses.next())
7     {
8         FamilyExpenses.u_amount += current.u_expense;
9         FamilyExpenses.u_expense_details += ">" + current.u_comments + ":" + "Rs." + current.u_expense + "/-";
10        FamilyExpenses.update();
11    }
12    else
13    {
14        var NewFamilyExpenses = new GlideRecord('u_family_expenses');
15        NewFamilyExpenses.u_date = current.u_date;
16        NewFamilyExpenses.u_amount = current.u_expense;
17        NewFamilyExpenses.u_expense_details += ">" + current.u_comments + ":" + "Rs." + current.u_expense + "/-";
18        NewFamilyExpenses.insert();
19    }
20
21 })(current, previous);
```

7.click on save

Configure The Relationship

Activity 7:

1.Open Service now

2.Go to all>>search for relationships>>open relationships

3.In open Daily Expenses relationship

For Applies to table:select Family Expenses

In Query with:write the below Query

4.click on update

Relationship
Daily Expenses

Name: Daily Expenses

Advanced ☐

Application: Global

Applies to table: Family Expenses [u_family_expenses]

Queries from table: Daily Expenses [u_daily_expenses]

This script refines the query in current that will populate the related list. For more information about it, its parameters and control variables, see the [documentation](#) See also the article about the recommended form of the script.

Query with

```
1 (function refineQuery(current, parent) {
2
3 // Add your code here, such as current.addQuery(field, value);
4 current.addQuery('u_date',parent.u_date);
5 current.query();
6
7 })(current, parent);
```

Update Delete