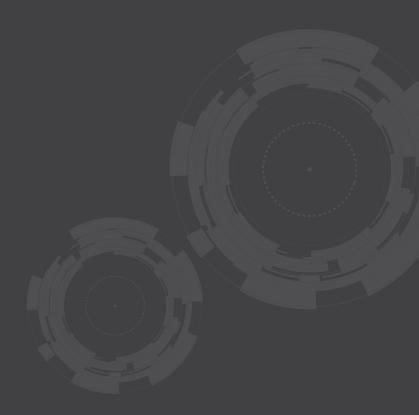


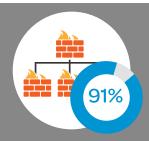
2016 State of the Firewall Report

FireMon is proud to present its 2nd Annual State of the Firewall Report based on a November 2015 survey of 600 IT security practitioners, representing a range of professional roles, organization sizes and industry verticals. Survey participants were asked 21 questions about their current firewall infrastructure and management challenges as well as questions about adoption and impact of emerging technologies such as NGFW, SDN and cloud.

When compared with results from the 2015 study, the responses revealed three trends that this report will explore further: 1) Firewalls remain an extremely valuable part of the network security infrastructure; 2) Next-generation firewalls continue to see broad adoption, adding complexity to security management; and 3) Awareness around SDN and its impact on network security has increased.

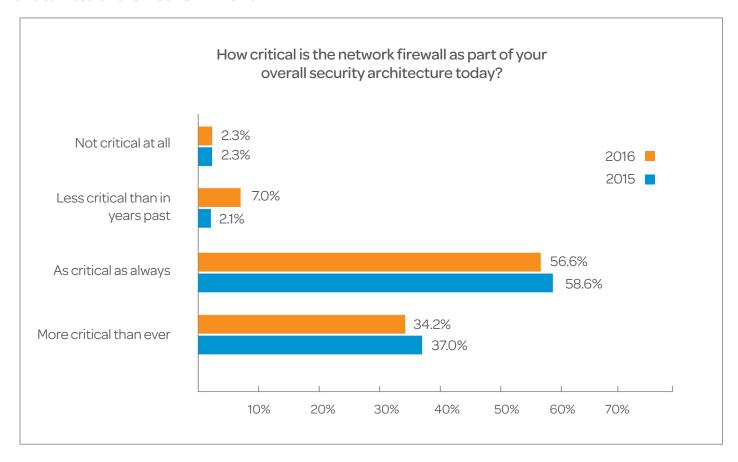


1. Firewalls remain an extremely valuable part of network security infrastructure.

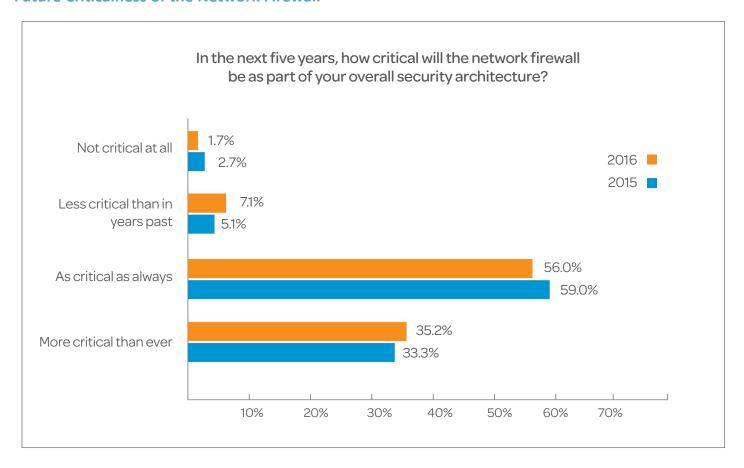


91% of respondents stated that firewalls are as critical as ever or more critical than ever to their security architecture. 91% believe that this will continue to be the case looking ahead to the next five years. Responses show a slight decrease in firewall criticalness since the 2015 survey potentially attributed to shifting infrastructure paradigms.

Criticalness of the Network Firewall



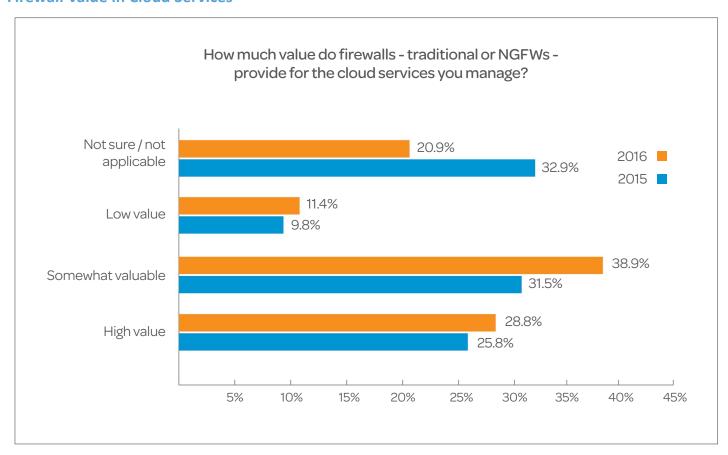
Future Criticalness of the Network Firewall





There is growing value in firewalls with new technology paradigms such as the cloud. **Two-thirds of respondents stated that firewalls are somewhat or highly valuable to the cloud services they manage**. This represents a 10% increase over 2015.

Firewall Value in Cloud Services

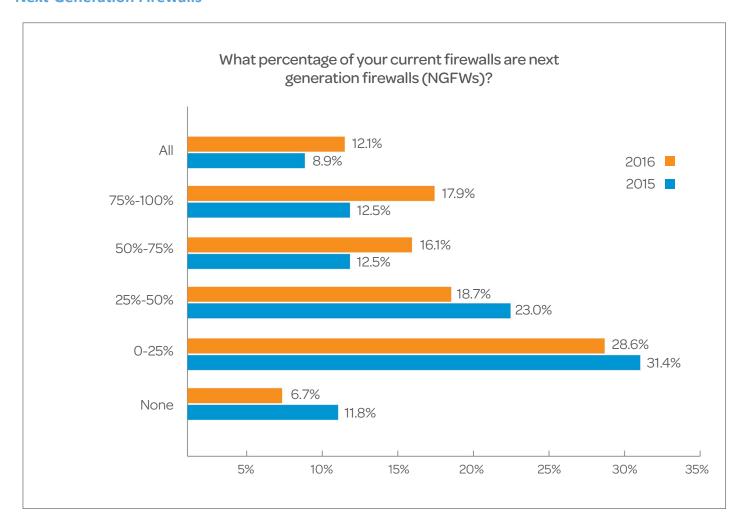


2. Next-generation firewalls continue to see broad adoption, which adds further complexity to security management.



NGFWs represent at least 50% of current firewall infrastructure in nearly half of the organizations surveyed compared to 34% last year. The percentage of organizations with no NGFWs in place decreased to just 6.7%.

Next-Generation Firewalls

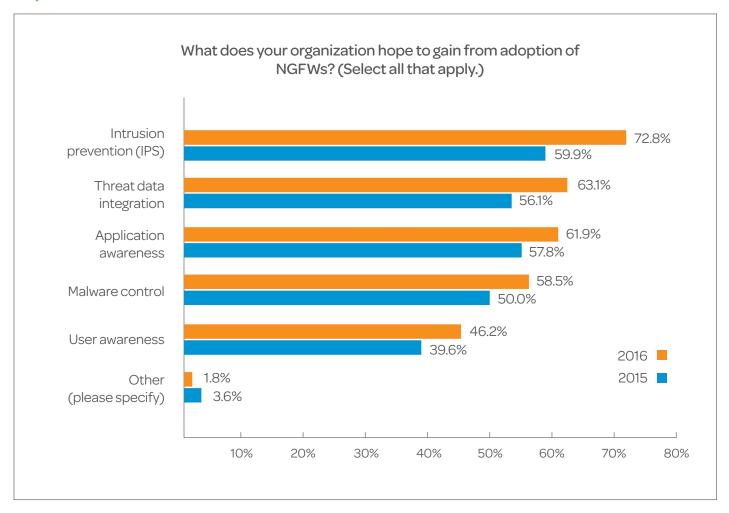




Survey results show increased adoption of advanced firewall features available with NGFWs, including intrusion prevention, threat data

integration and malware control. The distribution of responses signals that organizations are seeking more than the traditional capabilities associated with NGFWs such as application awareness and user awareness.

Adoption of NGFWs



Adoption of NGFWs has done nothing to quell firewall management and complexity challenges.



remains the number one issue security practitioners face.

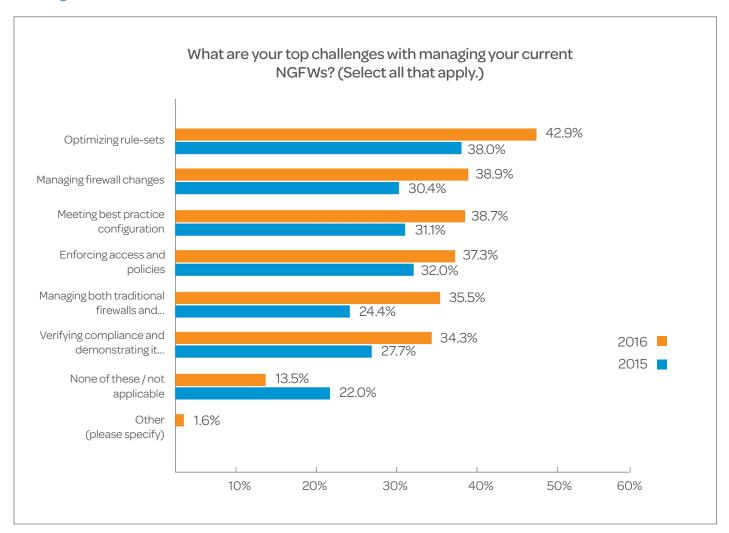


Managing
environments with
traditional and
next-gen firewalls
is a top concern
for those who have
both deployed.



Each NGFW
management challenge
saw an increase in
respondents in 2016,
suggesting more
widespread adoption
of the technology.

Challenges with NGFWs

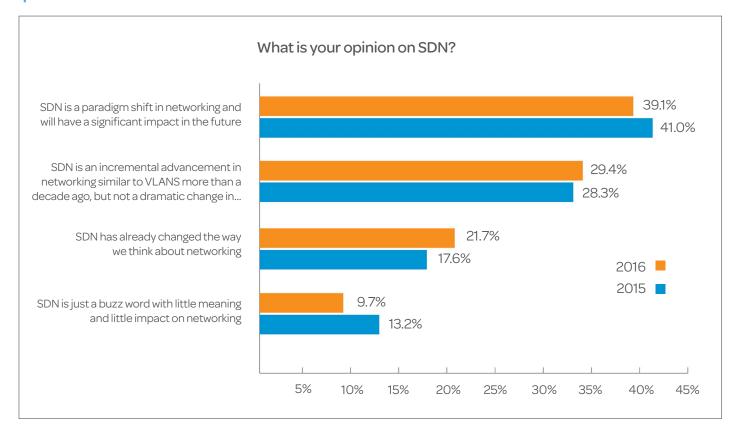


3. Awareness around SDN and its impact on network security has increased.



Most respondents (90%) recognize that **SDN has impacted or will impact networking to a certain degree**. The number who don't recognize the impact is trending downward with 13.2% in 2015 and only 9.7% in 2016. One-fifth stated that SDN has already changed the way we think about networking.

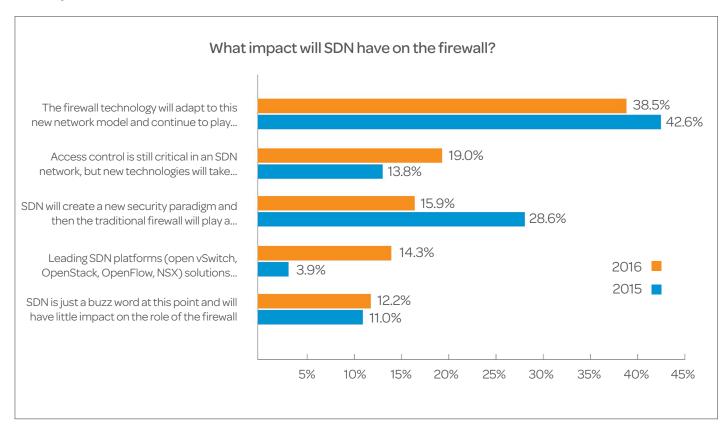
Opinion on SDN





There was a sharp increase in the number of respondents who believe the **native controls found in SDN solutions** (VMWare NSX, Amazon AWS) and new technologies will **pose a threat to existing firewall technologies**.

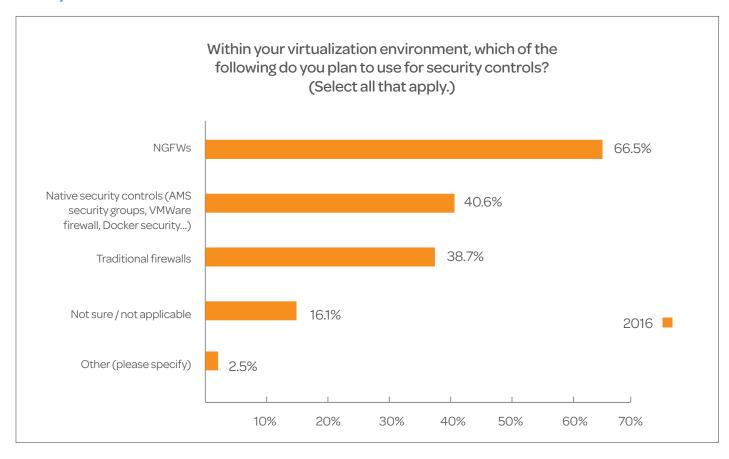
SDN Impact on the Firewall





However, in currently deployed SDN/virtualized environments, traditional and next-generation firewalls remain the clear favorite for security controls.

Security Controls in Virtualization Environment



Conclusion

The threat to the firewall as the center of the security infrastructure is not immediate. It continues to play a critical role in the majority of today's enterprises. However, the role of the firewall will have to evolve more as NGFWs become the norm and as emerging infrastructure paradigms such as SDN, cloud and micro-segmentation take hold.

Of course, none of this makes managing security infrastructure any less complex. We foresee continued investment in tools that simplify management of multi-vendor, multi-platform environments as well as those that simplify migration to next-generation, SDN and micro-segmented environments.

For more information, visit www.firemon.com.