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Nota di contenuto	DNS Security Management; Contents; Preface; Acknowledgments; 1 Introduction; Why Attack DNS?; Network Disruption; DNS as a Backdoor; DNS Basic Operation; Basic DNS Data Sources and Flows; DNS Trust Model; DNS Administrator Scope; Security Context and Overview; Cybersecurity Framework Overview; Framework Implementation; Whats Next; 2 Introduction to the Domain Name System (DNS); DNS Overview -- Domains and Resolution; Domain Hierarchy; Name Resolution; Zones and Domains; Dissemination of Zone Information; Additional Zones; Resolver Configuration; Summary; 3 DNS Protocol and Messages DNS Message FormatEncoding of Domain Names; Name Compression; Internationalized Domain Names; DNS Message Format; DNS Update Messages; The DNS Resolution Process Revisited; DNS Resolution Privacy Extension; Summary; 4 DNS Vulnerabilities; Introduction; DNS Data Security; DNS Information Trust Model; DNS Information Sources; DNS Risks; DNS Infrastructure Risks and Attacks; DNS Service Availability; Hardware/OS Attacks; DNS Service Denial; Pseudorandom Subdomain Attacks; Cache Poisoning Style Attacks; Authoritative Poisoning; Resolver Redirection Attacks; Broader Attacks that Leverage DNS

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Sommario/riassunto

This work is an advanced Domain Name System (DNS) security resource that explores the operation of DNS, its vulnerabilities, basic security approaches, and mitigation strategies.
