

Security Engineering

| Level/Skill | Impact | Security Knowledge | Communication/Writing | Mentorship | Threat Fluency | Scope |
|-------------|---|---|---|---|--|--|
| 1 | Creates a design document based on well-defined requirements and writes code to implement it with assistance from team. | <p>Proficient at self-study when encountering new topics. Knows when they don't know the answer and asks for help.</p> <p>Comfortable writing code in at least one programming language Teleport uses.</p> <p>Rapidly learns security best practices such as public key cryptography, certificates, authn/authz, RBAC, the principle of least privilege, and blameless post-mortem analysis.</p> <p>Learns team code review, on-call, incident response, and interviewing processes.</p> | <p>Actively solicits feedback from peers.</p> <p>Reports progress on a regular basis as required by the teams operational requirements.</p> | N/A | Learns from current and historical security incidents across the industry. Familiar with and able to execute the most common attacks such as the OWASP Top 10. | Works on one or two small projects at a time, mostly within their own team. |
| 2 | <p>Estimates implementation timelines and makes business appropriate tradeoffs to deliver high quality work on time.</p> <p>Participates in on-call rotations, security incident response, and interviewing with supervision.</p> | <p>Develops a primary security discipline. Builds deep familiarity within this discipline and an understanding of common best practices across disciplines.</p> <p>For example an application security engineer can securely implement CA-based architectures, while a cloud security engineer can properly secure IAM and network boundaries. Either can apply industry best practices such as setting up strong TLS or picking appropriate authentication and authorization mechanisms.</p> <p>Proficient in the tools and languages of the chosen discipline. For example, Go, gRPC, and Make for an application security engineer, or Terraform, AWS, and Kubernetes for a cloud security engineer.</p> <p>Customizes security recommendations to serve business needs.</p> | <p>Writes high quality documentation.</p> <p>Provides constructive review on immediate peers' code and design.</p> | Helps new team members during their first weeks or mentors interns. | Understands attack vectors for client/server architectures and network protocols. Applies lessons learned from Teleport's past security vulnerabilities. | Leads one or two medium or large projects at a time. Recognized for occasional participation in cross-team relationships and projects. |
| 3 | <p>Collaborates to scope requirements and triage priorities, based on Teleport's operating plan and team quarterly goals.</p> <p>Participates in on-call rotations, leads incident response, and interviews without dedicated backup/mentorship.</p> | <p>Demonstrates deep security domain knowledge within one field and broad familiarity across adjacent fields.</p> <p>Proficiently navigate Teleport policies, codebases, and tech stacks to find the right place at which to address security concerns.</p> <p>Familiar with security, privacy, and GRC standards such as SOC 2, ISO 27001, and GDPR. Incorporates these standards into design and review.</p> | <p>Improves company-wide security policies.</p> <p>Writes detailed, internal blameless post-mortems for security incidents.</p> | <p>Supports less experienced peers' technical skills, answering questions, and being a resource. Documents and improves team practices.</p> <p>Reviews RFDs from across the company for security concerns and effectively communicates security trade-offs to stakeholders.</p> | Able to chain attacks and apply Teleport-specific details to develop attacks. | <p>Leads cross-team projects and plays a significant role in major organizational initiatives.</p> <p>Relied upon to keep complex projects on-track and sustainably implemented.</p> |
| 4 | <p>Leads the implementation of isolated security projects that measurably and significantly impacts company security and business outcomes.</p> <p>Peers are not expected to find any notable security oversights in RFDs written or reviewed by Level 4+ Security Engineers.</p> | Serves as the expert resource to peers within one or more technical areas. | <p>Writes technical articles/blog posts and delivers tech and lightning talks representing the company's technical vision.</p> <p>Develops new company-wide security policies, educates peers, and monitors outcomes to ensure policy objectives are accomplished.</p> <p>Effectively communicates with customers and the public about Teleport's security incidents.</p> | | Maintains a deep, comprehensive and current understanding of attacks, as well as the best techniques to mitigate them. Develops novel proof-of-concept attacks against Teleport's infrastructure and threat model. | Independently identifies and mitigates large security risks within Teleport. |
| 5 | Leads timely implementation of critical security infrastructure and programs in collaboration with all other teams. | | Writes advanced technical articles/blog posts, gaining significant industry traction, or delivers technical talks at major conferences representing the company's vision. | | | |
| 6 | Designs novel solutions that solve contemporary industry-wide security issues and create notable competitive advantage for Teleport. | | Produces peer-reviewed research papers, patent applications, or books. | | | Independently identifies and mitigates large security risks across the industry. |