Requirement Analysis

Data Flow Diagram And User Stories

Date	07 November2025
Team ID	NM2025TMID09092
Project Name	Streamlining Ticket Assignment for Efficient Support Operations
Maximum Marks	4 Marks

Data Flow Diagram:

This Data Flow Diagram (DFD) visually represents the automated process designed to enhance the efficiency of ticket assignment within ServiceNow. It details how incoming support requests are processed, validated, and routed to the appropriate support teams, significantly reducing manual effort and accelerating resolution times.

Key Components and Flow:

End-User: The process initiates with the End-User submitting a new ticket. This involves providing essential information such as the issue description, category, and any other relevant details through the ServiceNow portal or other intake channels.

ServiceNow Ticket Database (D1): Upon submission, the new ticket data is immediately captured and stored in the ServiceNow Ticket Database (D1). This database serves as the central repository for all ticket-related information.

Automated Ticket Routing Process (1.0):

This is the core engine of our streamlined assignment.

1.1 Validate & Match Issue to Rules: The system automatically retrieves the new ticket data from the database. It then intelligently validates key fields (like "Issue" or "Category") against predefined Assignment Rules & CMDB (D2). This external data store (D2) contains the logic for routing, often leveraging Configuration Items (CIs), user data (e.g., department), and specific keywords to determine the correct assignment.

Automated Assignment Decision: Based on this validation, the system makes a decision. If a match is found, the ticket proceeds to an automated assignment. If no specific match is made, it might fall into a default manual queue for human review.

Assignment Rules & CMDB (D2): This external data store is crucial for intelligent routing.

It houses:

- **Assignment Rules:** Defined conditions and actions (e.g., "If Category is 'Email' AND Description contains 'Outlook,' assign to 'Messaging Team'").
- **CMDB (Configuration Management Database):** Provides context about affected CIs, their owners, and related services, which can be critical for accurate routing.
- **User Data:** Information about the requesting user's department, location, or associated services.
- **Assign "Assigned to Group" (1.2):** Once a match is confirmed by the automated routing process, the system updates the ticket by populating the "Assigned to group" field with the designated support team (e.g., "Network Team," "Application Support," "Security Team").

Notifications & SLA Activation:

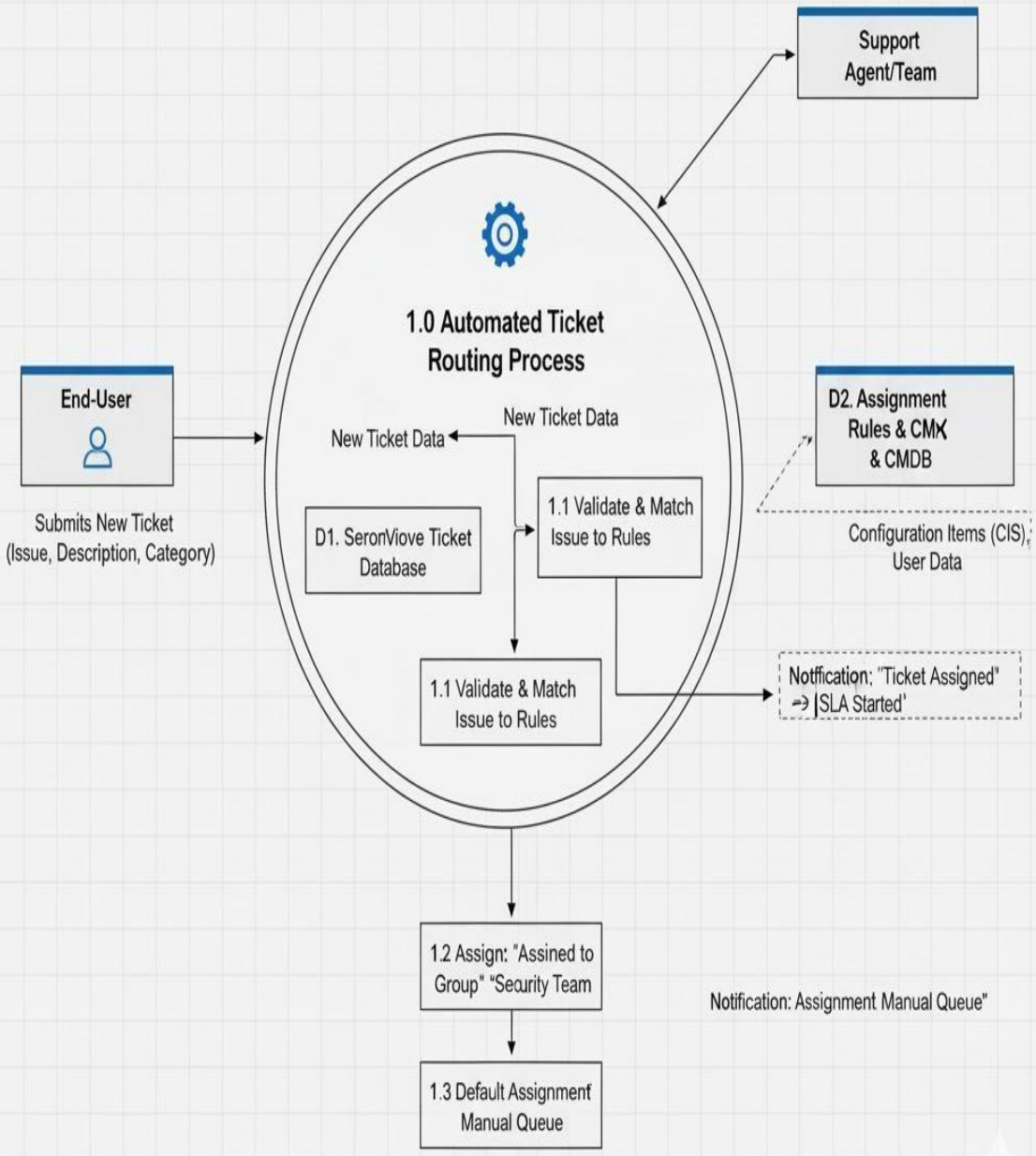
Ticket Assigned Notification: A notification is triggered, confirming that the ticket has been successfully assigned to a specific group. This provides transparency and allows the assigned team to begin work promptly.

SLA Started: Crucially, the Service Level Agreement (SLA) clock for the ticket begins ticking from this point, holding the assigned team accountable for timely resolution.

Manual Assignment Queue Notification: if the ticket couldn't be automatically assigned, it is directed to a Default Assignment Manual Queue (1.3), and a notification is sent to the relevant team for manual review and assignment.

Support Agent/Team: The correctly assigned Support Agent/Team receives the ticket directly in their queue, enabling them to immediately begin resolution without administrative delays or re-assignments.

Streamaming Ticket Assignment in SerorViove



User Stories – Streamlining Ticket Assignment (ServiceNow)

Persona: Support Agent (Efficiency & Accuracy Focus)

ID	User Story	Acceptance Criteria (Definition of Done)	Priority
AS-1	As a Support Agent, I want the system to automatically assign new tickets to the correct specialized group based on category and keywords, so that I don't waste time triaging misrouted tickets.	• Automated assignment accuracy ≥ 95%. • Assignment completes within 15 seconds after submission. • Logic uses category + keyword mapping (e.g., "Certificate", "VPN", "Login").	High
AS-2	As a Support Agent, I want the system to auto-enrich each ticket with the affected Configuration Item (CI) and requester's department, so that I can start work immediately without manual lookups.	• CI and Department fields are auto-filled from CMDB/User records. • No manual search required for these attributes. • Populated values appear correctly in the incident form.	High
AS-3	As a Support Manager, I want an audit log of the rule that triggered the assignment, so that I can review and refine the assignment logic.	• Activity Stream lists the Flow Designer rule or business rule name used. • Log entries display timestamp, assigned group, and triggering condition.	Medium

Persona: Customer (Experience & Speed Focus)

ID	User Story	Acceptance Criteria (Definition of Done)	Priority
CS-1	As a Customer, I want an immediate email confirmation showing the assigned support group name, so I know my issue is correctly routed.	• Email notification sent within 1 minute of ticket creation. • Email clearly shows the assigned group name (e.g., "Network Operations").	High
CS-2	As a Customer, I want tickets to remain with the initially assigned group unless manually changed by an agent, so that I don't have to repeat my issue.	• Automated reassignment disabled after initial routing. • Only manual user updates allowed for group reassignment. • No system-driven reassignments recorded in logs.	Medium
CS-3	As a Customer, I want fast ticket routing so I receive a response from an agent within SLA limits, minimizing wait time.	• Assignment time < 5 minutes on average. • SLA response adherence ≥ 95%. • At least 15% reduction in resolution time after automation rollout.	High