ZERO TRUST: PAST, PRESENT, AND FUTURE

Zulfikar Ramzan, Ph.D
Chief Digital Officer | RSA
@zulfikar_ramzan
NEVER TRUST
ALWAYS VERIFY
TRUST
ZERBURST
VERIFY
VERIFY
ZERO TRUST

NOVEL NAME | ESTABLISHED CONCEPT

- Saltzer: Least Privilege (1976)
- Thompson: Reflections on Trusting Trust (1977)
- Jericho Forum: De-perimeterization (1994)
- RFC 1636: "Soft & Chewy Center" (1994)
- Early Crypto Papers
- Certificate Authorities
ALL RESOURCES ACCESSED IN SECURE MANNER REGARDLESS OF LOCATION

Strong Authentication, Risk Engine

ACCESS CONTROL IS ON A NEED TO KNOW BASIS AND IS STRICTLY ENFORCED

Least Privilege, Identity Governance & Lifecycle, VLANs, Software-defined infrastructure

INSPECT AND LOG ALL TRAFFIC

Monitoring Solutions (Network logs & packets, endpoint, cloud / SaaS / PaaS, IoT, etc.)
JOURNEY OR DESTINATION?

“Never Trust” seems impossible

“Always Verify” seems impossible

IS IT BETTER TO AIM FOR A MEANINGFUL REDUCTION IN THE “TRUST SURFACE”?
REReducing TruST SURFACE

WHAT SHOULD ONE DO IN PRACTICE?

understand business requirements

- Some steps maybe harmful to the business
- Example: Client-side TLS and the eCommerce Vendor

Take risk-oriented approach

- Focus on maximizing reduction in (overall) risk per dollar spent
- Example: eCommerce Vendor Browse versus Transact
KEY TAKEAWAYS

1. Zero Trust is a Mindset (not a product, framework, or strategy)

2. The Underlying Philosophy is Decades Old

3. Take Risk-Driven View to Reduce your Trust Surface leveraging a holistic portfolio of products and services