

IAM Permissions Explorer: Product Strategy & Roadmap

1. Proposed Features

To solve the "Production Paradox" (the fear of breaking things while securing them), I propose three core features:

- Impact Simulator (The "Dry Run"):** Before revoking a permission, the system enters a "Shadow Mode" for 48-72 hours. It monitors real-time traffic to see if any service attempts to use the targeted permission. If a call is detected, the simulation fails, preventing a production outage².
- Auto-Right Size Engine:** Using ML to analyse the last 90 days of logs, the system generates a "Least Privilege" policy side-by-side with the current bloated one. It highlights exactly which lines of JSON code can be safely removed³.
- One-Click "Request Justification":** Instead of manual Slack messages, Kunal can trigger an automated workflow. The resource owner receives a notification to justify the permission. If they don't respond within a set period, the permission is auto-flagged for the next "Simulated Revocation" cycle.

2. Prioritization (RICE Framework)

I have prioritized these features using the RICE score to maximize security impact with minimal engineering risk.

Feature	Reach	Impact	Confidence	Effort	RICE Score
Impact Simulator	10/10	High (3)	90%	High (4)	6.75
Auto-Right Size Engine	10/10	Med (2)	80%	Med (3)	5.33
Justification Workflow	5/10	Low (1)	90%	Low (1)	4.5

Rationale: The **Impact Simulator** is the P0 (highest priority) because it directly solves the "Fear of Breaking" pain point, which is the biggest barrier to adopting IAM security tools⁵.

3. Success Metrics (KPIs)

To measure the effectiveness of the IAM Explorer, we will track:

- Permission Reduction Rate:** % decrease in "Admin" and "Write" permissions across the cloud estate over 3 months.
- False Positive Rate (Simulation):** % of simulated revocations that correctly identified a "rare but critical" permission before it was deleted.
- Mean Time to Remediate (MTTR):** The average time it takes from identifying a "Ghost Identity" to successfully revoking its access.

- **Zero-Outage Compliance:** A binary metric ensuring that 100% of permission removals performed through the "Impact Simulator" resulted in zero production downtime.