

# State Of Data Center Network Operations Report

## Most common issues plaguing customer fabrics

Statistics below show the top five categories of issues found in customer fabrics.



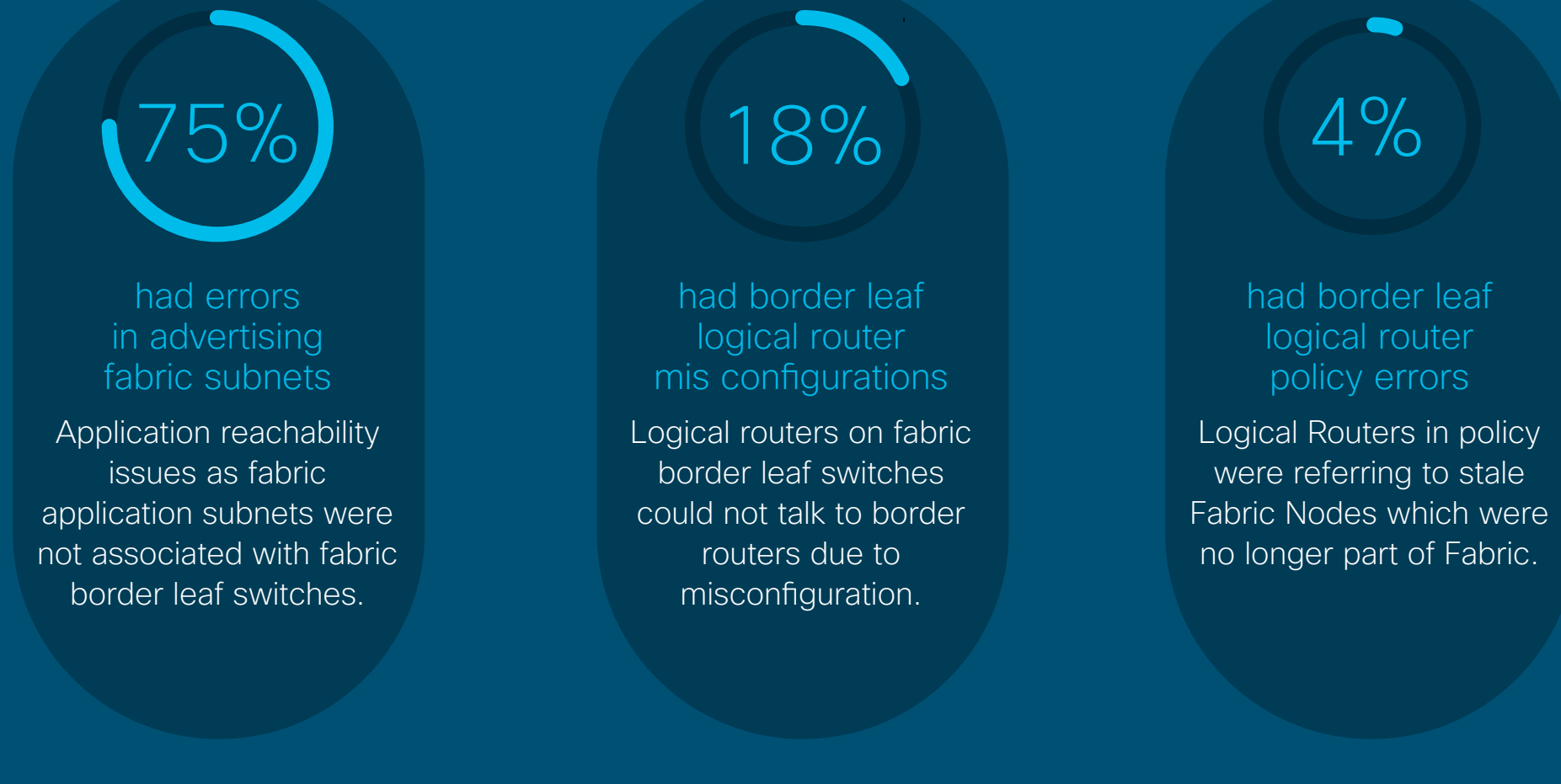
# of Customers (N)=28, Numbers represent % of customers who had these issues.

## Fabric external connectivity



The study found majority of customers struggle to correctly configure logical routers at the fabric boundary (L3Out in ACI parlance). The likely reason is non-uniform SDN experience across the networking team with all the necessary configurations required as per the controller's policy model.

### Top 3 issues found in customer fabrics



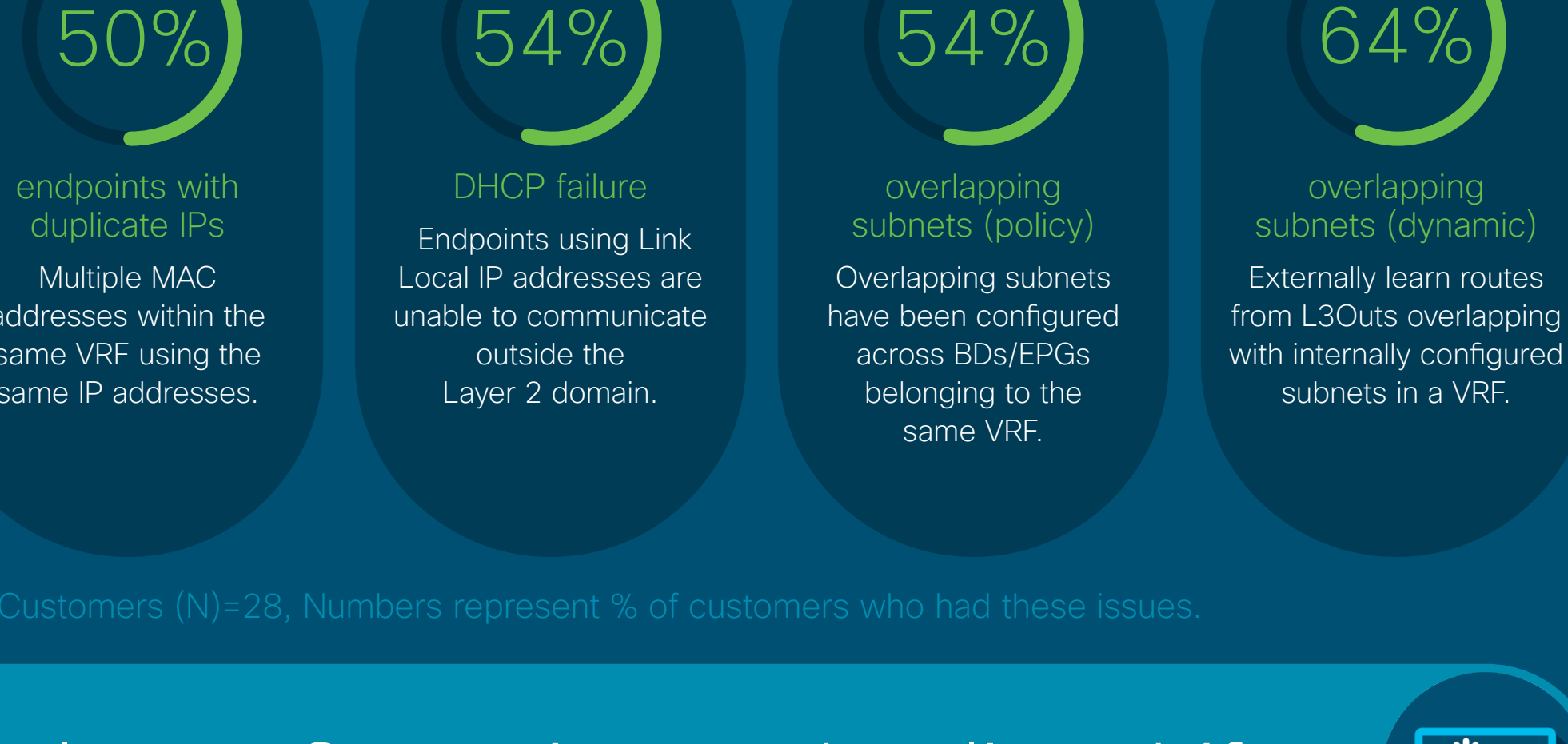
# of Customers (N)=28, Numbers represent % of customers who had these issues.

## IP and routing management issues



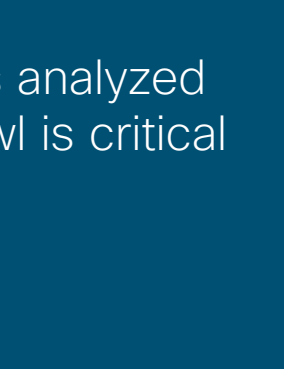
Customers vary in their sophistication using IP address and routing management solutions. A comprehensive and continuous verification across configuration dynamic state is critical to ensure consistency of IP address allocation across end-points and subnets.

### Top 4 issues found in customer fabrics



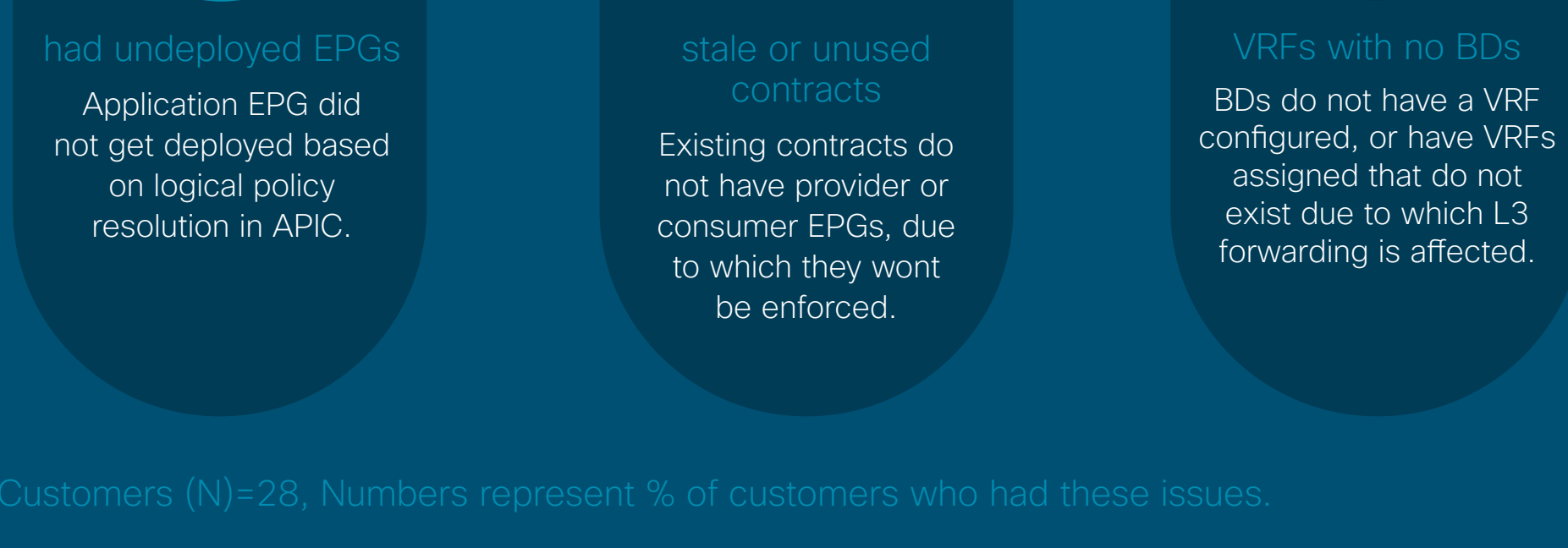
# of Customers (N)=28, Numbers represent % of customers who had these issues.

## Stale configuration and policy drift



Drift is a reality in every software platform and pervasive across all customer fabrics analyzed in this study. A proactive approach to minimizing configuration drift and policy sprawl is critical to managing risk in modern software driven networks.

### Top 3 issues found in customer fabrics



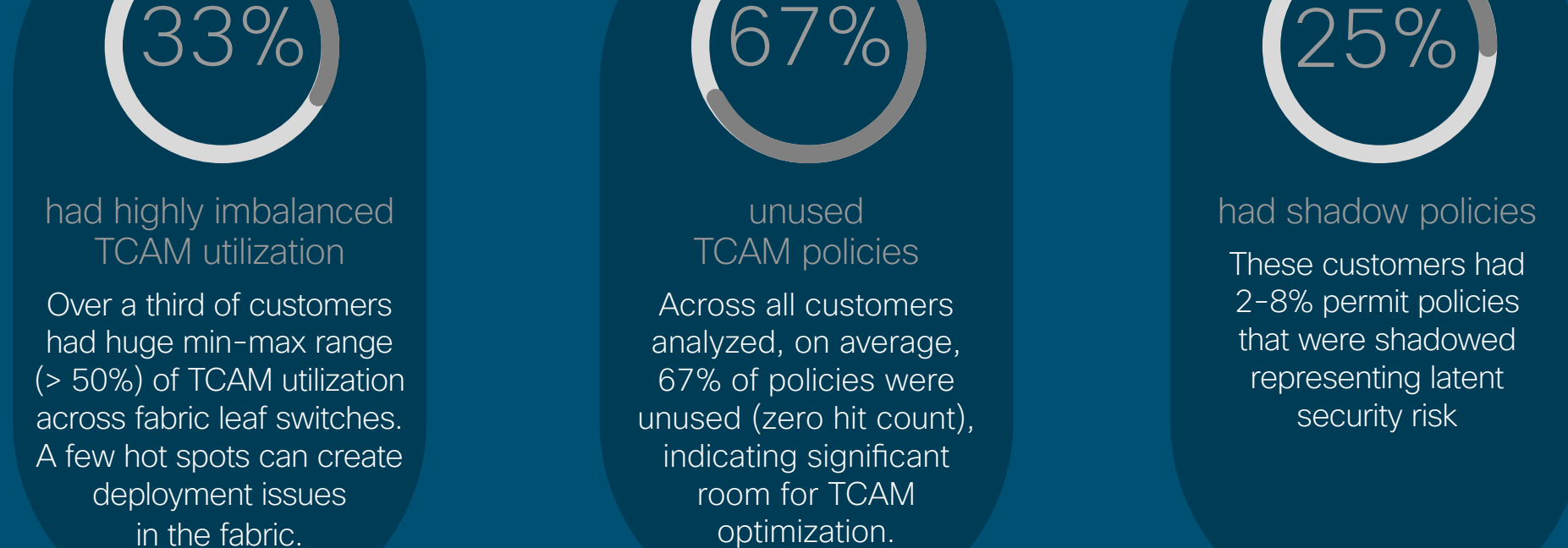
# of Customers (N)=28, Numbers represent % of customers who had these issues.

## TCAM resource constraints



Security policies keep growing, and customers typically have limited visibility or ability to understand how TCAM is being used, resulting in massive policy sprawl, increased security risk, and highly inefficient use of this expensive resource.

### Top 3 issues found in customer fabrics



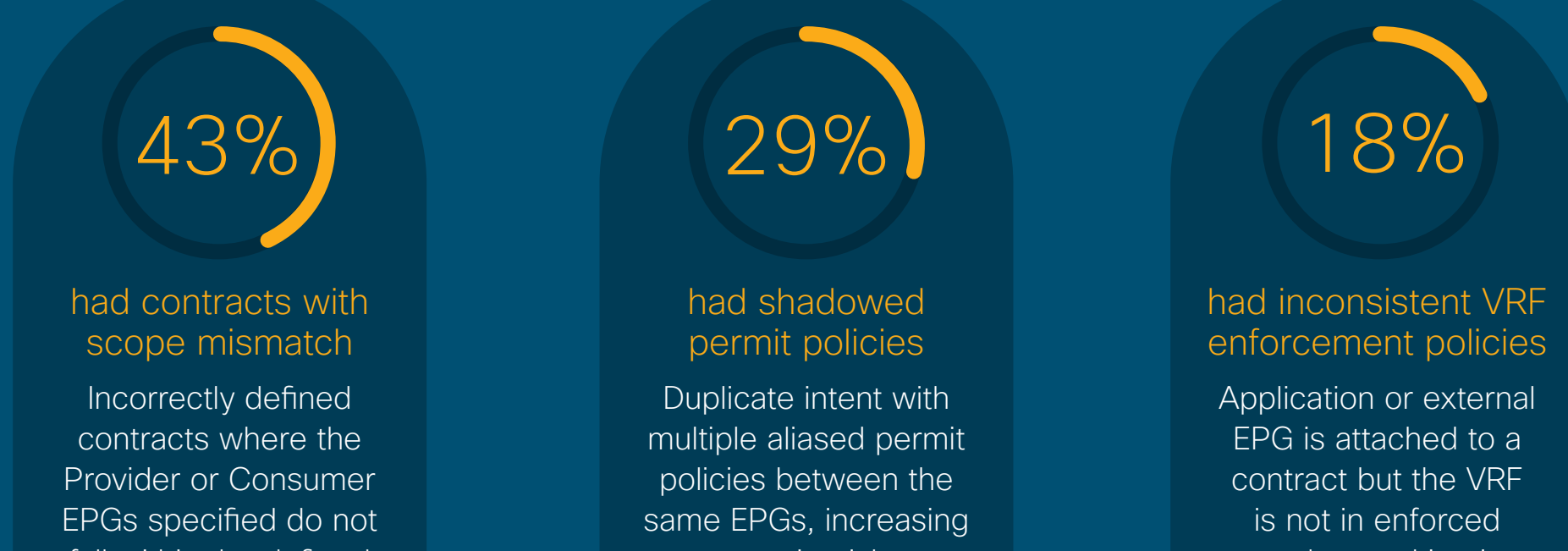
# of Customers (N)=12, % Numbers represent % of all policies analyzed

## Non-compliant network security policies



The study found almost 1 of 2 customers mis-specified security policies in the network. With multiple security policy configurations and a massive security policy set, security intent is often broken either denying expected application traffic or increasing the risk of a potential security breach.

### Top 3 issues found in customer fabrics



# of Customers (N)=28, Numbers represent % of customers who had these issues.

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