Title: DNS Ecosystem Security

Audience: Engineers, DNS administrators, Policy personnel with technical background

Duration (Remote Delivery): 2 hours

Prerequisite Courses: DNS 101

Description: This course will cover the best practices in securing the overall ecosystem of DNS, from the threats to mitigation perspective.

Expected Outcome
Participants should be able to understand the best practices in securing the DNS.

Course Outline

- Introduction: An Example Attack

- Refresher: Inter-domain Routing 101

- Refresher: DNS Resolution 101

- Common Attacks: Cache Poisoning, Fast Flux, Homographic Attacks, Emojis, IoT, etc.

- Mitigation with DNSSEC

- Mitigation with RPKI

- Mitigation with Request Data Encryption DNS (Stub-->Resolver)

- Mitigation with DMARC, SPF, or DKIM

- Credential Management

- Collaborating with ICANN