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.	Proficient at self-study when encountering new topics. Knows when they don't know the answer and asks for help. Comfortable writing code in at least one programming language Teleport uses. Rapidly learns security best practices such as public key cryptography, certificates, authn/authz, RBAC, the principle of least privilege, and blameless post-mortem analysis. Learns team code review, on-call, incident response, and interviewing processes.	Actively solicits feedback from peers. Reports progress on a regular basis as required by the team's operational requirements.	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	Estimates implementation timelines and makes business appropriate tradeoffs to deliver high quality work on time. Participates in on-call rotations, security incident response, and interviewing with supervision.	Develops a primary security discipline. Builds deep familiarity within this discipline and an understanding of common best practices across disciplines. 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. 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. Customizes security recommendations to serve business needs.	Writes high quality documentation. Provides constructive review on immediate peers' code and design.	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	Collaborates to scope requirements and triage priorities, based on Teleport's operating plan and team quarterly goals. Participates in on-call rotations, leads incident response, and interviews without dedicated backup/mentorship.	Demonstrates deep security domain knowledge within one field and broad familiarity across adjacent fields. Proficiently navigate Teleport policies, codebases, and tech stacks to find the right place at which to address security concerns. Familiar with security, privacy, and GRC standards such as SOC 2, ISO 27001, and GDPR. Incorporates these standards into design and review.	Improves company-wide security policies. Writes detailed, internal blameless post-mortems for security incidents.	Supports less experienced peers' technical skills, answering questions, and being a resource. Documents and improves team practices. Reviews RFDs from across the company for security concerns and effectively communicates security trade-offs to stakeholders.	Able to chain attacks and apply Teleport-specific details to develop attacks.	Leads cross-team projects and plays a significant role in major organizational initiatives. Routinely relied upon to keep complex projects on-track and sustainably implemented at current standards.
4	Leads the implementation of isolated security projects that measurably and significantly impacts company security and business outcomes. Peers are not expected to find any notable security oversights in RFDs written or reviewed by Level 4+ Security Engineers.	Serves as the expert resource to peers within one or more technical areas.	Writes technical articles/blog posts and delivers tech and lightning talks representing the company's technical vision. Develops new company-wide security policies, educates peers, and monitors outcomes to ensure policy objectives are accomplished. Effectively communicates with customers and the public about Teleport's security incidents.	A role model for other Teleporters. Regularly helps L2 and L3 peers with their growth and their own mentorship. For example: helping a L2 or L3 earn a promotion, learn a new specialty, or helping a first time mentor plan and lead a successful internship.	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. Proactively helps to refocus the team's efforts when projects are off-course and results aren't moving the needle.		Writes advanced technical articles/blog posts, gaining significant industry traction, or delivers technical talks at major conferences representing the company's vision.	Integral to talent development throughout Teleport's security efforts. Improves our hiring, on-boarding, and training programs. Helps entire teams with mentorship programs that scale super-linearly.		Independently executes the most challenging and critical projects to a high standard. E.g. against a tight deadline with significant consequences of failure, in the face of incredible ambiguity, or to a standard of quality well above the current state-of-the-art.
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 critical security risks across the industry.