

# Requirement Analysis (Requirement Analytics)

## Objective

The objective of this requirement analysis is to identify and define all **functional** and **non-functional requirements** necessary to implement an automated ticket routing system in **ServiceNow**.

This system ensures that each support ticket is automatically assigned to the correct group (Platform or Certificates) without manual intervention.

## Functional Requirements

Functional requirements describe **what the system must do** — the specific features and behaviors of the ServiceNow solution.

ID	Functional Requirement	Description
FR-01	<b>User Management</b>	The system must allow the creation and management of users within ServiceNow.
FR-02	<b>Group Management</b>	The system must support creating groups such as <i>Certificates Group</i> and <i>Platform Group</i> .
FR-03	<b>Role Assignment</b>	Each user should be assigned to a group and role defining their permissions (e.g., Platform_Role, Certificate_Role).
FR-04	<b>Table Creation</b>	Create a custom table ( <i>Operations Related</i> ) to store all support tickets with relevant fields (Issue, Description, Assigned Group).
FR-05	<b>Flow Automation</b>	The system must automatically assign tickets to groups based on the "Issue" field using <b>Flow Designer</b> .
FR-06	<b>Notification System</b>	The system should send notifications to the assigned group when a new ticket is created.
FR-07	<b>Access Control (ACL)</b>	Access to ticket records should be restricted based on roles and permissions.

FR-08	<b>Reporting &amp; Tracking</b>	The system should allow managers to view reports on ticket status and performance.
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### Non-Functional Requirements

Non-functional requirements define **how the system performs** rather than what it does.

ID	Non-Functional Requirement	Description
NFR-01	<b>Performance</b>	Ticket assignment must occur automatically within seconds of creation.
NFR-02	<b>Usability</b>	The interface must be easy to use for both employees and administrators.
NFR-03	<b>Scalability</b>	The system should support adding new issue types, groups, and flows easily.
NFR-04	<b>Security</b>	Only authorized users should be able to view or edit tickets relevant to their role.
NFR-05	<b>Reliability</b>	The automation workflow must perform consistently without manual errors.
NFR-06	<b>Maintainability</b>	Administrators should be able to modify or extend flows with minimal effort.
NFR-07	<b>Integration Readiness</b>	The system should support future AI (TensorFlow) or API integrations.
NFR-08	<b>Auditability</b>	The system should log all ticket routing and updates for accountability.

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### System Requirements

These specify the hardware, software, and tools needed for implementation.

Category	Requirement
<b>Platform</b>	ServiceNow (Latest version)

<b>Automation Tool</b>	Flow Designer
<b>Database</b>	ServiceNow internal database (for custom table storage)
<b>Programming</b>	Basic use of ServiceNow scripting if required
<b>Optional Tool</b>	TensorFlow (for future AI-based classification)
<b>Hardware</b>	Standard laptop/desktop with stable internet
<b>Browser</b>	Chrome / Edge / Firefox
<b>User Roles</b>	System Administrator, Support Engineer, Employee

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**System Inputs and Outputs**

System Component	Input	Output
<b>Ticket Form</b>	Issue details entered by employee	Ticket record created
<b>Flow Designer</b>	Issue field value	Assigned Group (auto-filled)
<b>Notification Engine</b>	Assigned group	Alert or message to group member
<b>Reports</b>	Ticket data	Graphs and summaries for managers

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**Requirement Traceability Matrix (RTM)**

Requirement ID	Mapped Component	Status
FR-01	User Creation Module	Implemented
FR-02	Group Creation Module	Implemented
FR-03	Role Assignment	Implemented
FR-04	Operations Related Table	Implemented

FR-05	Flow Designer Automation	Implemented
FR-06	Notification Rules	Planned
FR-07	ACLs	Implemented
FR-08	Reporting Dashboard	Planned

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## Summary

The requirements analysis ensures that the **automated ticket assignment system** in ServiceNow:

- Meets user needs (employees, engineers, admins, managers).
- Performs reliably and securely.
- Is flexible for future growth (AI and data analytics integration).
- Reduces manual workload and improves response efficiency.

In short, the system is designed to make ticket management **faster, smarter, and more efficient**.