

Calculating Family Expenses using Service Now

Milestone 1: Setting Up ServiceNow Instance:

- Sign up on developer.servicenow.com and create a developer account.
- Navigate to the Personal Developer Instance section and request a new instance.
- Fill out the required information and submit the request.
- Instance details (URL, username, password) will be sent via email.
- Log in to the instance using the provided credentials.
- The instance is ready for development and customization.

Milestone 2: Creation of New Update Set:

- Creating a Local Update Set in ServiceNow
 - Navigate to All in the application navigator.
 - In the filter search bar, type Local Update Set and select it from the results.
 - Click on the New button to create a new update set.
 - Name: Family Expenses
 - In the form that appears, enter the following details:
 - Click on Submit to save the update set.
 - After submission, click on Make Current to set this update set as the active one.
- Then created update set called “Family Expenses” and made it current

The screenshot shows the ServiceNow interface for creating a new update set. The breadcrumb trail is 'Update Set - Create New Update Set'. The form fields are as follows:

Field	Value
Name	Family Expenses
State	In progress
Parent	
Release date	
Description	

Buttons: Submit, Submit and Make Current

Milestone 3: Creation of Table (Family Expenses):

- Creation of Family Expenses tables and its fields:

Family Expenses Table Fields

Field Name	Type	
Number	String	Auto populate Number with Prefix MFE
Date	Date	
Amount	Integer	
Expense Details	String	Max Length 800

- Navigate to All in the application navigator.
- In the filter search bar, type Tables and select it from the results.
- Click on the New button to create a new table.
- In the form, provide the following details:
 - Label: Family Expenses
 - Name: Auto-Populated (automatically generated based on the label)
 - New menu name: Family Expenditure
- Navigate to the header section of the form, right-click on the header, and select Save from the context menu.

The screenshot shows the 'Table - Family Expenses' configuration page in ServiceNow. The 'Columns' tab is selected, displaying a table of dictionary entries. The table has columns for Column label, Type, Reference, Max length, Default value, and Display. The entries listed are:

Column label	Type	Reference	Max length	Default value	Display
Sys ID	Sys ID (GUID)	(empty)	32		false
Created	Date/Time	(empty)	40		false
Updates	Integer	(empty)	40		false
Updated by	String	(empty)	40		false
Expense Details	String	(empty)	800		false
Updated	Date/Time	(empty)	40		false
Number	String	(empty)	40		false
Date	Date	(empty)	40		false
Created by	String	(empty)	40		false
Amount	Integer	(empty)	40		false

- Making Number Field an Auto-Number:

- In the Columns section of the *Family Expenses* table, locate and double-click on the Number field to open its configuration.
- Scroll down and double-click on Advanced view to expand additional settings.
- Under the Default Value section:
- Enable the checkbox for Use dynamic default.
- Set the Dynamic default value to Get Next Padded Number.
- Click on Update to save the changes to the field.

The screenshot shows the 'Dictionary Entry - Number' configuration page in ServiceNow. The 'Default Value' tab is selected, displaying the 'Use dynamic default' checkbox checked and the 'Dynamic default value' set to 'Get Next Padded Number'. The page also shows the 'Table' as 'Family Expenses [u_family_expenses]', 'Type' as 'String', 'Column label' as 'Number', 'Column name' as 'u_number', and 'Max length' as '40'.

- Setting Up Number Maintenance for the Family Expenses Table
 - Navigate to All in the application navigator.
 - In the filter search bar, type Number Maintenance and select it from the list.
 - Click on the New button to create a new number maintenance record.
 - Provide the following details:
 - Table: Family Expenses
 - Prefix: MFE
 - Click on Submit to save the configuration.

The screenshot shows the 'Number - New Record' form in ServiceNow. The breadcrumb trail is 'All > Number Maintenance > New Record'. The form fields are as follows:

Field	Value
* Table	Family Expenses
Prefix	MFE
* Number	1,000
Application	Global
Number of digits	7

A 'Submit' button is located at the bottom left of the form.

- Configure the Form:
 - Navigate to All in the application navigator.
 - In the filter search bar, type Family Expenses and select it from the results to open the module.
 - Click on the New button to open a new record form.
 - In the form header, right-click and select Configure > Form Design from the dropdown menu.
 - In the Form Designer, use drag-and-drop functionality to customize the layout of the form fields as needed. Fields can be rearranged, moved between sections, or grouped based on specific requirements.
 - Once the desired layout has been achieved, click Save or Close to apply the changes.
 - Before Form design:

The screenshot shows the 'Family Expenses - Create MFE0001001' form in ServiceNow. The breadcrumb trail is 'All > Family Expenses > Create MFE0001001'. The form fields are as follows:

Field	Value
Number	MFE0001001
Expense Details	
Date	
Amount	

A 'Submit' button is located at the bottom left of the form.

- Form design:

- After form design:

Milestone 4: Creation of Table (Daily Expenses):

- Creation of Daily Expenses Table and its fields:

Daily Expenses Table Fields

Field Name	Type	
Number	String	Auto populate Number with Prefix DFE
Family Member Name	Reference	Sys_User
Date	Date	
Expense	Integer	
Comments	String	Max Length 800

- Navigate to All in the application navigator.
- In the filter search bar, type Tables and select it from the list.
- Click on the New button to create a new table.
- Fill in the following details in the form:
 - Label: Daily Expenses
 - Name: Auto-Populated (automatically generated based on the label)
 - Add Module to menu: Family Expenditure

- Navigate to the header of the form, right-click, and select Save from the context menu.

- Making Number Field an Auto-Number:

- In the Columns section of the Daily Expenses table, locate and double-click on the Number field to open its configuration.
- Scroll down and double-click on Advanced view to expand additional settings.
- Under the Default Value section:
- Enable the checkbox for Use dynamic default.
- Set the Dynamic default value to Get Next Padded Number.
- Click on Update to save the changes to the field.

- Setting Up Number Maintenance for the Daily Expenses Table

- Navigate to All in the application navigator.
- In the filter search bar, type Number Maintenance and select it from the list.
- Click on the New button to create a new number maintenance record.
- Provide the following details:
 - Table: Daily Expenses
 - Prefix: DFE
- Click on Submit to save the configuration.

servicenow All Favorites History Workspaces Admin Number - DFE

Search

Update Delete

* Table: Daily Expenses

Prefix: DFE

* Number: 1,000

Application: Global

Number of digits: 7

Update Delete

Related Links
[Show Counter](#)

- **Configure the Form:**

- Navigate to All in the application navigator.
- In the filter search bar, type Daily Expenses and select it from the results to open the module.
- Click on the New button to open a new record form.
- In the form header, right-click and select Configure > Form Design from the dropdown menu.
- In the Form Designer, use drag-and-drop functionality to customize the layout of the form fields as needed. Fields can be rearranged, moved between sections, or grouped based on specific requirements.
- Once the desired layout has been achieved, click Save or Close to apply the changes.
 - Before Form design:

servicenow All Favorites History Workspaces Daily Expenses - Create DFE0001001

Search

Submit

Number: DFE0001001 Date:

Comments:

Expense: Family Member Name:

Submit

- **Form design:**

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Daily Expenses [u_daily_exp] Default view Form Design

Fields Field Types

Filter

Fields

Created Created by Updated Updated by Updates

Formatters

Activities (filtered)

Daily Expenses [u_daily_exp] 2 Column

Number Family Member Name Date Expense

Comments 1 Column

- After form design:

The screenshot shows the ServiceNow interface for creating a new record in the 'Daily Expenses' table. The header bar includes the ServiceNow logo, navigation tabs (All, Favorites, History, Workspaces), and a search bar. The main form area contains the following fields:

- Number:** DFE0001002
- Family Member Name:** (empty text field with a search icon)
- Date:** (empty date picker)
- Expense:** (empty text field)
- Comments:** (empty text area)

A 'Submit' button is located at the bottom left of the form.

Milestone 5: Creation of Relationship:

- Creation of Relationship between Family Expenses and Daily Expenses tables
 - Navigate to All in the application navigator.
 - In the filter search bar, type Relationships and select it from the list.
 - Click on the New button to create a new relationship.
 - Enter the following details:
 - Name: Daily Expenses
 - Applies to Table: Family Expenses
 - Queries to Table: Daily Expenses
- Click Save to store the relationship.

The screenshot shows the ServiceNow interface for creating a new relationship record. The header bar includes the ServiceNow logo, navigation tabs, and a search bar. The main form area contains the following fields:

- Name:** Daily Expenses
- Application:** Global
- Applies to table:** Family Expenses [u_family_expenses]
- Queries from table:** Daily Expenses [u_daily_expenses]

Below the form fields, there is a section for 'Query with' and a code editor. The code editor contains the following script:

```

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

Milestone 6: Configuring Related List on Family Expenses:

- Navigate to All in the main menu.
- In the filter/search bar, type Family Expenses, then select and open the Family Expenses module.
- Click on the New button to create a new Family Expenses record.
- In the header section of the screen, right-click and choose Configure from the context menu.
- From the configuration options, select Related Lists.
- In the Related Lists configuration screen, locate Daily Expenses in the available list.

- Move Daily Expenses to the Selected area to include it in the related lists for Family Expenses.
- Click Save or Done (depending on the interface) to apply the changes.

servicenow All Favorites History Workspaces Admin ServiceNow Search

< Configuring related lists on Family Expenses form Cancel Save

Available Selected

Attachments Daily Expenses

Cancel Save

View name: Default view

Related Links
Show versions

Milestone 7: Creation of Business Rules:

- From the main navigation, go to All.
- In the search or filter bar, type Business Rules.
- Under the System Definition section, click on Business Rules.
- Click on the New button to create a new business rule.
- Fill in the Business Rule Details:
 - Name: Family Expenses BR
 - Table: Select Daily Expenses from the dropdown list.
- Check the box labeled Advanced to enable additional configuration options.
- Configure When to Run: Under the When to Run section, make sure the following options are checked:
 - Insert
 - Update

servicenow All Favorites History Workspaces Business Rule - New Record Search

< Business Rule New record Submit

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. [More Info](#)

Name: Family Expenses BR Application: Global

Table: Daily Expenses [u_daily_expenses] Active: ☒ Advanced: ☒

When to run: When before Order: 100

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

Insert: ☒ Update: ☒ Delete: ☐ Query: ☐

Filter Conditions: Add Filter Condition Add "OR" Clause

Role conditions:

- In Advance (write the code): Write the below code >>

The screenshot shows the ServiceNow interface for configuring a Business Rule. The table is 'Daily Expenses [u_daily_expenses]'. The 'Advanced' tab is active, displaying a script that updates family expenses.

```

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 }(current, previous);

```

Milestone 8: Configure the Relationship:

- From the main navigation, go to All.
- In the search bar, type Relationships, then open the Relationships module.
- Locate and open the Daily Expenses Relationship record.
- Set the Following Details:
 - For Applies to table, select Family Expenses from the dropdown list.
- After entering the script, click Update to save your changes.

The screenshot shows the ServiceNow interface for configuring a Relationship. The relationship is named 'Daily Expenses'. The 'Advanced' tab is active, displaying a script that refines the query for the relationship.

```

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);

```