



International Distributor of leading edge IT solutions

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# ZYCKO Polska : Innowacyjne rozwiązania dla IT



Prepared by:

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Riverbed Certified Solutions Professional (RCSP)

# MODEL ROZWIĄZAŃ ZYCKO

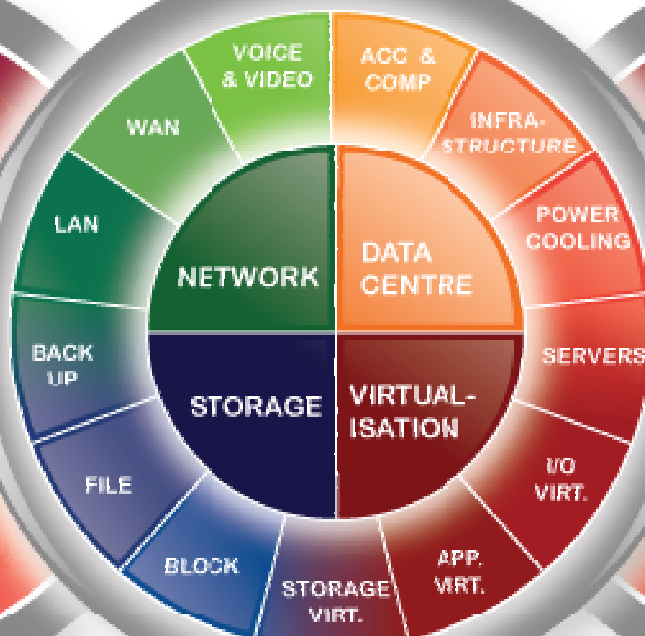
Zycko Globalnym dystrybutorem

**riverbed**<sup>®</sup>

WAN optimization • cloud storage delivery • cloud acceleration  
network performance management • application delivery

## USŁUGI PROFESJONALNE

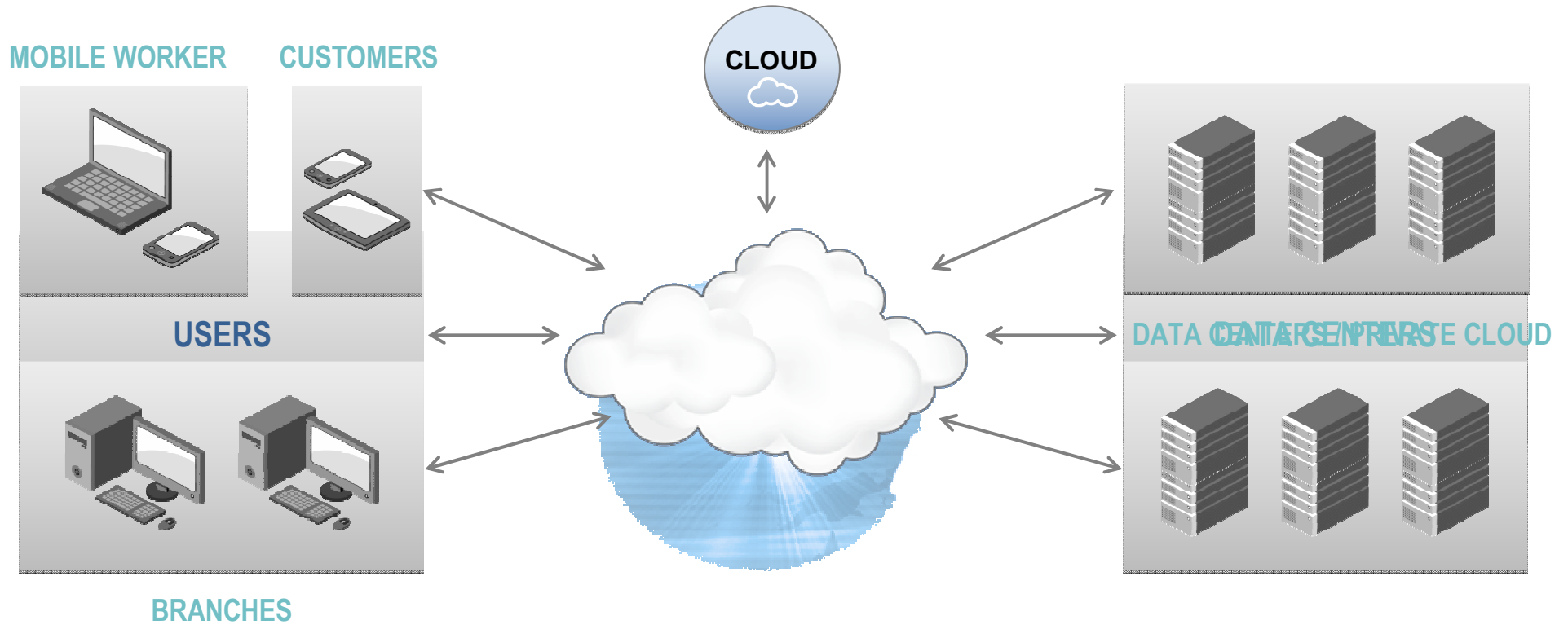
- > Szkolenia
- > Konsultacje
- > Analizy potrzeb
- > Konfiguracje
- > Instalacje
- > Laboratorium Demo



## USŁUGI BIZNESOWE

- Marketing <
- Finanse <
- Naprawa sprzętu <
- Odkup sprzętu <
- starszych generacji
- Magazynowanie <
- Logistyka <
- najwyższej klasy

# Wymagania i złożoność funkcjonowania środowisk IT



**USERS**

Speed

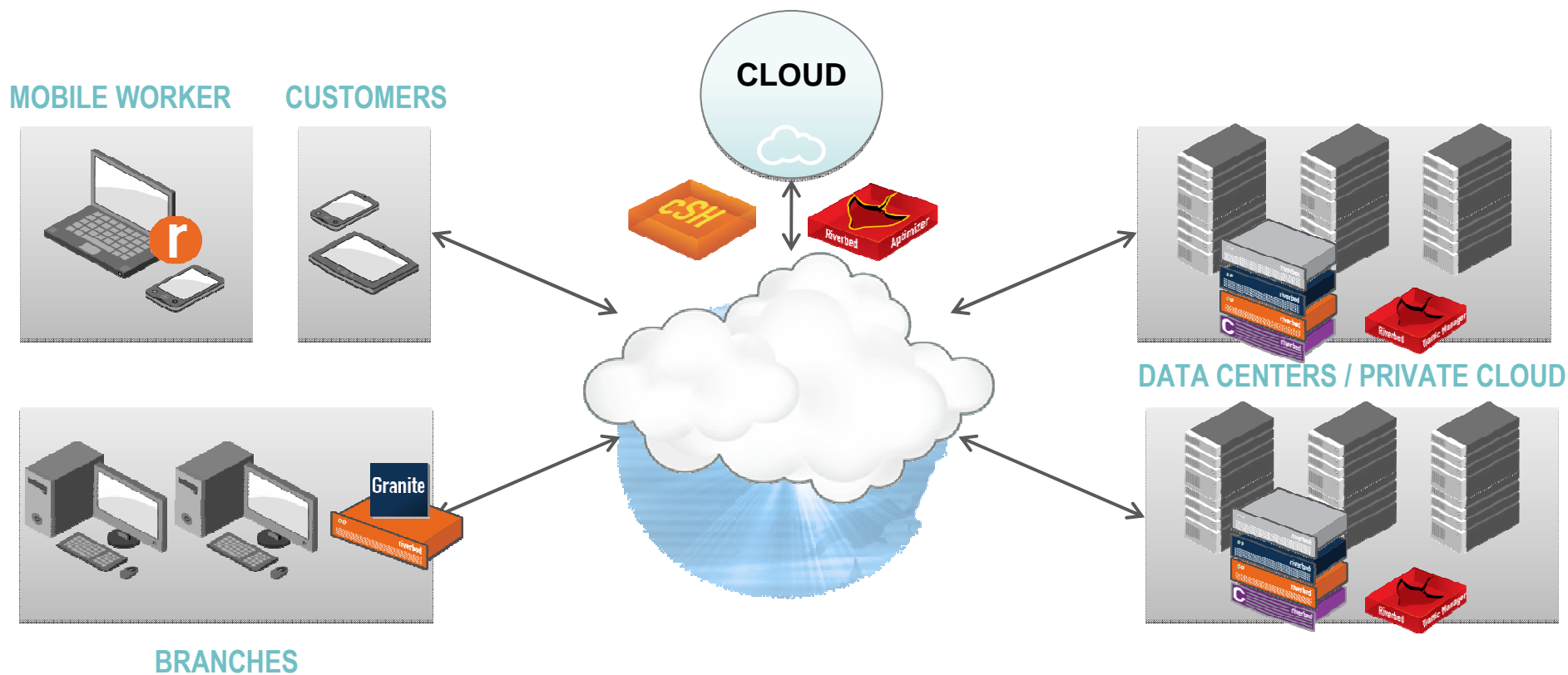
**IT**

Control

**BUSINESS**

Productivity

# Platforma wydajności dzisiaj i jutro.



**Inni budują sieci Riverbed je przyspiesza!!!**

# Riverbed – pionier i lider wydajności

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**Technology**

**Stability**

**Support**

5

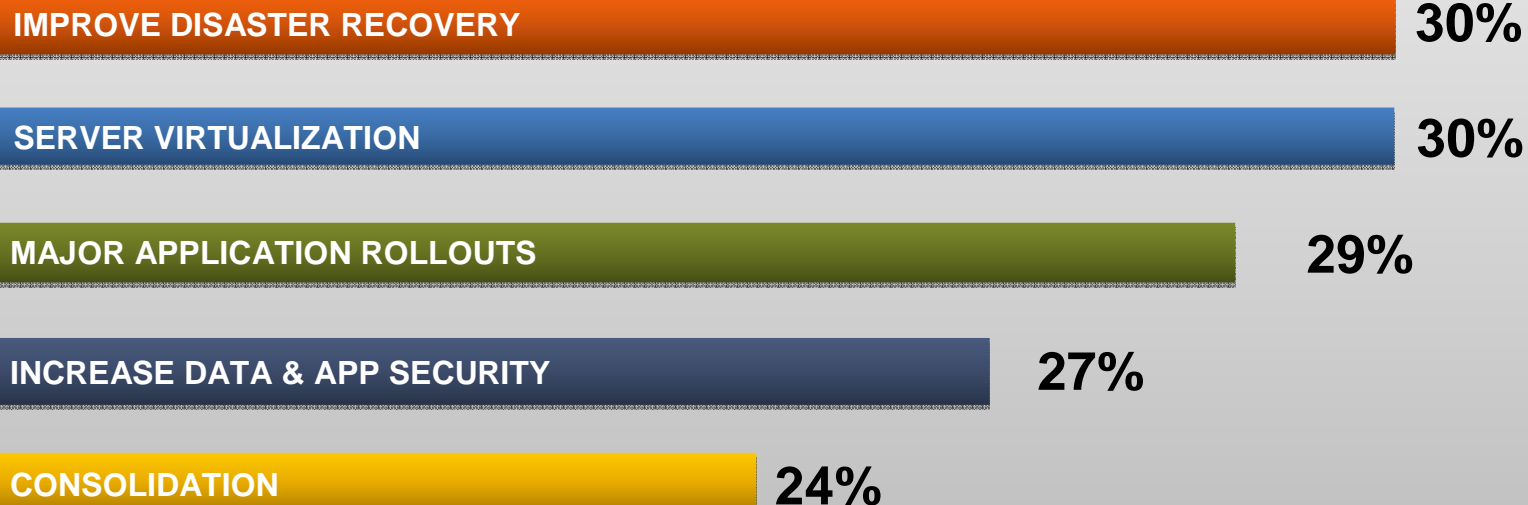
1600+

24

5 Years – InfoWeek  
Technology of the Year  
Gartner Magic Quadrant Leader

# 5 priorytetów inwestycyjnych dla IT

“Which of the following initiatives are likely to be your IT organization’s top technology priorities over the next 12 months?”



SOURCE: ESG, 2012 (Note: Respondents can choose more than one answer)

# Riverbed komplementarna platforma wydajności

## ANALYZE



### The Total Picture

- Spotlight current pain
- Identify potential
- Map dependencies
- Slash diagnosis time

## ACCELERATE



### The ROI from IT Investments

- Accelerate time-to-market
- Accelerate apps
- Optimize disaster recovery
- Cut bandwidth costs

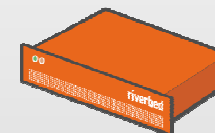
## CONTROL



### Private / Public Cloud and Branches

- Consolidate IT
- Cloud Balance
- Prioritize Traffic
- Cloud Burst

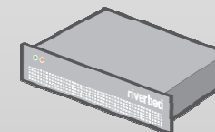
**STEELHEAD**  
WAN Optimization



**CASCADE**  
Network Performance  
Management



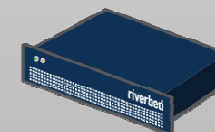
**WHITEWATER**  
Cloud Storage  
Gateway



**STINGRAY**  
Application Delivery  
Controller

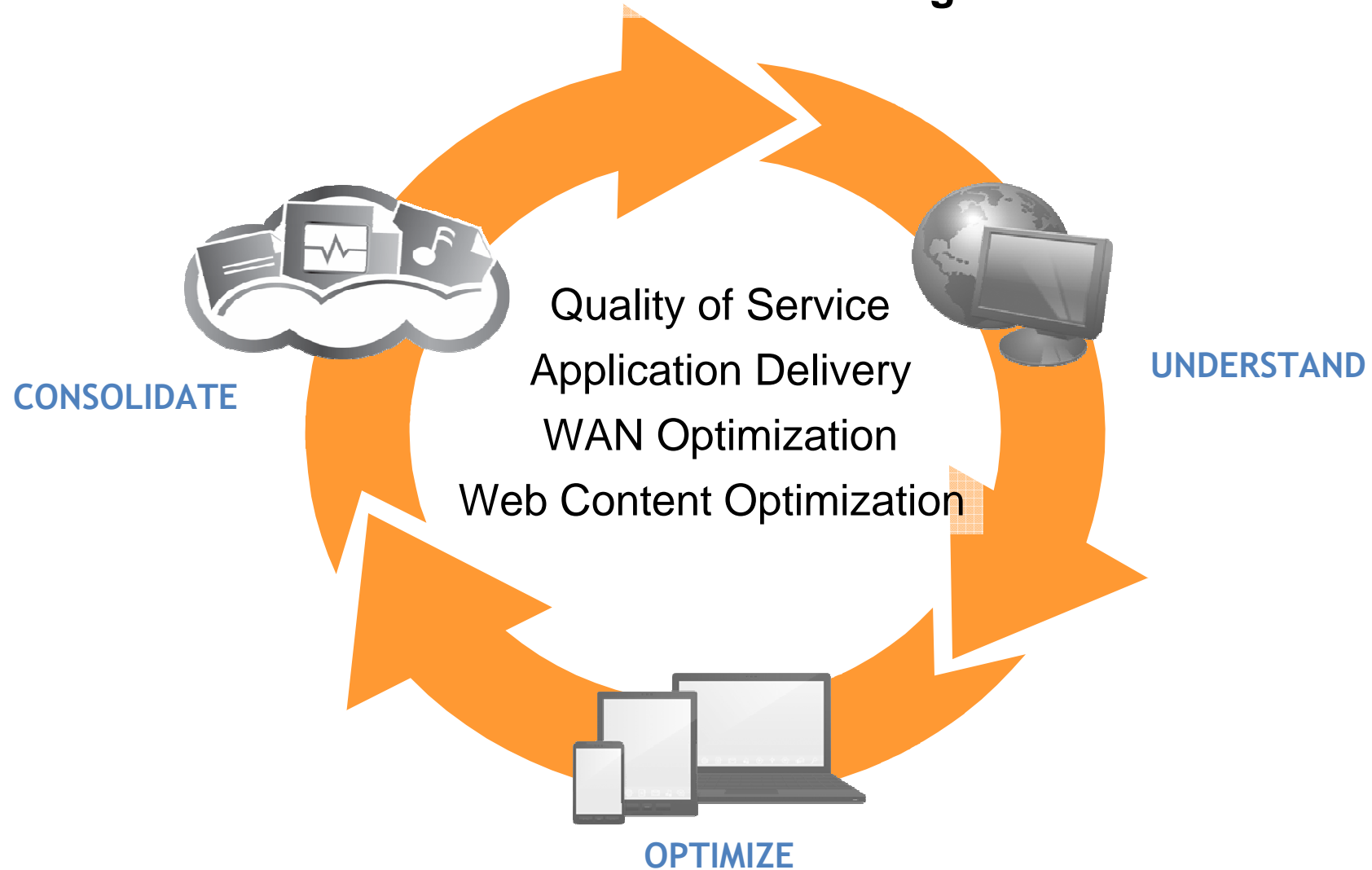


**GRANITE**  
Edge Virtual Server  
Infrastructure



# Idea ciągłej poprawy wydajności aplikacji

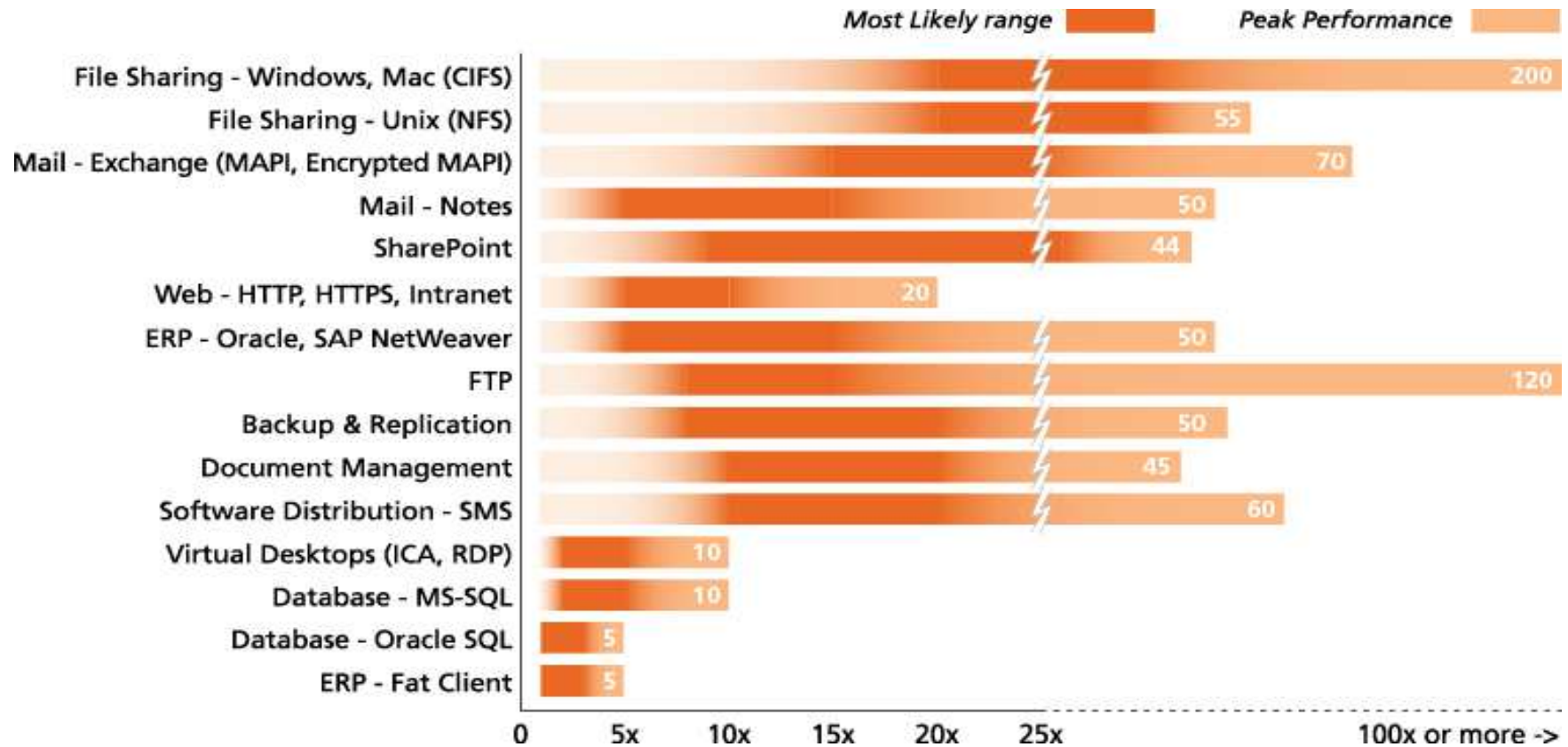
## Network Performance Management





# Riverbed przyspiesza aplikacje TCP/UDP

	CIFS	CIFS signed	CIFS print	Mac CIFS	MAPI	MAPI 2K3	MAPI 2K7	MAPI crypto	MAPI prepop	Lotus Notes	HTTP	SSL	Oracle Forms	ICA	NFS
Riverbed	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓



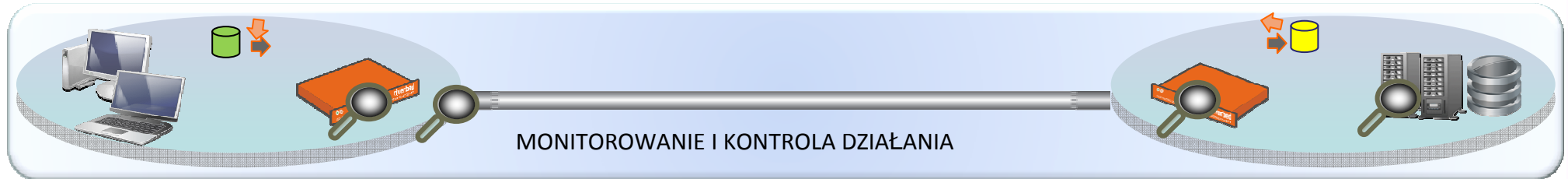
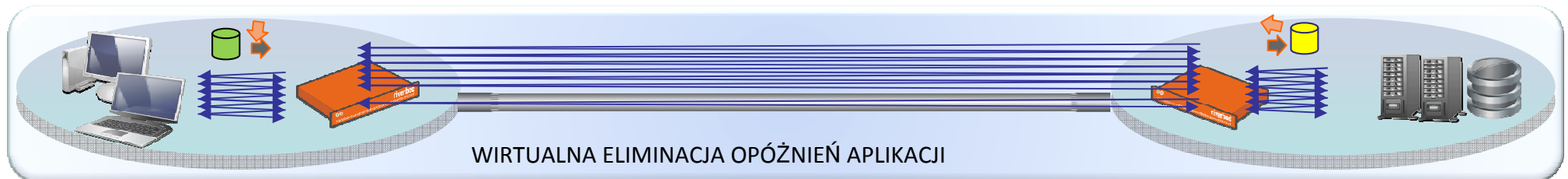
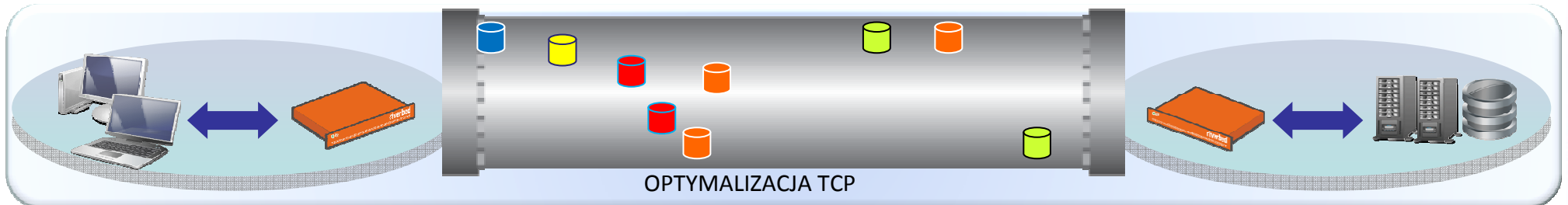
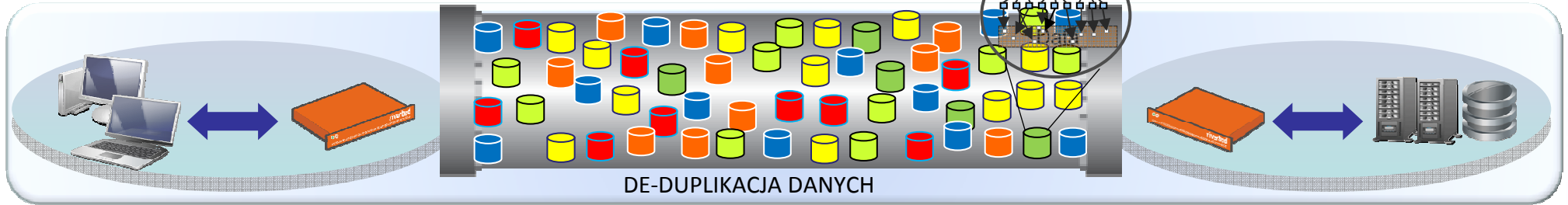
# Kluczowe cechy optymalizacji RiOS



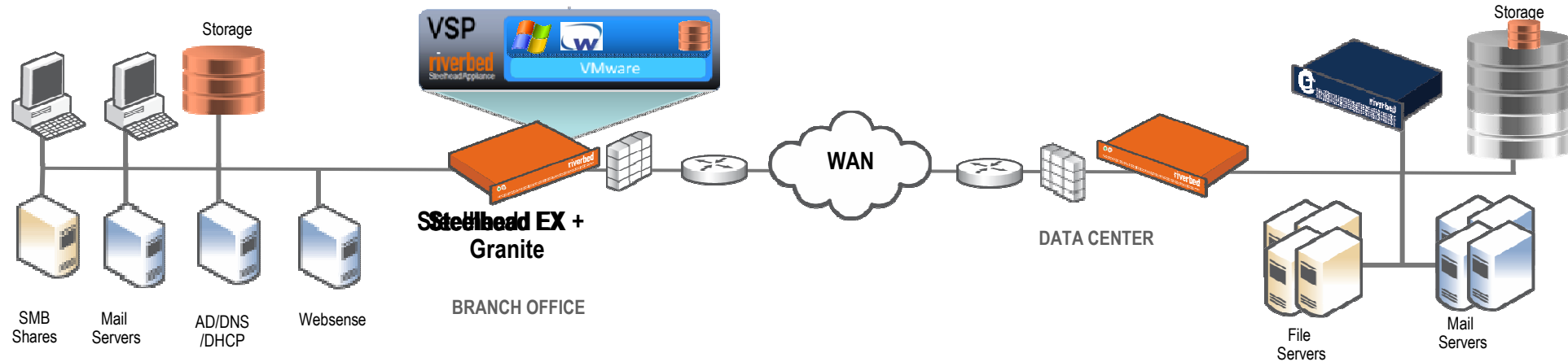
UŻYTKOWNICY

SIEĆ

CENTRUM DANYCH



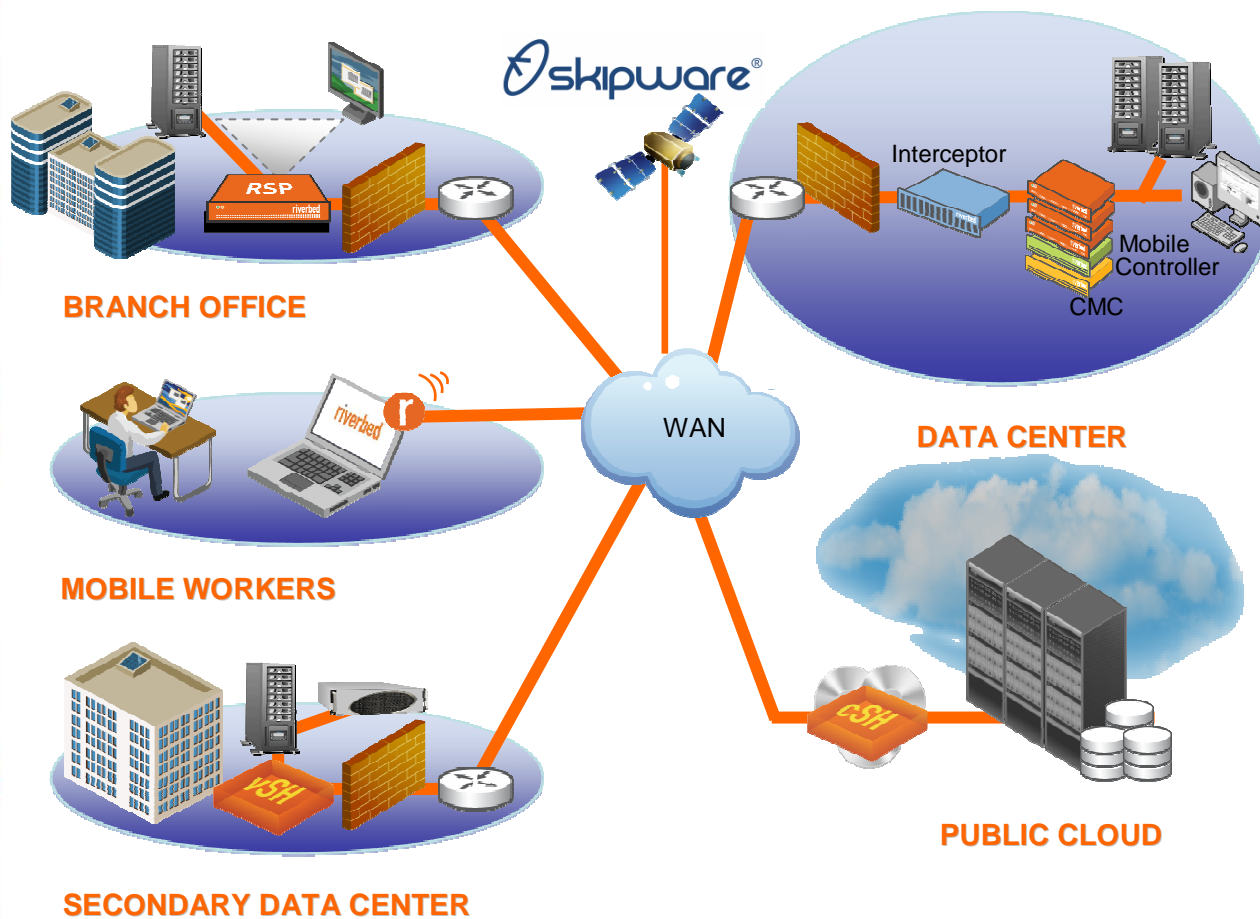
# Bringing it all Together – Edge Virtual Server Infrastructure



## Edge Virtual Server Infrastructure

100% Consolidated  
Consolidate with Steelhead  
100% Control  
Consolidate with EX and VSP  
50% of the Cost  
Consolidate with Granite

# Komplementarne i skalowalne rozwiązanie.

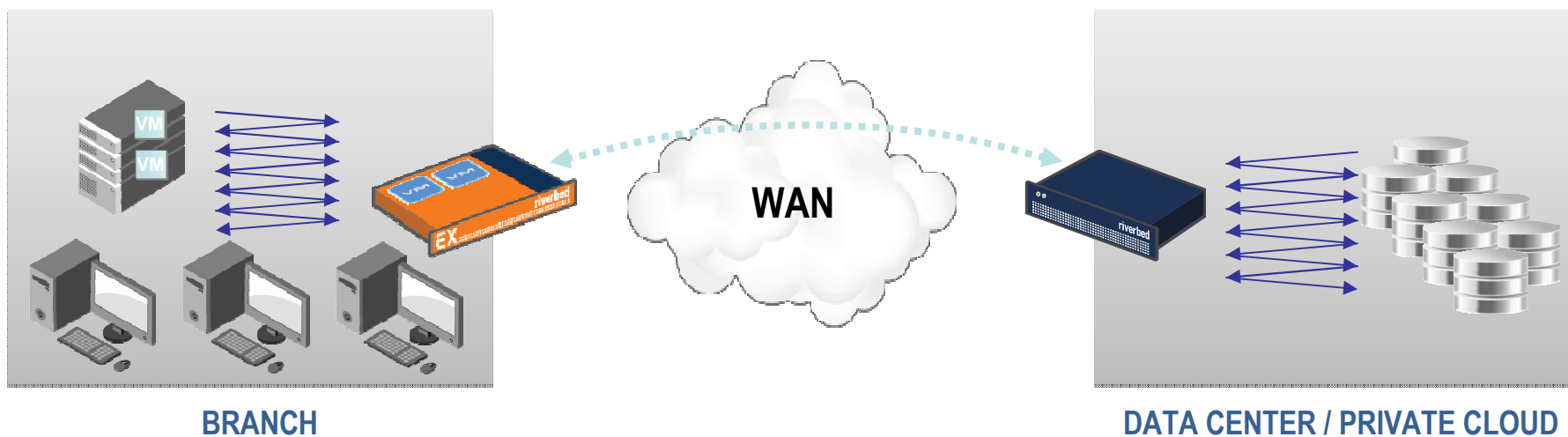


## Steelhead Platforms

- Steelhead Appliances
  - 1 Mb/s–12 Gb/s
  - 30–1 Million TCP conn.
  - Host up to 5 VMs
- Virtual Steelhead
  - ESX/ESXi Based
  - VMware management tools
- Cloud Steelhead
  - Subscription Model
  - Pay as you grow scaling
- Steelhead Mobile
  - Per Connection Licensing
  - Branch Site DR

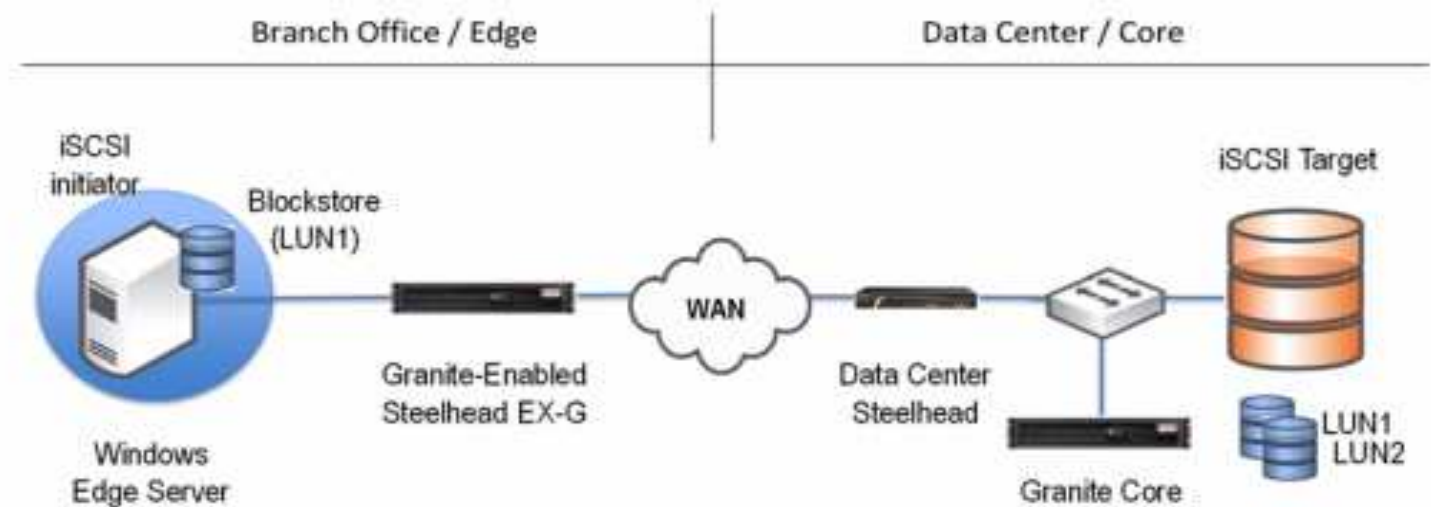
# Riverbed Granite – konsolidacja storage i backupu

## Edge Virtual Server Infrastructure



- Adresuje zagadnienia SAN/NAS/DAS i backupu
- Dostarcza w sposób blokowo przestrzeń dyskowa (iSCSI)
- Brak WAN - Granite zachowuje ciągłość pracy „local storage”
  - Centralne przechowywanie; wydajność lokalna
  - Umożliwia 100% konsolidację oddziałów do DC

# Architektura systemu Granite



The basic system components are:

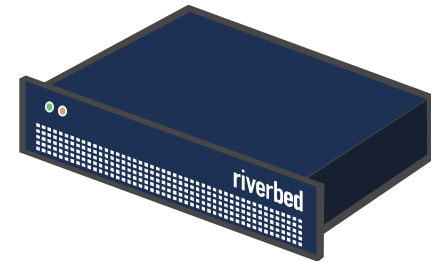
- Blockstore
- iSCSI Initiator
- Microsoft Windows Edge Server
- Granite-enabled Steelhead EX appliance
- Data Center Steelhead
- Granite Core
- iSCSI Target
- LUNs

# Granite komponenty systemu

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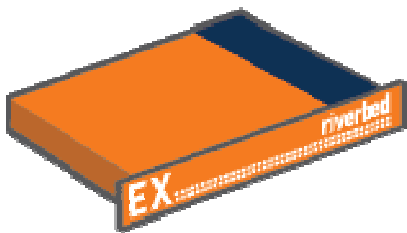
## Granite Core

- Mounts storage in the data center
- Projects LUNs to branch offices
- Crawls and parses file system(s)
- Predicts and pre-fetches blocks for edge

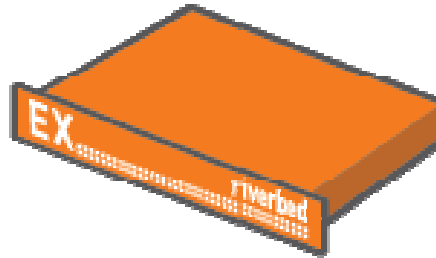


## Granite Edge

- Exposes the iSCSI interface in the branch
- Cache working set of data for LAN access
- Extends thin provisioning to the edge
- Enables fast “cold” reads and writes



# Steelhead EX – nowe wydajniejsze modele urządzeń



EX 1260

- <= 45Mbps / 4000 conns
- Granite standard
- <= 45 GB RAM / 3.6 TB
- RAID / dual PS standard

EX 1160

- <= 45Mbps / 4000 conns
- Granite Optional
- <= 8 GB RAM / 760 GB
- RAID / dual PS standard

EX 760

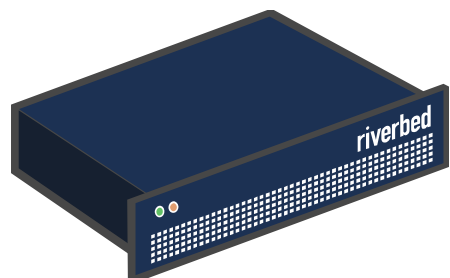
- <= 20 Mbps / 2300 conns
- 4 ports
- Granite optional
- <= 8 GB RAM and 380 GB disk for VSP/Granite

EX 560

Steelhead EX



# Granite Core – urządzenie po stronie Data Center



## Granite Core Appliance

2U	GC-2000-VH	35TB	80 Branches
2U	GC-2000-H	20TB	40 Branches
2U	GC-2000-M	10TB	20 Branches
2U	GC-2000-L	5TB	10 Branches

## Granite Core Virtual Appliance

VGC-1000-M	10TB	20 Branches
VGC-1000-L	5TB	10 Branches
VGC-100-VL	2TB	5 Branches



**data domain**



Tivoli  
Storage  
Manager



Storage Reinventer



symantec...  
NetBackup  
Backup Exec  
PureDisk



EQUALLOGIC



compellent



NetApp™

SnapMirror  
SnapVault



powered by

amazon S3  
web services™

## Riverbed Works with ALL Leading Storage Vendors



XP  
EVA



AT&T Synaptic Storage as a Service

HITACHI  
Inspire the Next



vmware™



  
BROCADE 7500



Microsoft®

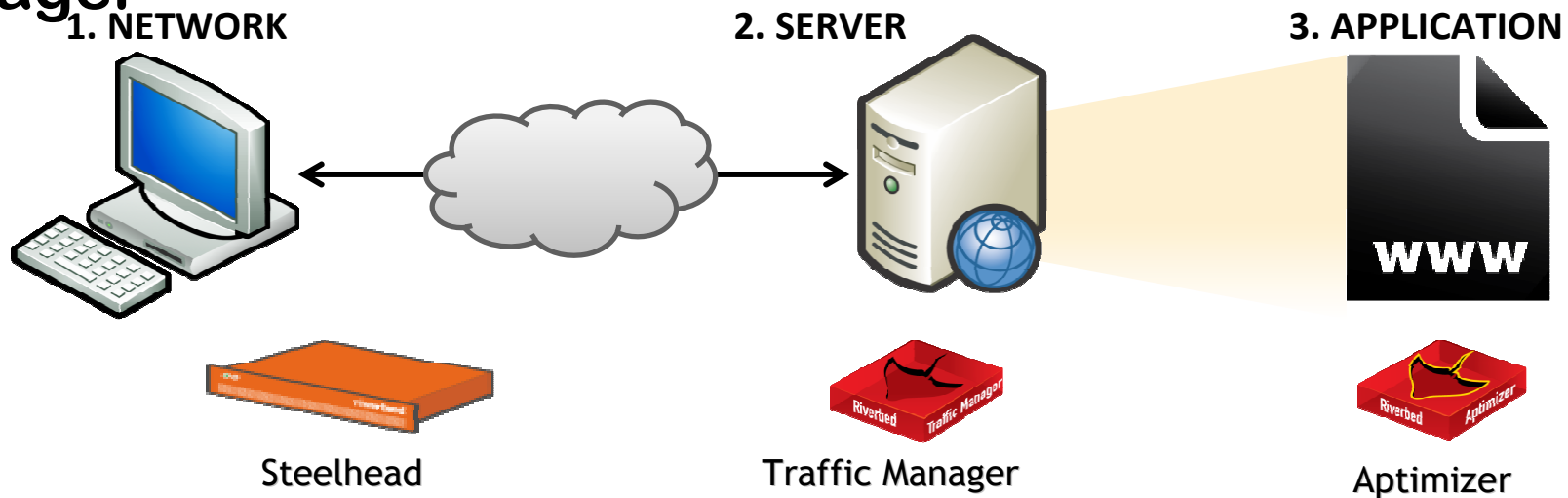


MDS



You have 7 seconds

# Stingray Aptimizer with Steelhead & Stingray Traffic Manager



## Symmetric

Compression

QoS/ BW Shaping

Application Protocol  
Streamlining

Transport Protocol  
Streamlining

Data De-duplication

“Fill the pipe” technology

## Asymmetric

Compression

QoS/ BW Shaping

TCP/SSL Offload

Load Balancing

Application Scripting

## Asymmetric

File merging

Shrinking and compression

Browser caching

Dynamic Layout

## Stingray – rozwiązanie LB/ADC

---



### Stingray Traffic Manager

W pełni wydajne rozwiązanie ADC (Application Delivery Control) w opcji virtual /software. Zapewnia niezawodność, dostępność, rozładowanie ruchu sieciowego, bezpieczeństwo, itp.



### Stingray Aptimizer

Lider w optymalizacji zawartości stron (Web Content Optimization -WCO). Obniża czas ładowania stron i obciążeń łącz. Dostępny dla aplikacji SharePoint & stron www.



### Stingray Web

#### Application Firewall

Ochrona aplikacji przed zagrożeniami. Dostępny jako dodatek do StingrayTraffic Manager, także w opcji standalone.

**Optymalizacja w Data CENTER: Aplikacje TCP/UDP; usługi danych**

**Wydajność; dostępność, akceleracja; pojemność; bezpieczeństwo**

# Stingray Application Delivery Controller?

## Stingray virtual ADC



### FASTER:

- SSL and XML offload
- Content Compression
- HTTP Caching
- HTTP Multiplexing
- TCP Offload

### MORE RELIABLE:

- Load balancing
- Fault tolerance
- Monitoring
- Bandwidth and rate shaping

### MORE SECURE:

- Server Isolation
- Traffic Filtering and Scrubbing
- **Scalable, Distributed Application Firewall**

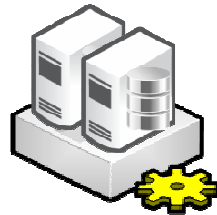
### EASIER TO MANAGE:

- TrafficScript logic
- Service Level Monitoring
- Reporting and alerting
- Control and Event API



### • Web Sites

E-commerce, corporate sites



### • Enterprise Apps

Intranets, Document Mgmt, ERP, CRM



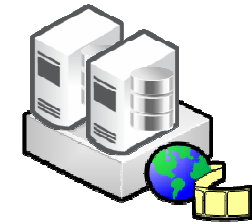
### • Email

SMTP, IMAP, POP



### • Web Services

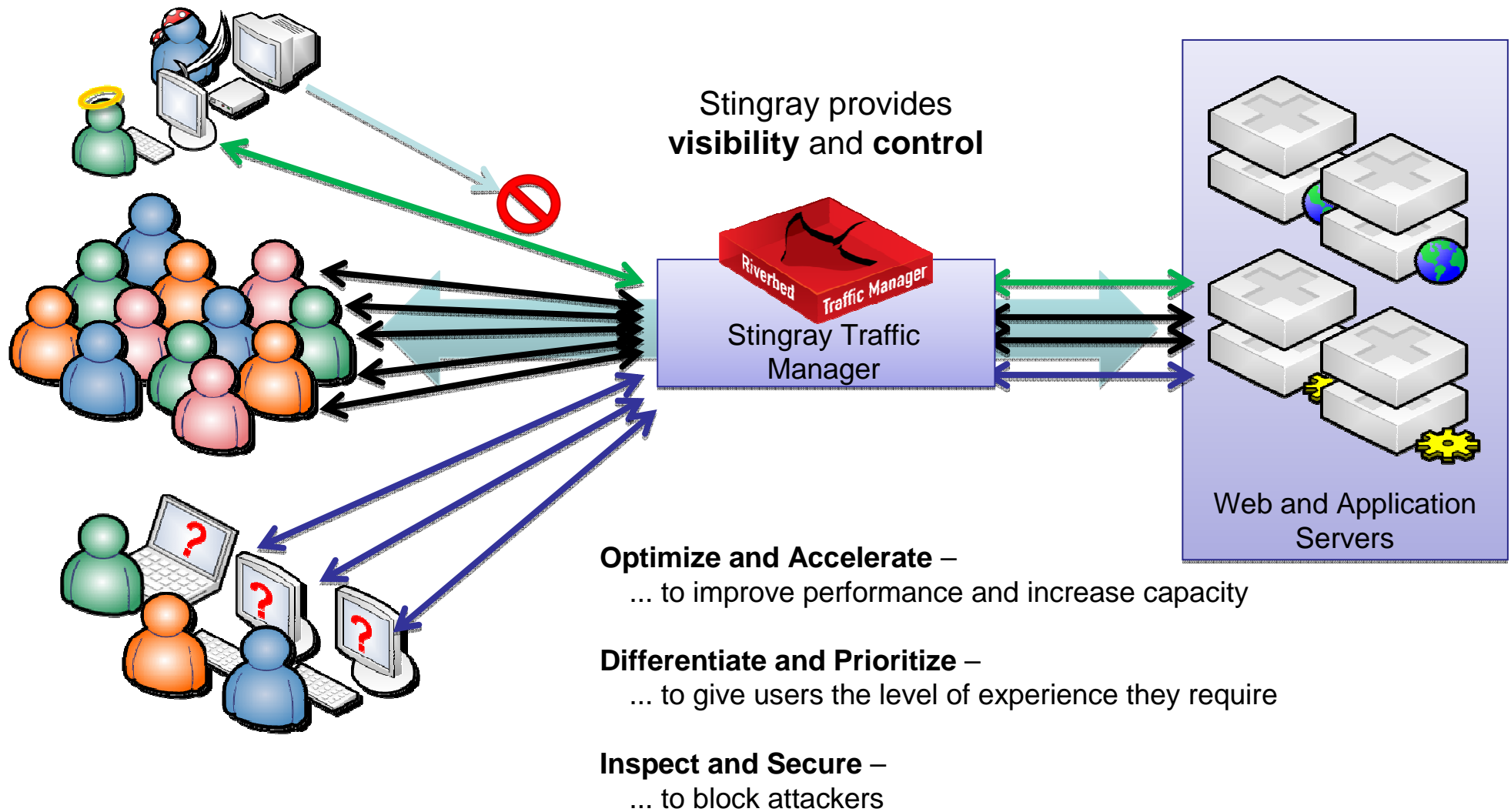
Databases, XML, SOAP



### • Rich Media

Video, Audio, SIP, RTSP

# Jak to działa?



# Security Integration – Web Application Firewall



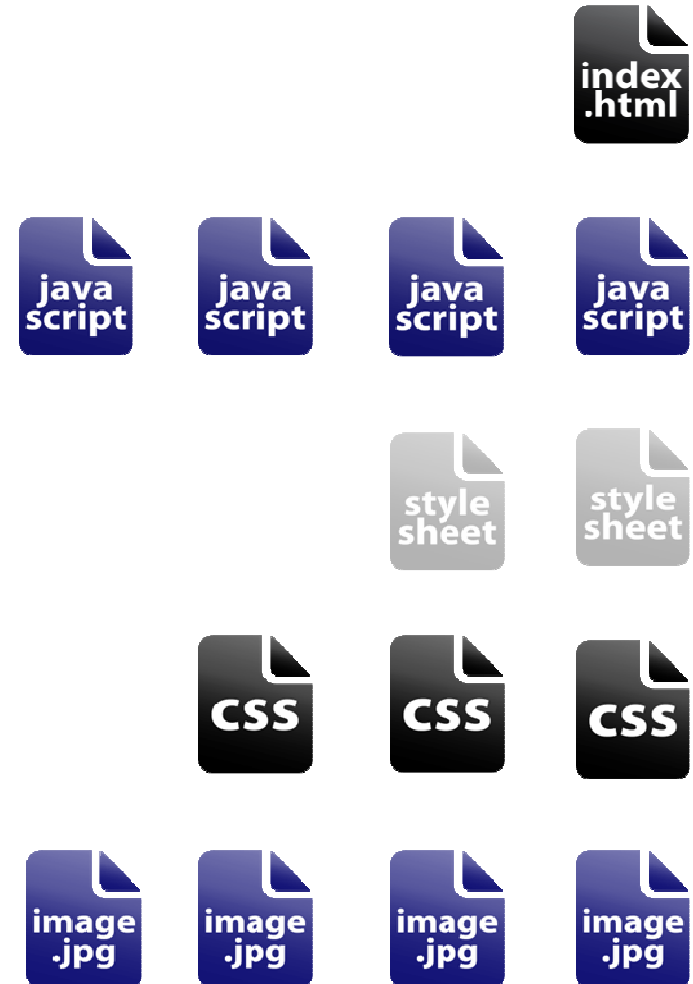
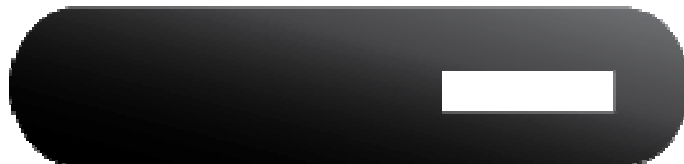
The screenshot displays the Riverbed Stingray Application Firewall management console. The interface includes a navigation menu on the left with options like 'Secure Website', 'Prefixes', 'Logs', 'Statistics', and 'Settings'. The main content area shows 'Applications in Detection Mode' with a table listing the 'Secure Website' application, its 'hyperguard' capability, and its status as 'Traffic allowed'. Below this is an 'Add Application' section with a text input field and a 'Create' button. A 'Hosts' table is also visible at the bottom of the main area. On the right side, there is a sidebar with user information, including 'Logged in as admin', 'Group Membership' (zeusafm Admin), and 'Cluster Status' (All cluster members running).



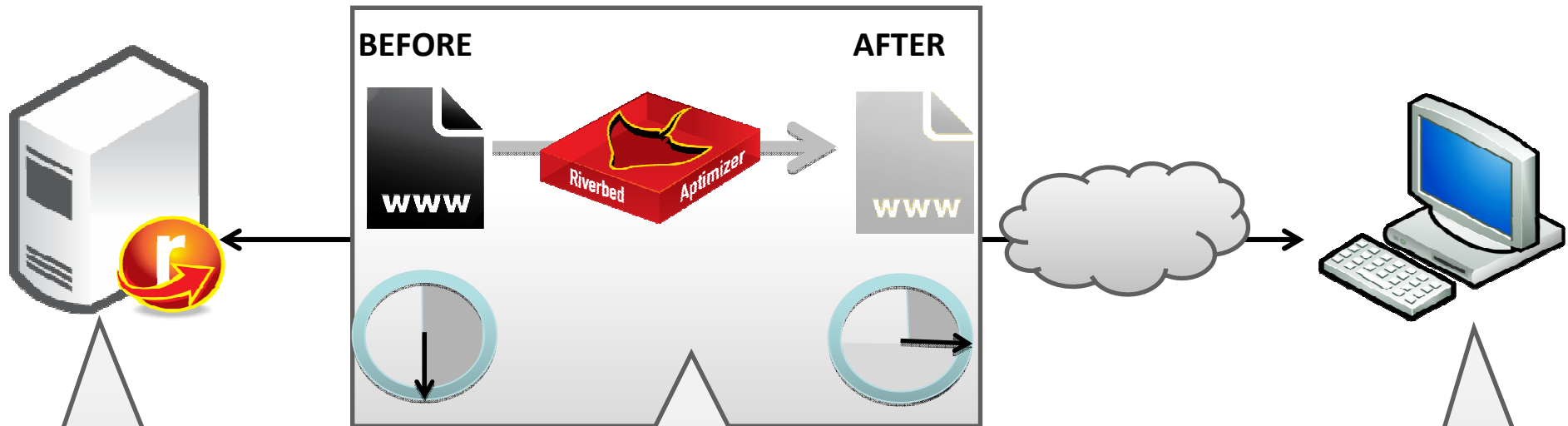
- Meets customer needs for greater application security
- Supports PCI-DSS compliance
- Management Integrated into Stingray Traffic Manager
- Available on all Traffic Manager models
- Available as Stand-Alone



# How an unoptimized website loads



# How Aptimize works



## 1. Install software:

- On web front-end servers or virtual machine
- SharePoint / Windows
- Configuration in 1-2 hours

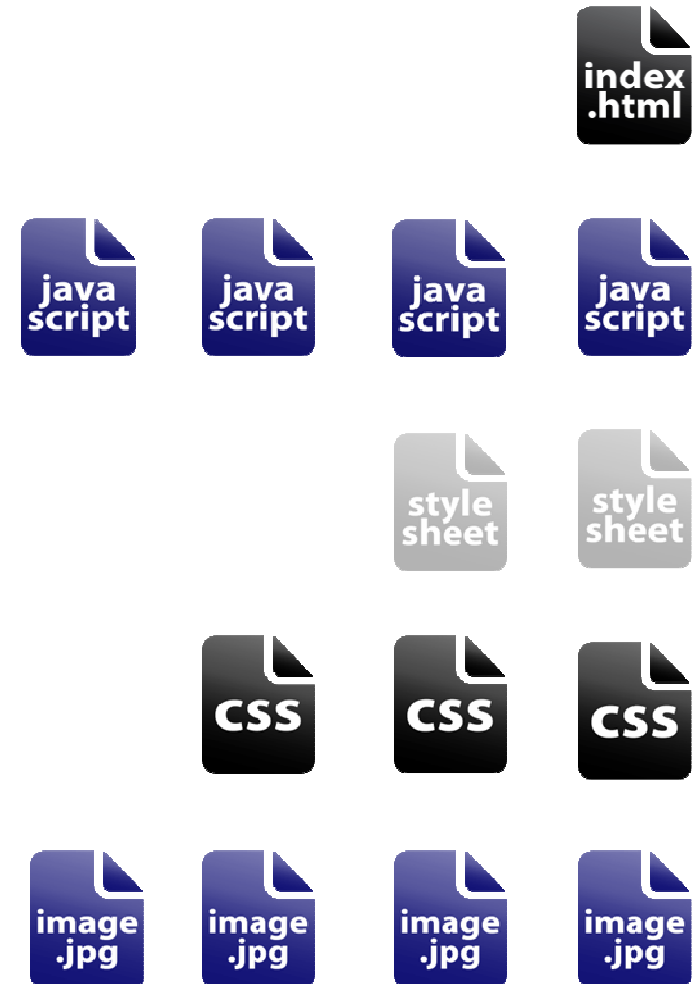
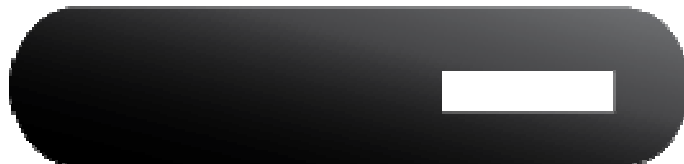
## 2. Optimize dynamically:

- Merges files (fewer round trips)
- Shrink + compress files (less data)
- Increase caching (reduce reloads)
- Tune page layout (1<sup>st</sup> things 1<sup>st</sup>)

## 3. Instant results:

- Up to 76% reduction in load times
- Up to 43% less traffic
- Better CDN performance

# How an optimized website delivers



# Aptimize – odczucia użytkowników

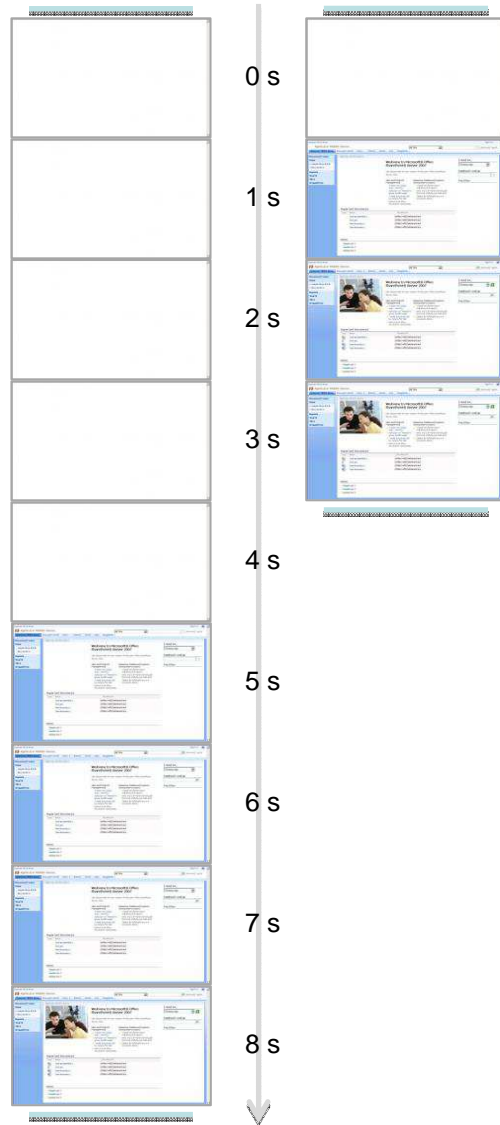
## Unoptimized web page



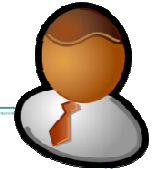
- User sees blank page until script loads and executes
- Origin site content slowed down by 3<sup>rd</sup> party content



- Browser retrieves HTML page content
- Loads and executes JavaScript files one-by-one
- Then starts loading other page elements
- Is slowed down by 3<sup>rd</sup> party content



## Optimized web page



- User sees page begin to render immediately
- Origin site content loads at maximum speed



- Browser retrieves HTML page content
- Begins loading JavaScript in the background
- Starts loading other page elements immediately
- Is not affected by speed of 3<sup>rd</sup> party content

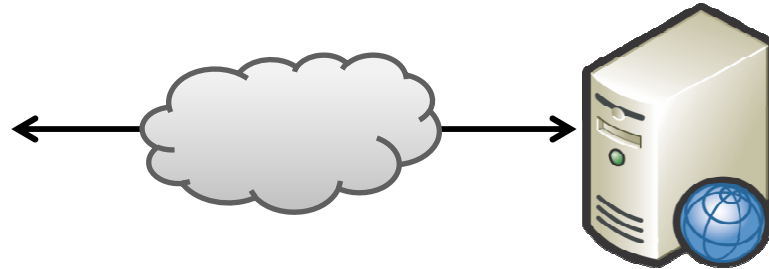
# Business impact of different performance issues

USER (Employee)



USER (Consumer)

APPLICATION



PAGE COMPOSITION



## NETWORK

Can I consolidate?  
Is app performance meeting my SLA?  
Employee Productivity?  
Control Network Costs?

## APPLICATION

Impact of server failure?  
Peak capacity mgmt?  
Can I secure the app?  
Can I make rapid changes to application functionality?

## CONTENT

Can I improve user experience?  
Can I map the application to mobile, ipad platforms?

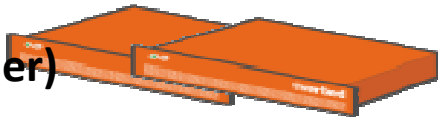
**COMPLEX PERFORMANCE CHALLENGES REQUIRE AN INTEGRATED STRATEGY**

# The right performance tools for your challenge

USER (Employee)



USER (Consumer)



APPLICATION



PAGE COMPOSITION



## Symmetric - WOC

- Accelerate Enterprise Applications
- Cut WAN Bandwidth
- Improve Employee
- Productivity

Steelhead

## Asymmetric - ADC

- Accelerate applications over the Internet
- Scale applications
- Improve app resiliency
- Leverage cloud

Stingray  
Traffic Manager

## Asymmetric -

- Optimize web pages - Image, Browser, Script, and HTML
- Adapt to user platform (PC, Phone, Tablet)

Stingray Aptimizer

HTML Metadata removal

# The right performance tools for your challenge

USER (Employee)



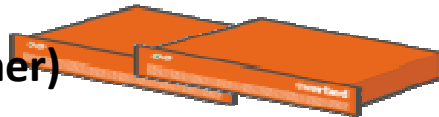
USER (Consumer)



APPLICATION



PAGE COMPOSITION



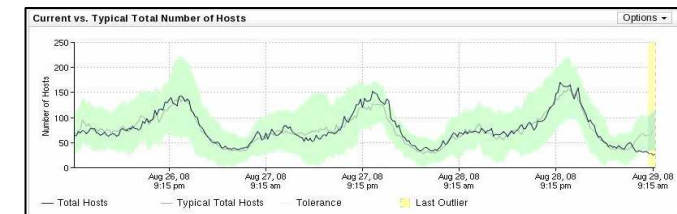
Symmetric - WOC

Asymmetric - ADC

Asymmetric -



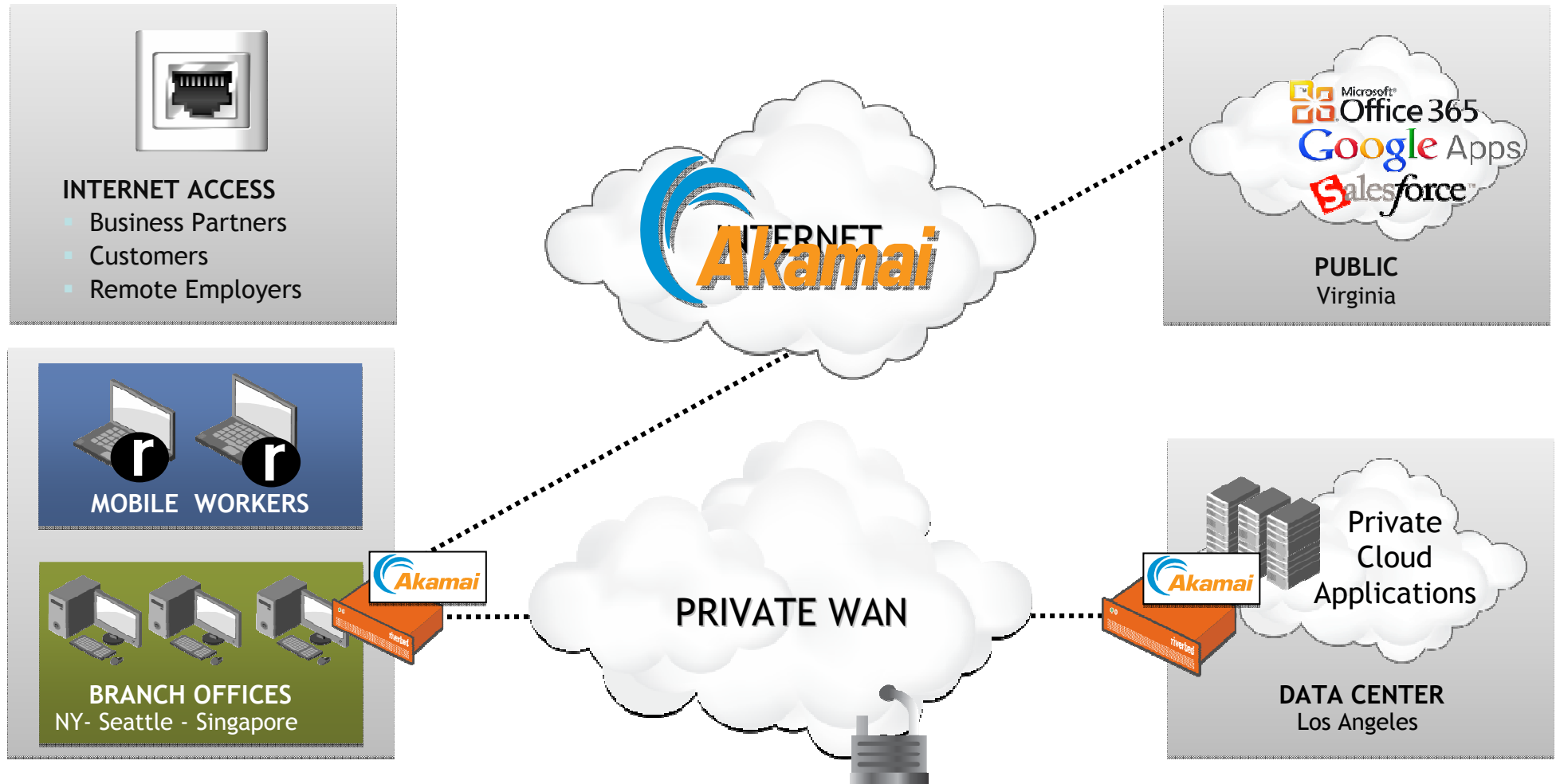
Service Health				
Service Tree	Overall	Connect	User Exp.	EFF
Exchange	🟢	🟢	🟢	🟢
Sharepoint	🟢	🟢	🟢	🟢
Oracle	🟡	🟡	🟢	🔴
ERP	🟡	🟡	🟢	🟢
Twiki	🟢	🟢	🟢	🟢



Cascade – Real time visibility, dashboards and troubleshooting to monitor, manage, and fine-tune performance

USE THESE TECHNOLOGIES STAND-ALONE OR IN COMBINATION

# Cloud Computing nowe wyzwania. Rivrbed - Akamai





# Radość zwycięzców - Zapraszamy do KONKURSU



**3. Odpowiedz na 3 pytania na stoisku ZYCKO**

**2. Zostaw wizytówkę**

**1. Wyniki: 14:30**

KONTAKT ZYCKO POLSKA

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**Dziękuję za uwagę**

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