

# 10 ways to securely optimize your network

Integrate WAN acceleration with next-gen firewalls to enhance performance, security and control



SONICWALL™

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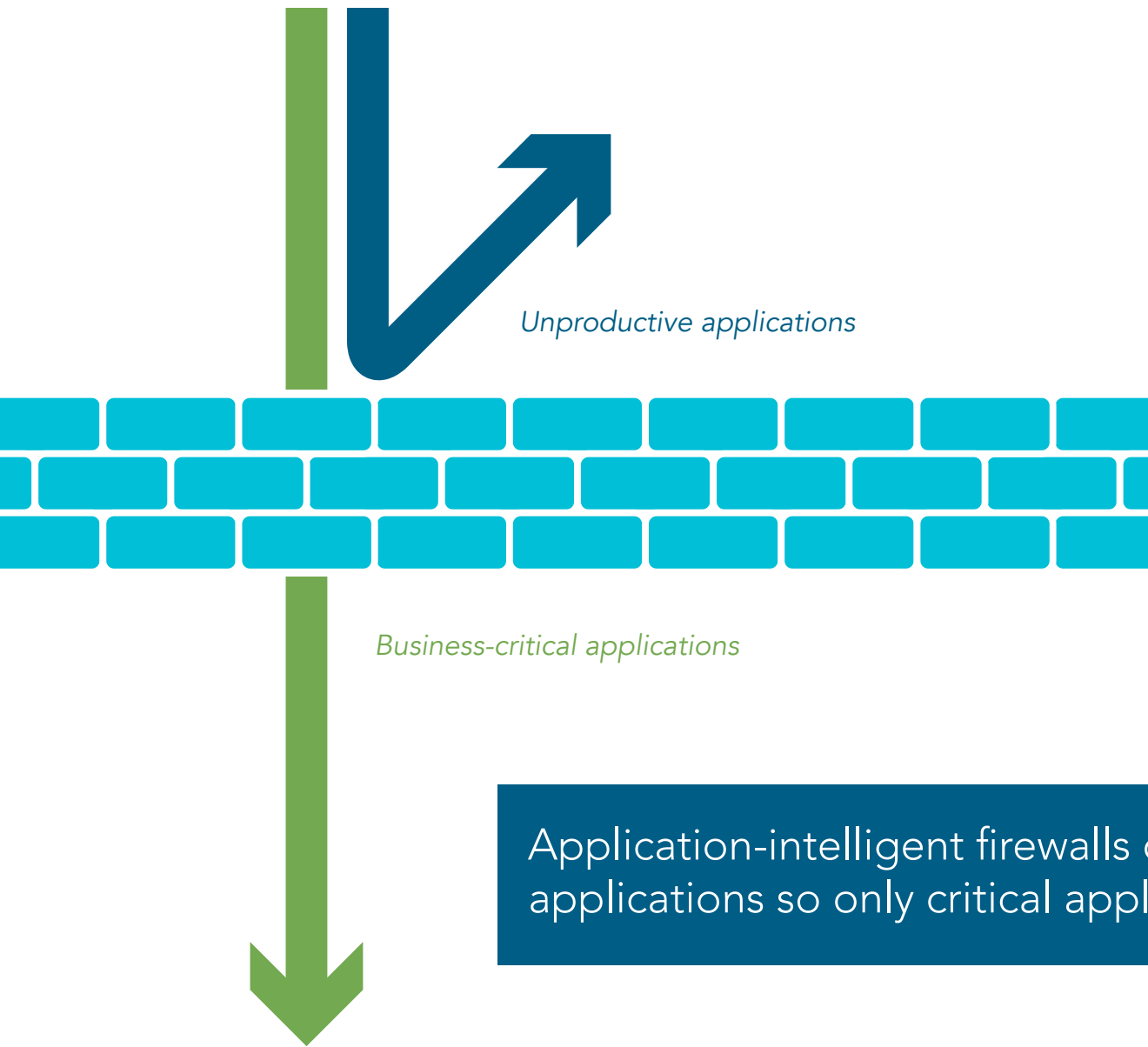
# Secure network optimization

The rapid evolution of the web has changed the office forever. Broad adoption of Web 2.0 and social networking applications has created an entirely new set of IT requirements for securing, controlling, and ensuring bandwidth in the new enterprise network.

The following e-book outlines 10 ways that integrating WAN acceleration with next-generation firewalls can help optimize performance, enhance security and increase employee productivity, without introducing latency.



Optimize performance, enhance security, increase productivity.



## #1 Application intelligence

There is a rapidly increasing, high volume of application traffic on today's networks that can overburden existing WAN solutions. Application-intelligent firewalls visualize and filter non-productive and dangerous applications while forwarding business-critical applications.

Application-intelligent firewalls can filter unproductive applications so only critical applications are prioritized.

#2

## Blocking undesirable applications

Employee use of time-wasting and dangerous applications poses additional challenges for IT.

Application intelligence and control can provide the tools for the administrator to identify and block potentially unproductive application traffic such as YouTube, BitTorrent and Facebook Candy Crush.

YOUTUBE  
BITTORRENT  
CANDY CRUSH

Application intelligence and control on a next-generation firewall can identify and block unproductive or dangerous applications before they enter your network.

CANDY ~~CRUSH~~



Application intelligence and control provides tools for administrators to sort the productive from the counter-productive.

### #3 Bandwidth- managing applications

Critical business applications need bandwidth prioritization, while social media and video streaming applications may need to be bandwidth-throttled or completely blocked.

Application intelligence and control can allow authorized use of applications (e.g., Facebook for marketing or YouTube for training), while blocking recreational use — even at the feature level (e.g., Candy Crush use on Facebook). It can also allow business-critical applications like Salesforce.com to be prioritized across the network.

#4

## Data de-duplication

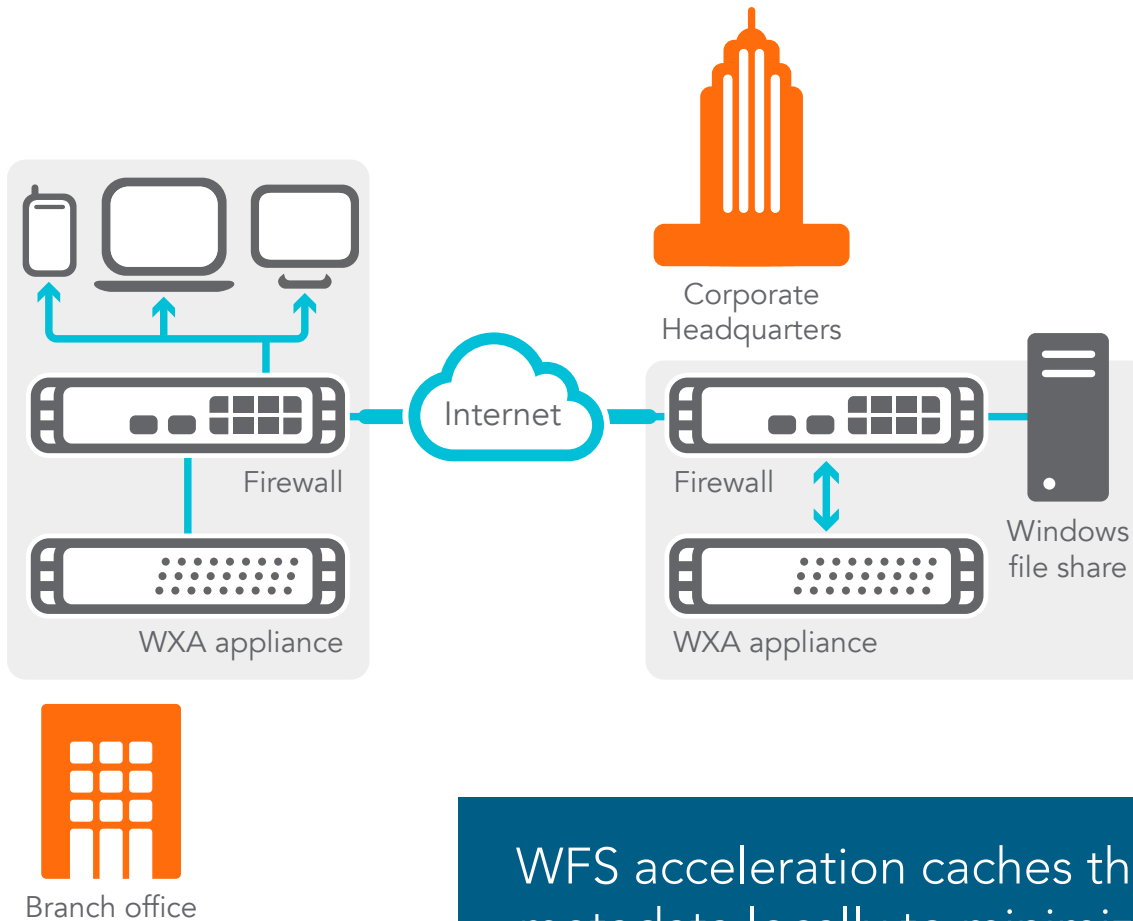
Distributed network application users collaborating with co-workers often retransmit entire files multiple times, unnecessarily

sending the same data over and over. Data de-duplication via byte and file caching reduces bandwidth consumption and

lowers latency by orders of magnitude, delivering faster response times and a better experience for all users.



Data de-duplication reduces traffic by transmitting only incremental changes.



## #5 Windows File Share acceleration

With Windows® File Sharing (WFS), multiple users accessing the same file across a WAN can increase the bandwidth required when accessing the same data. Transmitting only changed data instead of entire data structures significantly improves response times for users while reducing bandwidth consumption.

WFS acceleration caches the most-used files and metadata locally to minimize redundant data transfers.

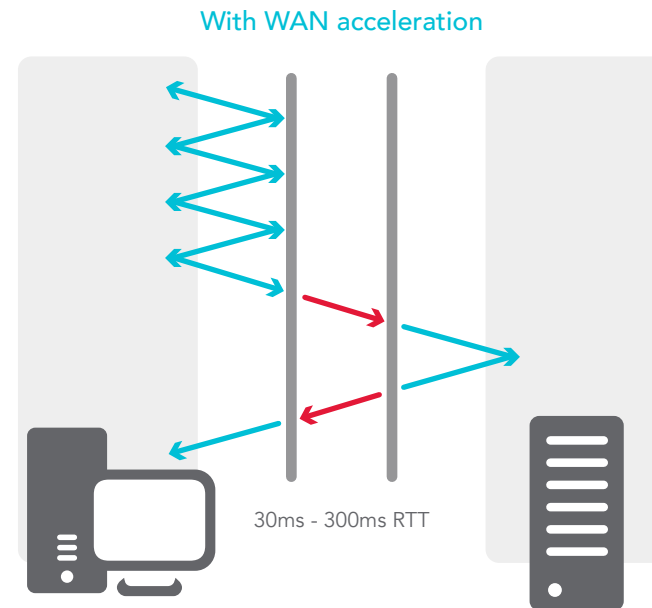
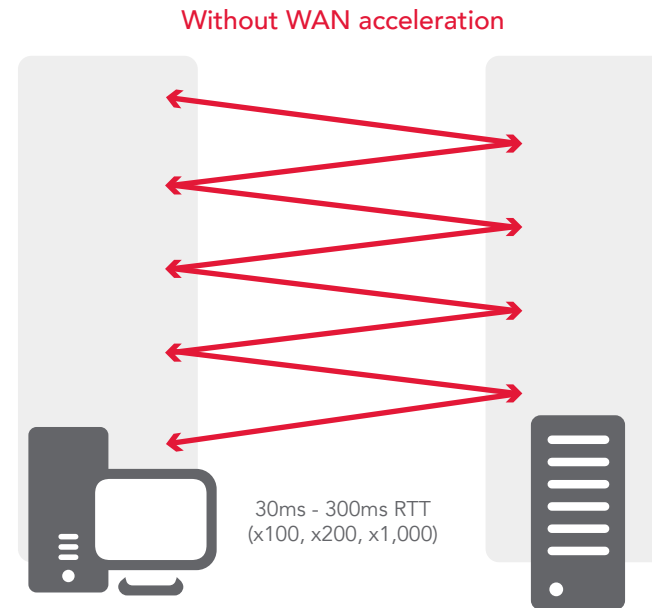


## #6 Protocol optimization

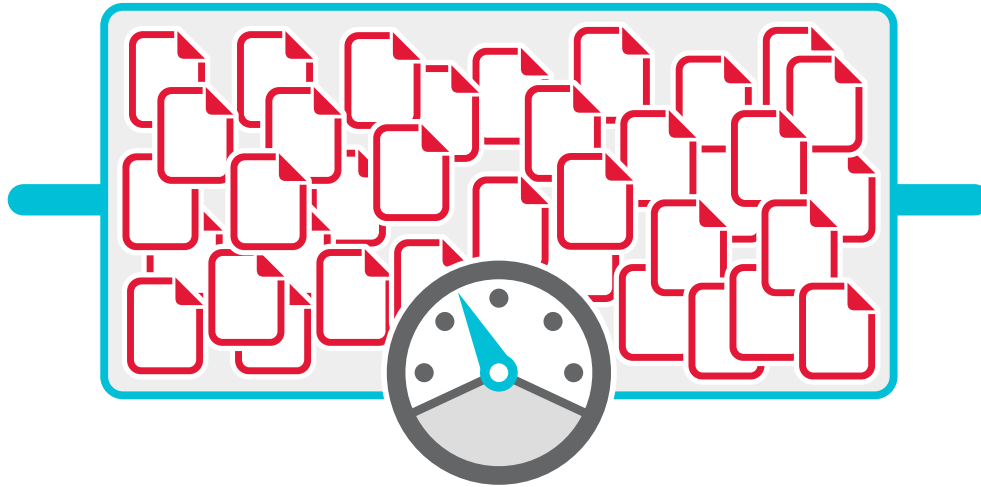
Applications designed to work in a local area network (LAN) environment may not work as well over a WAN connection because of chattiness or inefficiencies in how the application communicates.

Protocol optimization delivers snappy, LAN-like application performance for users accessing shared resources over the WAN.

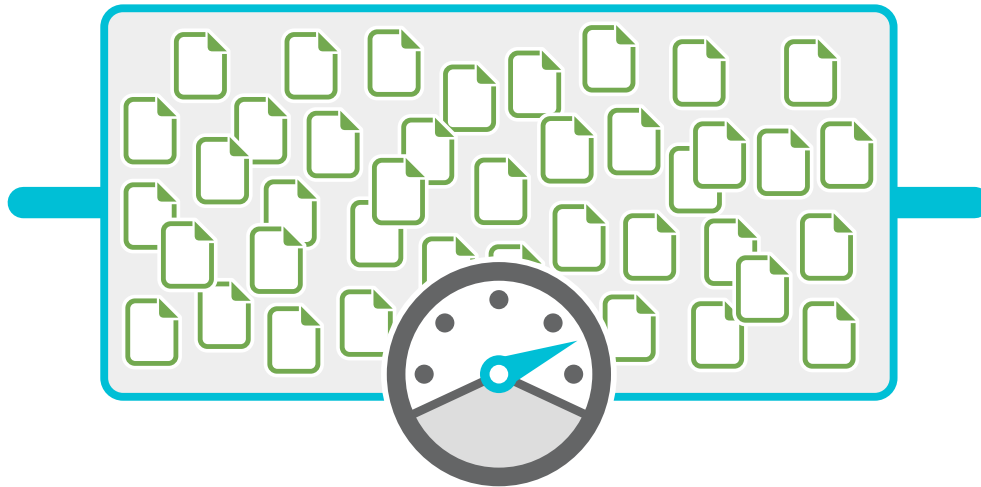
Protocol optimization makes applications more responsive when accessed over the WAN.



Without data compression



With data compression



## #7 Data compression

Today's sophisticated applications generate an ever-growing volume of network traffic.

Data compression across the WAN increases performance and reduces latency.

Data compression  
across the WAN  
increases performance  
and reduces latency.

#8

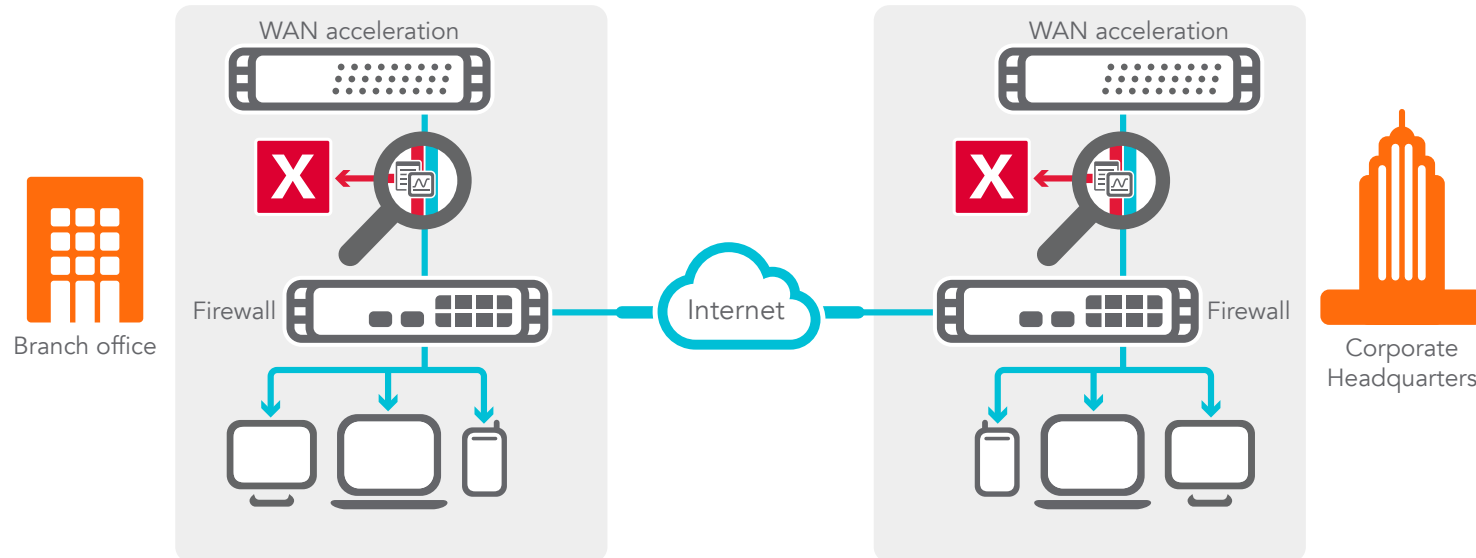
## Enhanced security

With other WAN optimization solutions, the administrator must choose to deploy the solution inside or outside the security boundary, often leaving the

network vulnerable. Worse, they can even accelerate threats across the network.

Integrating next-gen firewalls that are capable of examining every

packet of every protocol can enable you to eliminate malware and prevent intrusions before data is accelerated across the WAN.



You shouldn't have to sacrifice security for optimization.



## #9 Real-time visualization

Organizations need reporting and visualization tools to help them quickly identify network inefficiencies.

Real-time visualization delivers tools for administrators to gain strategic insight into the performance gains and see the cost savings obtained by WAN acceleration, while continuing to identify undesirable or unsafe application usage. This enables IT to effectively secure and control the network, and further minimize total cost of ownership (TCO).

Don't pull into the fast lane with your eyes closed.

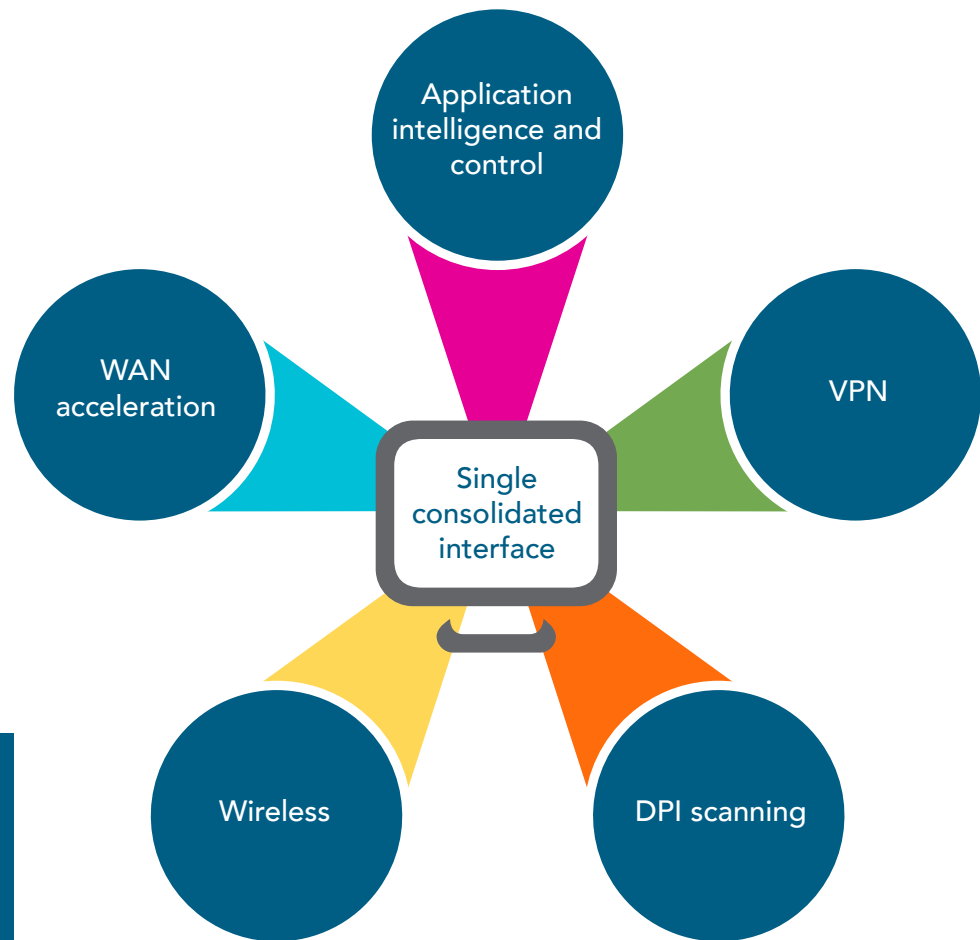
#10

## Effortless manageability

Consolidating management into a single interface helps ease the cost of deployment and lowers TCO by minimizing infrastructure, training and administrative overhead.

In addition, WAN acceleration solutions that automate provisioning and configuration management can greatly simplify deployment into distributed networks, as well as integration with other components (such as VPNs).

Managing an integrated platform is easier and more secure than piecing together multiple, hole-ridden solutions.



## Conclusion

By seamlessly and dynamically integrating WAN acceleration with next-gen firewall application intelligence, control and visualization, gateway protection, and inspection for SSL-encrypted sessions, you can maximize security and control with minimum network latency across your distributed enterprise. This allows IT to transition to an advanced security platform that can secure and control against today's constantly evolving threats, application-related challenges and bandwidth issues.

Visit the [SonicWall WAN Acceleration Appliance \(WXA\)](#) web page

## About Us

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