

# Performance Testing Report

Date:	November 02, 2025
Team ID:	NM2025TMID05019
Project Name:	Calculating Family Expenses using ServiceNow
Maximum Marks:	4 Marks

## 1. Introduction

This performance testing evaluates the responsiveness and efficiency of the Family Expense Calculation feature within ServiceNow, focusing on its ability to handle various scenarios and user loads.

## 2. Objectives

The primary objectives of this performance test are to:

- Measure the response time for calculating family expenses.
- Assess the system's stability under peak load conditions.
- Identify potential bottlenecks in the calculation process.
- Determine the maximum number of concurrent users the system can support without performance degradation.

## 3. Test Environment

The tests were conducted on a dedicated test instance of ServiceNow, mirroring the production environment in terms of hardware, software, and network configuration. Key specifications:

- ServiceNow Version: [Specify Version]
- Database: [Specify Database]
- Server Specs: [Specify Server Specs]
- Network Latency: [Specify Latency]

## 4. Test Scope

The performance tests covered the following scenarios:

- Single user expense calculation.
- Multiple concurrent user expense calculations.
- Expense calculation with varying data volumes.
- Stress testing to determine system limits.

## 5. Test Data

Test data was generated to simulate realistic family expense entries, including variations in item count, categories, and user profiles. A data generator script was used to create [Specify Number] expense records for testing.

## 6. Test Tools and Methodology

The following tools were used for performance testing:

- [Specify Tool 1, e.g., JMeter]: For simulating user load and measuring response times.
- [Specify Tool 2, e.g., ServiceNow Performance Analytics]: For monitoring system metrics.

The tests followed a standard load testing methodology, starting with baseline tests and gradually increasing the load to identify performance thresholds and breakpoints.

## 7. Test Results

### 7.1 Response Time Analysis:

- Average response time for single expense calculation: [Specify Time]
- Average response time under peak load ([Specify Users] concurrent users): [Specify Time]
- [Include charts/graphs showing response time trends under different loads]

## **7.2 Throughput Analysis:**

- Maximum transactions per second: [Specify TPS]
- [Include charts/graphs showing throughput under different loads]

## **7.3 Resource Utilization:**

- CPU Utilization: [Specify Percentage]
- Memory Utilization: [Specify Percentage]
- Database Load: [Specify Load Metric]
- [Include charts/graphs showing resource utilization during tests]

## **8. Findings and Observations**

- [Summarize key findings, e.g., System performs well under normal load but experiences degradation beyond X concurrent users].
- [Highlight any specific bottlenecks identified, e.g., Database queries for large datasets].
- [Mention any errors or exceptions encountered during testing].

## **9. Recommendations**

Based on the test results, the following recommendations are made:

- [Provide specific recommendations for performance improvement, e.g., Optimize database queries, scale up server resources].
- [Suggest code optimizations if specific code sections were identified as bottlenecks].
- [Recommend further testing if needed].

## **10. Conclusion**

The performance testing of the Family Expense Calculation feature in ServiceNow has provided valuable insights into its responsiveness and scalability. While the system performs adequately under normal load, optimizations are recommended to ensure optimal performance under peak conditions. Further testing after implementing the recommendations is advised.