

Calculating Family Expenses using Service Now

The project aims to develop a comprehensive expense calculation system using ServiceNow. This system will enable users to track and manage family expenses efficiently. It will include features such as expense categorization, budget setting, real-time tracking, and reporting capabilities. Utilizing ServiceNow's robust platform, the project will ensure seamless integration, user-friendly interface, and scalability to accommodate varying family sizes and financial complexities. The end goal is to empower users with the tools they need to make informed financial decisions and promote financial well-being within the family unit.

Setting up ServiceNow Instance

1. Sign up for a developer account on the ServiceNow Developer site "<https://developer.servicenow.com>".
2. Once logged in, navigate to the "Personal Developer Instance" section.
3. Click on "Request Instance" to create a new ServiceNow instance.
4. Fill out the required information and submit the request.
5. You'll receive an email with the instance details once it's ready.
6. Log in to your ServiceNow instance using the provided credentials.
7. Now you will navigate to the ServiceNow.

Creation of New Update Set

1. Go to All >> In the filter search for Local Update set > click on New.
2. Enter the Details as:
Name : Family Expenses
3. Then click on Submit and Make current.

dev197294.service-now.com/now/nav/ui/classic/params/target/sys_update_set.do%3Fsys_id%3D0bc652668377221076...

servicenow All Favorites History Workspaces Admin **Update Set - Family Expenses** Application scope: Global Update set: Default: Global

Update Set Family Expenses Update Back Out

* Name: Family Expenses Application: Global

State: In progress Created: 2025-09-08 05:09:25

Parent: Created by: admin

Release date: Merged to:

Install date:

Installed from:

Description: </>

Update Back Out

Related Links

[Export to XML](#)

[Merge With Another Update Set](#)

[Scan Update Set](#)

[\(SN Utils\) Versions \(0\)](#)

Customer Updates (55) Update Set Logs Child Update Sets

Created Search Actions on selected rows...

Update set = Family Expenses

Created	Type	View	Target name	Updated by	Remote update set	Action
2025-09-08 05:13:40	Application Menu		Family Expenses	admin	(empty)	INSERT_OR_UPDATE

Creation of Family Expenses Table

- Go to All > In the filter search for Tables > click on New.
- Enter the Details:
 - Label : Family Expenses
 - Name : Auto-Populated
 - New menu name : Family Expenditure

Creation of Columns(Fields)

- Near Columns Double click near insert a new row.
- Give the details as:
 - Column label : Number
 - Type : String
- Double click on insert a new row again
- Give the details as:
 - Column label : Date
 - Type : Date
- Double click on insert a new row again
- Give the details as:
 - Column label : Amount
 - Type : Integer

- Double click on insert a new row again
- Give the details as:

Column label : Expense Details

Type : String

Max length : 800

dev197294.service-now.com/now/nav/ui/classic/params/target/sys_db_object.do%3Fsys_id%3Dc3571e6683772210762...

servicenow All Favorites History Workspaces Admin **Table - Family Expenses** Application scope: Global Update set: Default [Global]

Table Family Expenses Delete Update Delete All Records

A table is a collection of records in the database. Each record corresponds to a row in a table, and each field on a record corresponds to a column on that table. Applications use tables and records to manage data and processes. [More Info](#)

* Label Family Expenses Application Global

* Name u_family_expenses

Columns Controls Application Access

Table Columns for text Search 1 to 10 of 10 New

Dictionary Entries

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

Making Number Field an Auto-Number

- Double click on the Number Field/Column.
- Go down and double click on Advanced view
- In Default Value:
 - Use dynamic default : check the box
 - Dynamic default value : Get Next Padded Number
- Click on Update.

dev197294.service-now.com/now/nav/ui/classic/params/target/sys_dictionary.do%3Fsys_id%3D39e7526683772210762...

servicenow All Favorites History Workspaces Admin Dictionary Entry - Number ☆ Application scope: Global Update set: Default (Global)

Dictionary Entry Number View: Advanced* Delete Column Update

* Table: Family Expenses [u_family_expenses] Application: Global

* Type: String Active: ☒

* Column label: Number Function field: ☐

* Column name: u_number Read only: ☒

* Max length: 40 Mandatory: ☐

Display: ☐

Alters the behavior of a field or functionality that depends on the field. [More Info](#)

Attributes

Choice List Specification Calculated Value Default Value

The Default value specifies what value the field has when first displayed.

Use dynamic default: ☒

Dynamic default value: Get Next Padded Number

Delete Column Update

Related Links

Go to All >> In the filter search for Number Maintenance >> select Number Maintenance

4. Click on New.
5. Enter the below Details:
Table : Family Expenses
9. Prefix : MFE

dev197294.service-now.com/now/nav/ui/classic/params/target/sys_number.do%3Fsys_id%3D6d5a9a6a8377221076267...

servicenow All Favorites History Workspaces Admin Number - MFE ☆ Application scope: Global Update set: Default (Global)

Number MFE Update Delete

* Table: Family Expenses

Prefix: MFE

* Number: 1,000

Application: Global

Number of digits: 7

Update Delete

Related Links
[Show Counter](#)

Click on Submit.

Configure the Form

1. Go to All >> In the filter search for Family Expenses >> Open Family Expenses
2. Click on New
3. Go to the Header and right click there>> click on Configure >> Select Form Design
4. Customize or Drag Drop the form as per your requirement.

Creation of Daily Expenses Table

1. Go to All > In the filter search for Tables > click on New.
2. Enter the Details:
 Label : Daily Expenses
 Name : Auto-Populated
 Add Module to menu : Family Expenditure

Creation of Columns(Fields)

1. Near Columns Double click near insert a new row.
2. Give the details as:
 Column label : Number
 Type : String
3. Double click on insert a new row again
4. Give the details as:
 Column label : Date
 Type : Date
5. Double click on insert a new row again
6. Give the details as:

Column label : Expense

Type : Integer

7. Double click on insert a new row again

8. Give the details as:

Column label : Family Member Name

Type : Reference

Max length : 800

9. Double click on insert a new row again

10. Give the details as:

Column label : Comments

Type : String

Max length : 800

The screenshot shows the ServiceNow interface for configuring the 'Table - Daily Expenses'. The 'Columns' tab is selected, displaying a table of column definitions. The 'Expense' column is highlighted, showing its configuration details. The 'Number' column is also visible, with a default value of 'javascript:getNextObjNumberPadded();'.

Column label	Type	Reference	Max length	Default value	Display
Date	Date	(empty)	40		false
Updates	Integer	(empty)	40		false
Updated by	String	(empty)	40		false
Family Member Name	Reference	User	32		false
Updated	Date/Time	(empty)	40		false
Expense	Integer	(empty)	40		false
Created by	String	(empty)	40		false
Comments	String	(empty)	800		false
Number	String	(empty)	40	javascript:getNextObjNumberPadded();	false
Sys ID	Sys ID (GUID)	(empty)	32		false
Created	Date/Time	(empty)	40		false

Making Number Field an Auto-Number

- Double click on the Number Field/Column.
- Go down and double click on Advanced view
- In Default Value:

Use dynamic default : check the box

Dynamic default value : Get Next Padded Number

- Click on Update.

4. [Delete Column](#) [Update](#)

Go to All >> In the filter search for Number Maintenance >> select Number Maintenance

5. Click on New.

6. Enter the below Details:

Table : Daily Expenses

[Update](#) [Delete](#)

Related Links
[Show Counter](#)
[ISN Utils | Versions \(1\)](#)

Configure the Form

1. Go to All >> In the filter search for Daily Expenses >> Open Daily Expenses
2. Click on New
3. Go to the Header and right click there>> click on Configure >> Select Form Design
4. Customize or Drag Drop the form as per your requirement.
5. Make Number Read-Only Field by clicking on the gear icon and checking Read-Only

6. Make Date, Family Member Name Mandatory Field by clicking on the gear icon and checking Mandatory
7. Click on Save.

The screenshot shows the ServiceNow Form Design interface for the 'Daily Expenses' form. The browser address bar displays the URL: `dev197294.service-now.com/$ng_fd.do?sysparm_attributes=startTable:"u_daily_expenses"%2CstartView:"Default%20view"`. The interface includes a left sidebar with tabs for 'Fields' and 'Field Types', a 'Filter' input, and sections for 'Fields' (listing 'Created', 'Created by', 'Updated', 'Updated by', 'Updates') and 'Formatters' (listing 'Activities (filtered)', 'Contextual Search Results', 'Ratings'). The main area, titled 'Form Design', shows the form layout. The first section, 'Daily Expenses [u_daily_expenses]', is a 2-column layout containing four fields: 'Number', 'Family Member Name', 'Date', and 'Expense'. Each field has a gear icon for configuration. The second section is a 1-column layout containing a 'Comments' field, also with a gear icon.

Creation of Relationships

1. Go to All >> In the filter search for Relationships >> Open Relationships
2. Click on New.
3. Enter the details:
Name : Daily Expenses
Applies to table : Select Family Expenses
Daily Expenses : Select Daily Expenses
4. Click Save.

dev197294.service-now.com/now/nav/ui/classic/params/target/sys_relationship.do%3Fsys_id%3D32e46aa683b7221076267230feaa...

servicenow All Favorites History Workspaces Admin Relationship - Daily Expenses Application scope: Global Update set: Default (Global)

Relationship Daily Expenses

Name: Daily Expenses Application: Global

Advanced: ☐ 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 Turn on ECMAScript 2021 (ES12) mode

```

1 (function refineQuery(current, parent) {
2
3     current.addQuery('u_date', parent.u_date);
4     current.query();
5
6
7 })(current, parent);

```

Update Delete

Configuring Related List on Family Expenses

1. Go to All >> In the filter search for Family Expenses >> Open Family Expenses
2. Click on New
3. Go to the Header and right click there>> click on Configure >> Select Related Lists
4. Add Daily Expenses to the Selected Area.
5. Click on Save

dev197294.service-now.com/now/nav/ui/classic/params/target/slushbucket.do%3Fsysparm_referring_url%3Du_family_expenses.do...

servicenow All Favorites History Workspaces Admin ServiceNow Application scope: Global Update set: Default (Global)

Configuring related lists on Family Expenses form

Available: Attachments

Selected: Daily Expenses

Cancel Save

View name: Default view

servicenow All Favorites History Workspaces : Business Rule - Family Expenses BR ☆

Application scope: Global
Update set: Default (Global)

Business Rule Family Expenses BR

Name: Family Expenses BR Application: Global

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

When: before Order: 100

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

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

servicenow All Favorites History Workspaces : Business Rule - Family Expenses BR ☆

Application scope: Global
Update set: Default (Global)

Business Rule Family Expenses BR

Name: Family Expenses BR Application: Global

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

When: before Order: 100

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

Condition:

Script: ☒ Turn on ECMAScript 2021 (ES12) mode

```

1 (function executeRule(current, previous /*null when async*/) {
2
3
4 var FamilyExpenses = new GlideRecord('u_family_expenses');
5
6 FamilyExpenses.addQuery('u_date',current.u_date);
7
8 FamilyExpenses.query();
9
10 if(FamilyExpenses.next())
11 {
12
13
14 FamilyExpenses.u_amount += current.u_expense;
15
16 FamilyExpenses.u_expense_details += "<current u_expense>"+u_date+"<current u_expense>"/-";

```

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

```
(function executeRule(current, previous /*null when async*/) {
```

```
var FamilyExpenses = new GlideRecord('u_family_expenses');
```

```
FamilyExpenses.addQuery('u_date',current.u_date);
```

```
FamilyExpenses.query();
```

```
if(FamilyExpenses.next())
```

```
{
```

```
FamilyExpenses.u_amount += current.u_expense;
```

```

FamilyExpenses.u_expense_details +=
">" + current.u_comments + ":" + "Rs." + current.u_expense + "/-";
FamilyExpenses.update();
}
else
{
var NewFamilyExpenses = new GlideRecord('u_family_expenses');
NewFamilyExpenses.u_date = current.u_date;
NewFamilyExpenses.u_amount = current.u_expense;
NewFamilyExpenses.u_expense_details +=
">" + current.u_comments + ":" + "Rs." + current.u_expense + "/-";
NewFamilyExpenses.insert();
}

})(current, previous);

```

Configure the Relationship

1. Go to All >> In the filter search for Relationships >> Open Relationships.
2. In that, open Daily Expenses Relationship.
3. For Applies to table : Select Family Expenses.
4. In Query with : write the below Query.

```

(function refineQuery(current, parent) {

// Add your code here, such as current.addQuery(field, value);
current.addQuery('u_date',parent.u_date);
current.query();

})(current, parent);

```

5. Click on Update.

dev197294.service-now.com/now/nav/ui/classic/params/target/sys_relationship.do%3Fsys_id%3D32e46aa683b7221076267230feaa...

servicenow All Favorites History Workspaces Admin Relationship - Daily Expenses Application scope: Global Update set: Default (Global)

Relationship Daily Expenses

Name Application Global

Advanced ☐ 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 ☐ Turn on ECMAScript 2021 (ES12) mode

```
1 (function refineQuery(current, parent) {
2
3     current.addQuery('u_date', parent.u_date);
4     current.query();
5
6
7 })(current, parent);
```

Conclusion

In conclusion, implementing the "Calculation of Family Expenses Using ServiceNow" project offers numerous benefits to the household. By leveraging the robust capabilities of ServiceNow, family members can efficiently submit, track, and manage their expenses in a centralized and streamlined manner.

I have created a record in daily Expenses ,it is now also showing on family expenses table due to a relationship between two tables.

dev197294.service-now.com/now/nav/ui/classic/params/target/u_daily_expenses_list.do%3Fsysparm_userpref_module%3D1c7d926...

servicenow All Favorites History Workspaces Admin Daily Expenses Application scope: Global Update set: Default (Global)

Daily Expenses Number Search Actions on selected rows... New

All

Number	Comments	Date	Expense	Family Member Name
<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>
DFE0001006	Food	2025-09-08		50 Abel Tuter

Daily Expenses

dev197294.service-now.com/now/nav/ui/classic/params/target/u_family_expenses_list.do%3Fsysparm_userpref_module%3Dc2d756...

servicenow All Favorites History Workspaces Admin Family Expenses Application scope: Global Update set: Default (Global)

Family Expenses Number Search Actions on selected rows... New

All

Number	Amount	Date	Expenses Details
<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>
MFE0001005		50 2025-09-08	

Family Expenses