FORWARD NETWORKS

CASE STUDY: FORTUNE 500 FINANCIAL

Using Forward Enterprise: A Journey in 200 Tickets

Summary

Forward Enterprise can assist Network Operations and Engineering in problem resolution in four different ways:

1. INCIDENT DETECTION

When network changes occur, verifying that all applications function correctly has traditionally been a difficult task. Using Forward Networks NQE checks and Diff analysis, Operators can be sure of the reachability state of the network at all times.

2. INCIDENT MITIGATION

As new tickets are created, the first task is often to know exactly what can be done to define and limit the scope or impact of an outage. Using Forward Networks ACL/NAT prediction, Diff analysis, and API integrations, network operators can confidently know the exact scope of an incident.

3. INCIDENT PREVENTION

The best scenario is proactively identifying issues so that an incident can be prevented altogether. As many incidents are caused by insufficient testing and configuration drift, it can be quite difficult to maintain a healthy state of the network prior to incidents. Forward Networks predefined checks, diff functionality, and ACL/NAT productions can verify the end-to-end health of the network to as-designed specifications.

4. INCIDENT RESOLUTION

When incidents occur, seconds count and time to resolution is critical. Even experienced operators do not always know the intricacies of every CLI and every protocol along a path. Forward Networks search and network mapping functionality assists operators in providing a quick visual representation of every device along a path, along with hop-by-hop packet level details, to provide mathematical certainty if a particular path will succeed or fail, and why.

Analysis

Forward Networks analyzed a sample of 200 failed tickets/changes from a Fortune 100 customer firm in the Financial Services vertical prior to Forward implementation. Looking across all four dimensions above, the customer agreed Forward Networks would have assisted in many of the cases. A brief chart analysis is below:

Of the total of 200 tickets, 75% (146) would have been assisted by Forward Enterprise. Here we break the percentage of those 150 by use case:
Percentages add up > 100%, as many tickets can span multiple dimensions.

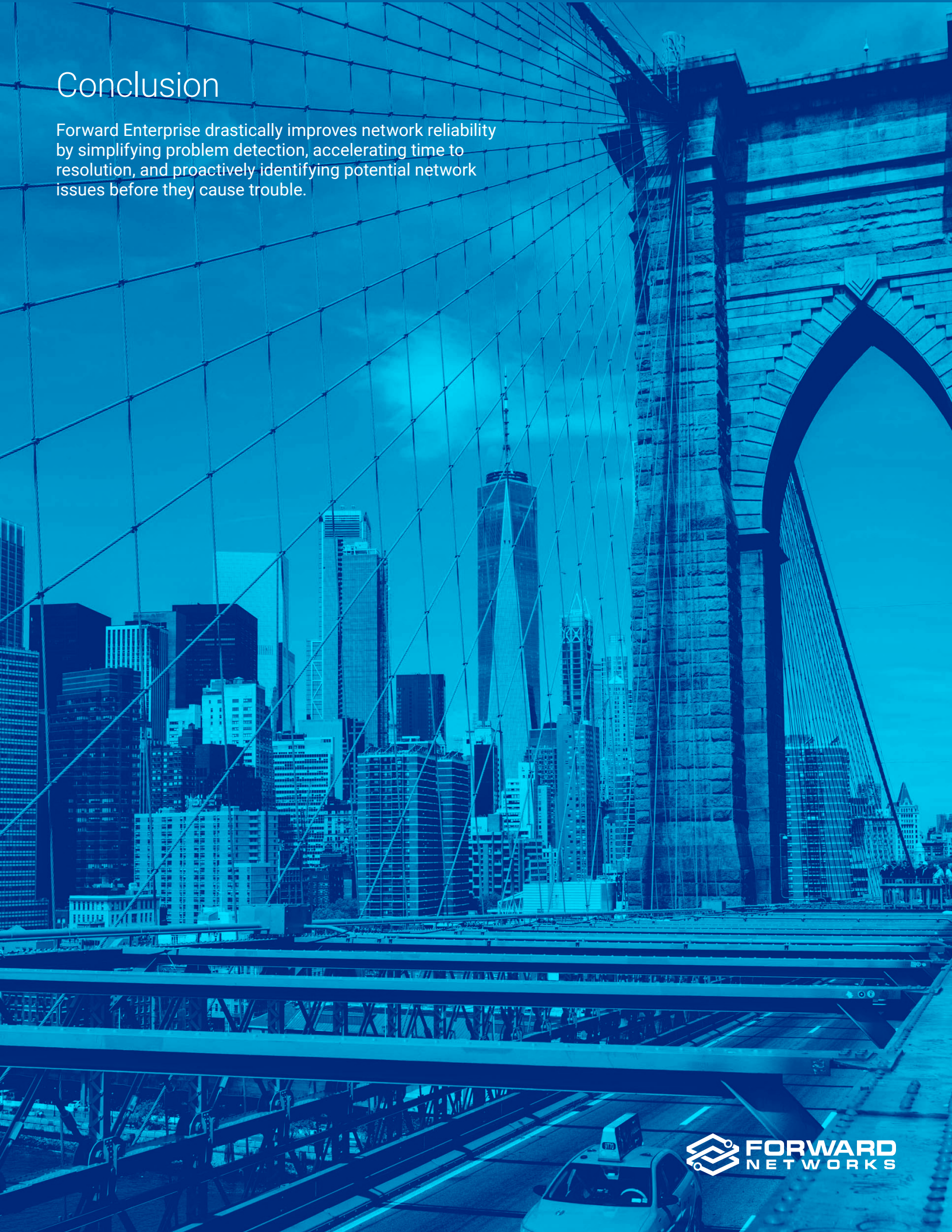
Detection Identifying that a problem exists in the network before users do	**Mitigation** Limiting the scope of impact of a ticket	**Resolution** Reducing the time a ticket impacts the business	**Prevention** Proactively identifying issues in a network before it is even a problem
61% (88 tickets)	65% (65 tickets)	89% (129 tickets)	68% (99 tickets)

On another axis, we identify which Forward Enterprise features would have been most useful:

Search Quickly mapping out the network to understand the scope	**Path Analysis** Identifying the exact path between two endpoints to aid in troubleshooting	**Intent Verification** Verifying path correctness	**NQE** Verifying network correctness proactively with custom checks	**Diff** Verifying configuration and state pre and post change	**ACL Predict** Predict the impact of ACL/ NAT changes in the network before the change
88% (129 tickets)	47% (68 tickets)	13% (18 tickets)	55% (79 tickets)	27% (39 tickets)	8% (12 tickets)

Conclusion

Forward Enterprise drastically improves network reliability by simplifying problem detection, accelerating time to resolution, and proactively identifying potential network issues before they cause trouble.



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