Engineer Data

Wrote 1,000 RBAC rules to secure Linux servers

Enhanced data security by implementing 1,000 RBAC rules for developers, application instances, PostgreSQL, MS SQL, and other Linux servers, preventing unauthorized access; documented with Ansible automation.

2022 – 2024

1,000

access rules written to close a security gap

Situation. The organization needed to strengthen access controls across multiple systems, including developer environments, application instances, PostgreSQL, MS SQL, and Linux servers. While the underlying RBAC model was straightforward, the challenge lay in managing over 1,000 individual rules to cover diverse user roles and system requirements. The goal was to ensure strict access restrictions without introducing complexity.

Task. Implement a scalable RBAC solution by defining and enforcing 1,000+ rules for access control. This involved mapping permissions to specific roles (e.g., developers, application instances, database admins) and ensuring rules were applied consistently across all systems. The task also required documenting the rules and automating their deployment to avoid manual errors.

Action. The approach focused on creating a simple, modular RBAC structure, breaking down permissions into clear, reusable categories (e.g., “read-only access to production databases”). Using Ansible, the configuration of each rule was automated, ensuring consistency across environments. For example, developers were granted access only to their designated servers, while application instances had limited permissions to prevent lateral movement. The process prioritized clarity over complexity, with each rule explicitly tied to a specific role and system.

Result. The recorded work covers 1,000 access rules across developer environments, application instances and database and Linux servers, with documented Ansible configuration. The delivered result is a role-based rule set and a repeatable way to apply and review it. The record does not quantify security-risk reduction or deployment-time savings.

Bring this experience to your project

Use “Wrote 1,000 RBAC rules to secure Linux servers” as a starting point for a similar challenge in your organisation. The services behind this work are available for your project. Somebody responsible for the thing the whole company rests on: it is up, it is backed up, and it is not quietly rotting.

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Look behind the result

Read the situation, decisions and result in this example. We can discuss which parts transfer to your constraints and which need another approach. Wrote 1,000 RBAC rules to secure Linux servers — 1,000 access rules written to close a security gap

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Need tighter access control across your systems?

Talk through your project with the engineer responsible for delivery. We agree the scope, price basis and handover in writing before work begins.

Role context: Database Engineer. It draws on Databases, DevOps, Infrastructure, Automation & CI/CD, Linux & Servers, Security, System Administration and Documentation. And while you are here, we are rather good at Database Administration (DBA), Infrastructure as Code, System Administration, Security & Access Management and AI Agent Security.

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One piece of **a longer record** — and it is all on this site.

Every entry is written the same way: the situation, the task, what we did and what changed.

See the whole record

Define the improvement you need

Bring a representative dataset, the questions it must answer and the current bottleneck. We can agree how to measure quality, throughput and recovery.

See what it costs Get in touch →

Need tighter access control across your systems?

Ask about the decisions behind “Wrote 1,000 RBAC rules to secure Linux servers”. You will speak with the people who can explain the work and assess your own project.

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