

## Requirement Analysis: Access Control Optimization Project

### I. Functional Requirements (FR)

These define the specific functions the ServiceNow solution **must** perform to meet the project's goal of automation and optimization.

ID	Requirement Category	Description	Source (User Story)
FR-1.0	Role Management	The system <b>must</b> allow an <b>Admin</b> to define, edit, and deactivate custom <b>Roles</b> for different user groups.	USN-01
FR-2.0	User Provisioning	The system <b>must</b> automatically <b>assign default roles</b> and permissions to new users upon group assignment.	USN-02
FR-3.0	Group Management	The system <b>must</b> allow an <b>Admin</b> to add or remove users from <b>Groups</b> and automatically map group membership to a set of permissions.	USN-02
FR-4.0	Workflow & Approval	The system <b>must</b> support the creation of custom, workflow-driven approval processes for role and group assignments.	USN-03
FR-5.0	Access Control (RBAC)	The system <b>must</b> enforce <b>Role-Based Access Control (RBAC)</b> , ensuring users can only access resources explicitly granted by their assigned roles and groups.	Architectural Detail
FR-6.0	Auditing & Logging	The system <b>must</b> log all key access changes, including role assignment, group modification, and approval actions, for compliance.	Architectural Detail
FR-7.0	Testing	The system <b>must</b> allow a <b>Tester</b> to validate approval logic and access restrictions before deployment.	USN-04

---

### II. Non-Functional Requirements (NFR)

These define criteria that judge the operation of the system, not its specific functions.

ID	Requirement Type	Description
NFR-1.0	Performance	The <b>role and group assignment</b> process, including all automated workflows, <b>must complete</b> within <b>5 seconds</b> of a request submission.
NFR-2.0	Security	All access assignment requests <b>must</b> be channeled through an <b>approval workflow</b> before becoming effective, enforcing a principle of least privilege.
NFR-3.0	Usability	The interface for <b>Admins</b> to manage roles, groups, and workflows <b>must be intuitive and easily navigable</b> within the ServiceNow platform.
NFR-4.0	Reliability	The core access control features (RBAC) <b>must maintain 99.9% uptime</b> to prevent service disruptions from access failures.
NFR-5.0	Compliance	The system <b>must</b> provide features for <b>audit compliance</b> , specifically retaining access logs for a minimum of 90 days.

### III. Stakeholder Needs Addressed

This analysis directly addresses the core **Problem-Solution Fit**:

- **Security Vulnerabilities:** Addressed by **FR-5.0 (RBAC)** and **NFR-2.0 (Approval Workflow)**.
- **Time-Consuming Manual Process:** Addressed by **FR-2.0 (Automated Provisioning)** and **FR-4.0 (Workflow Automation)**.
- **Centralization/Error-Prone:** Addressed by using a single platform (**ServiceNow**) and implementing **FR-3.0 (Group Management)**.