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#### Introduction

Day 14 explored packet capture and traffic analysis as tools for both attackers and defenders. Understanding how data flows on a network enables detection of anomalies and vulnerabilities.

#### Key Concepts Discussed

We reviewed packet structure at a high level, the significance of headers and how encryption affects visibility. The trainer discussed what information in cleartext flows and how to spot suspicious patterns.

#### Lab Preparation in Theory

A conceptual capture plan was described: identify capture points, manage storage for large captures, and plan filters to reduce noise. Ethical constraints around capturing traffic that contains private data were reiterated.

#### Practical Understanding (Theory)

We covered how defenders build detection rules and what telemetry is most useful for identifying attacks. The session stressed baseline profiling and anomaly detection as valuable techniques.

#### Key Takeaways

Traffic analysis is a powerful diagnostic and detection tool; it must be used responsibly and with consent.

#### Conclusion

The next topic will be man-in-the-middle concepts and how TLS and certificate pinning can help mitigate those risks.