

# Network Traffic Security Analysis Report

## Executive Summary

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**1,000 instances** of TCP connect scans detected, all exhibiting SYN flags with window sizes > 1024.

Scans originated from **five distinct external IPs**, targeting internal host 192.168.100.99.

No malicious TCP/UDP/ICMP/ARP packets observed beyond reconnaissance activity.

Risk Assessment

**High Risk:** TCP connect scans indicate **active reconnaissance** by threat actors probing for vulnerabilities.

**Impact:** Potential precursor to exploitation (e.g., service enumeration, brute-force attacks).

**Severity:** Elevated due to volume (1,000 detections) and persistence across multiple sources.

**Moderate Risk:** Lack of port/destination details limits granular threat assessment.

Threat Observations

### Scanning Technique:

All scans used **TCP SYN packets with abnormally large window sizes (>1024)**, a tactic to bypass basic IDS/IPS rules.

Source IPs (63.2.154.223, 68.51.139.235, 136.237.33.61, 118.134.247.33, 190.98.141.113) are geographically diverse, suggesting **distributed scanning** or botnet involvement.

### Target:

Focused on internal IP 192.168.100.99—potentially a critical asset (e.g., server, database).

### Timing:

All scans occurred within **seconds** (09:07:47), indicating automated tools (e.g., Nmap, Masscan).

Recommendations

### Immediate Actions:

**Block source IPs** at the firewall/IDS level.

**Review logs** on 192.168.100.99 for follow-up exploitation attempts (e.g., failed logins, unusual service requests).

### Long-Term Mitigations:

**Deploy TCP anomaly detection** rules to flag SYN packets with window sizes >1024.

**Segment the network** to restrict external access to critical hosts like 192.168.100.99.

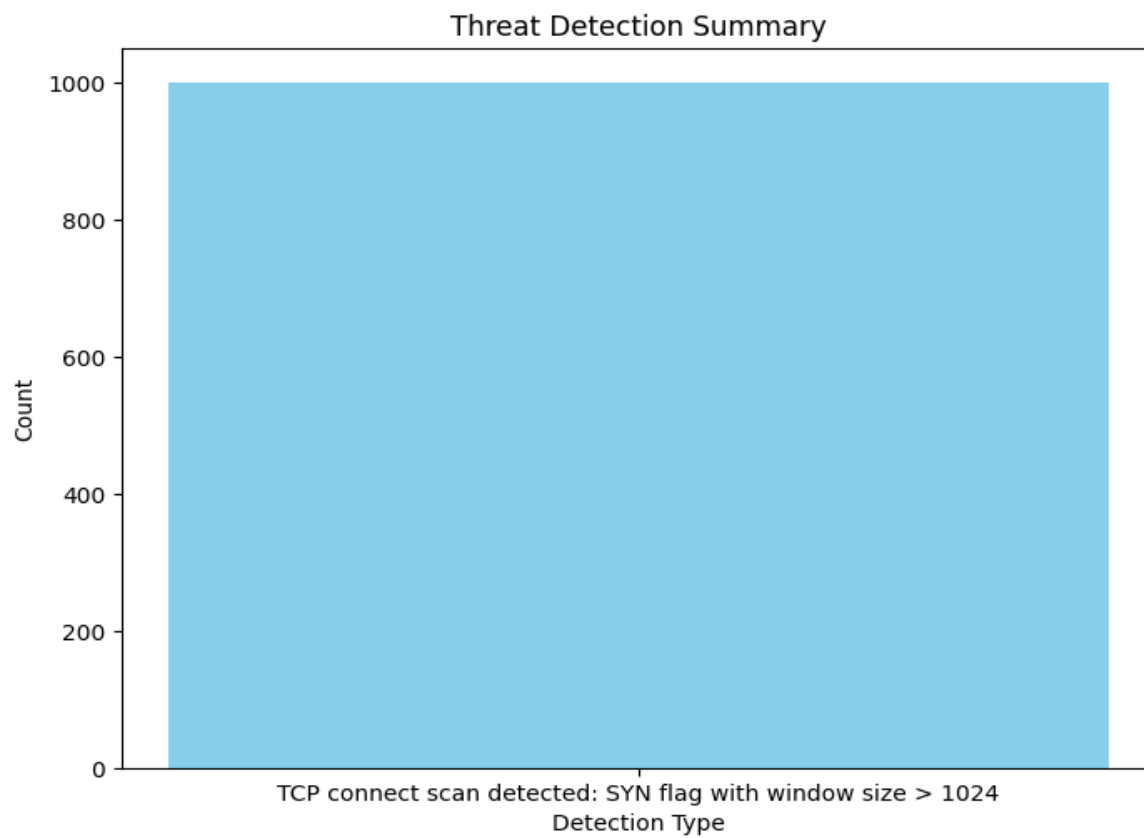
**Enable rate-limiting** for SYN packets to throttle scan attempts.

### Forensic Follow-Up:

**Correlate scans** with threat intelligence feeds to identify known malicious IPs.

**Conduct vulnerability assessment** on 192.168.100.99 to address potential exposure.

## Threat Detection Summary



Detection Type	Count
TCP connect scan detected: SYN flag with window size > 1024	1000