

# **Solution Requirements**

## **ID    Functional Requirement**

- FR-01 The system shall automatically classify incoming tickets based on priority, category, and keywords.
- FR-02 The system shall automatically assign tickets to the appropriate support agent or team based on skills, workload, and availability.
- FR-03 The system shall allow agents to manually reassign tickets when needed.
- FR-04 The system shall enable supervisors to override automated assignments.
- FR-05 The system shall provide real-time notifications to assigned agents.
- FR-06 The system shall track assignment time and ticket status.
- FR-07 The system shall maintain a history log of ticket assignment changes.
- FR-08 The system shall allow users to view assigned agent details.
- FR-09 The system shall support integration with email, chat, and web forms for ticket creation.
- FR-10 The system shall route escalated tickets to a higher-level support group automatically.
- FR-11 The system shall provide suggestions for assignment based on historical resolution data.
- FR-12 The system shall allow agents to update skills and availability status.

Non-functional requirements:

<b>ID</b>	<b>Requirement</b>
NFR-P01	The system shall assign tickets within 2 seconds of creation.
NFR-P02	The system shall support at least 10,000 ticket transactions per day.

Reliability:

<b>ID</b>	<b>Requirement</b>
NFR-R01	The system shall have 99.5% uptime.
NFR-R02	The system shall ensure no ticket is left unassigned beyond a defined SLA threshold.

Security:

<b>ID</b>	<b>Requirement</b>
NFR-S01	Only authorized personnel shall modify assignment rules.
NFR-S02	Ticket data shall be encrypted during transmission and storage.

Usability:

<b>ID</b>	<b>Requirement</b>
NFR-U01	The system UI shall allow supervisors to easily view ticket assignment status summaries.
NFR-U02	Agents should be able to update their availability within 3 clicks.

Maintainability:

**ID            Requirement**

NFR-M01 Assignment rules shall be editable without major code changes.

Interface Requirements:

**ID            Requirement**

IR-01 The system shall integrate with CRM/Support tools (e.g., Zendesk, Freshdesk, ServiceNow) through API.

IR-02 The system shall provide REST APIs for third-party integration.

IR-03 The system shall display agent availability and workload dashboards.

IR-04 The system shall provide email, SMS, or in-app notification interfaces.

Data Requirements:

**ID            Requirement**

DR-01 The system shall store ticket metadata (priority, category, timestamps, status).

DR-02 The system shall store agent skill profiles and workload metrics.

DR-03 The system shall store historical ticket assignment records.

DR-04 The system shall retain ticket assignment logs for audits for at least 2 years.

Business requirements:

**ID            Requirement**

BR-01 Reduce ticket resolution time by ensuring optimal agent assignment.

BR-02 Increase customer satisfaction through faster response and routing.

## **ID      Requirement**

BR-03 Reduce workload imbalance among support agents.

BR-04 Improve visibility into ticket handling and agent performance.

Solution constraints:

## **ID      Constraint**

SC-01 Must comply with data privacy and regulatory requirements.

SC-02 Must integrate with existing help desk platform.