riverbed

# PRODUCT INNOVATION AND TECHNICAL VISION

David Wu, CTO

WHERE WE HAVE BEEN

WHERE WE ARE NOW

WHERE WE ARE HEADED

#### LOCATION-INDEPENDENT COMPUTING

Turns distance and location into a competitive advantage by allowing IT to have the flexibility to host apps and data in optimal locations while ensuring flawless delivery and best user experiences

IT should not be constrained by the limitations imposed by distance and location.

IT should be allowed to place workloads and data in the optimal location, directed by business needs.

# IT should be free of performance and visibility limitations.

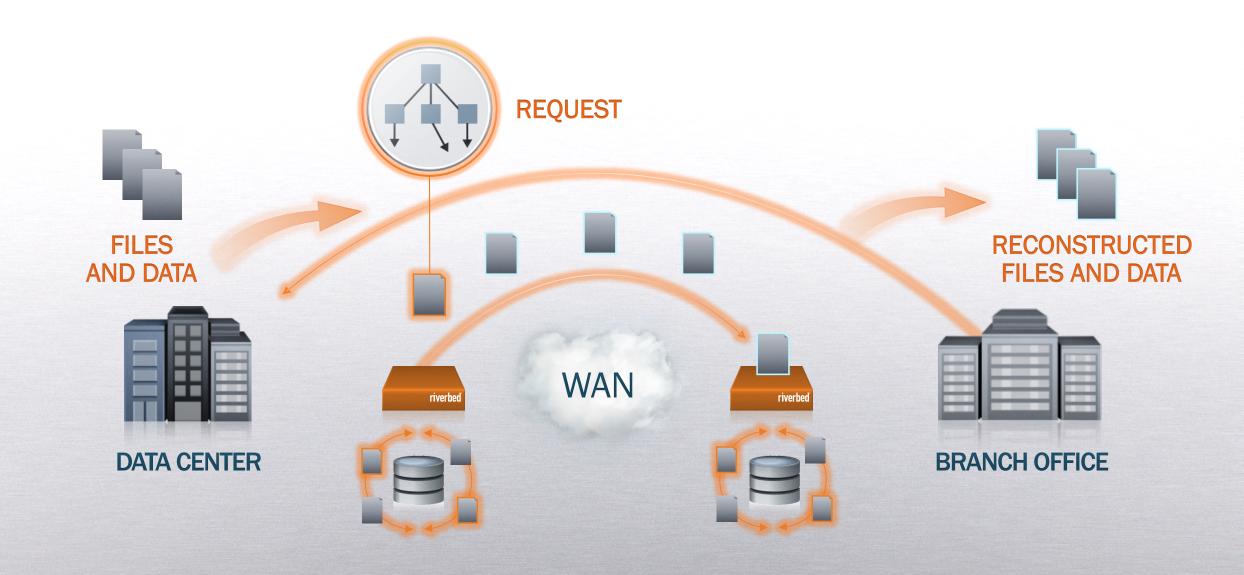
WHERE WE HAVE BEEN

WHERE WE ARE NOW

WHERE WE ARE HEADED

## "We speed up networks"





#### We Solved Customer Problems in Unique Ways



Consolidate Infrastructure



Collaborate Globally



Save Money, Reduce Risks



Improve User Experience

WHERE WE HAVE BEEN

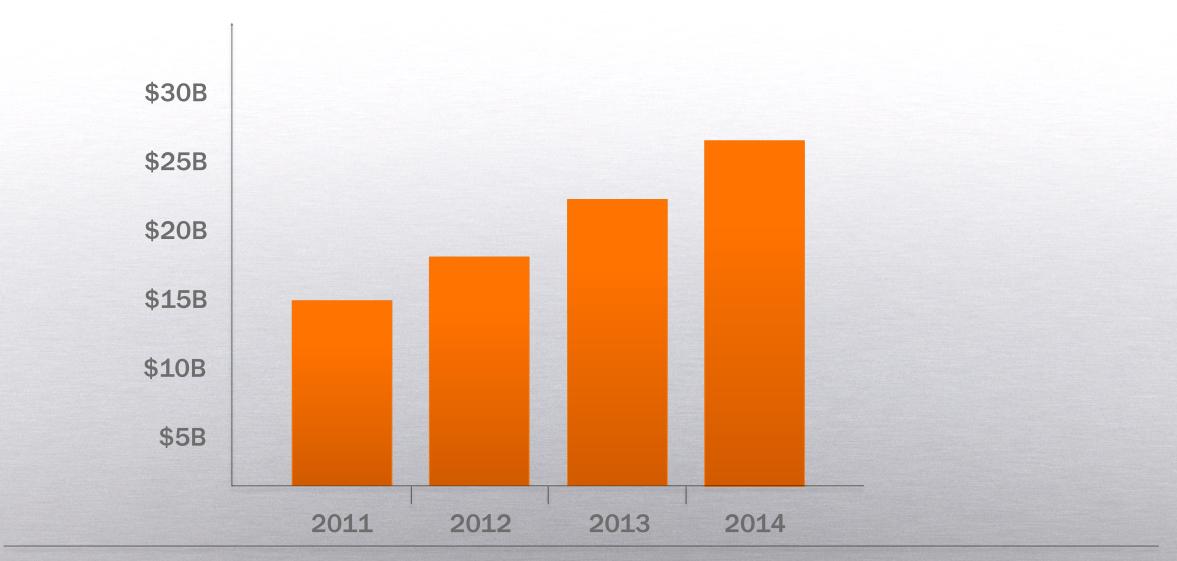
WHERE WE ARE NOW

WHERE WE ARE HEADED

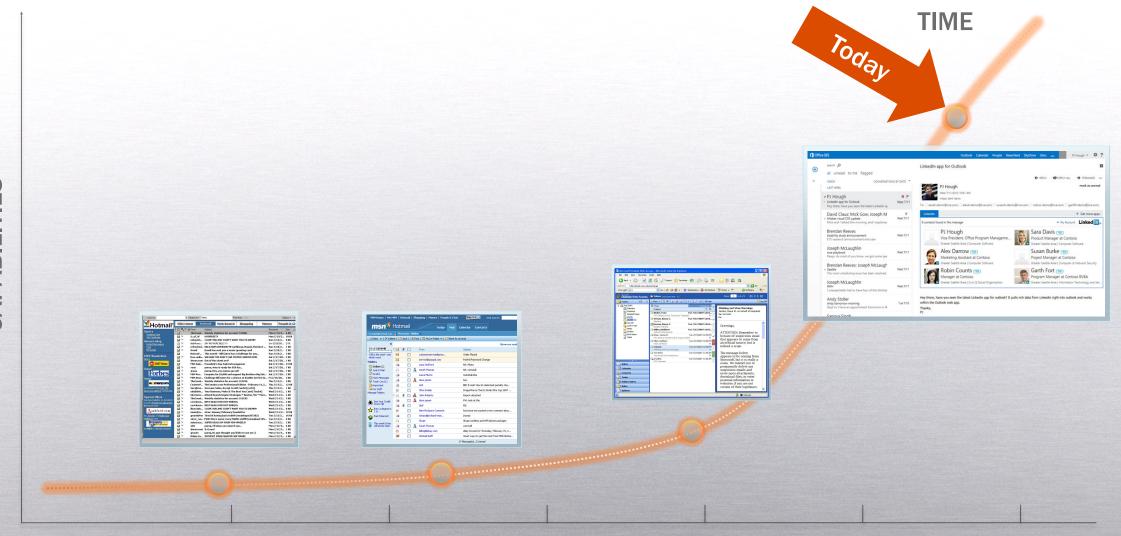
#### The User's Perspective



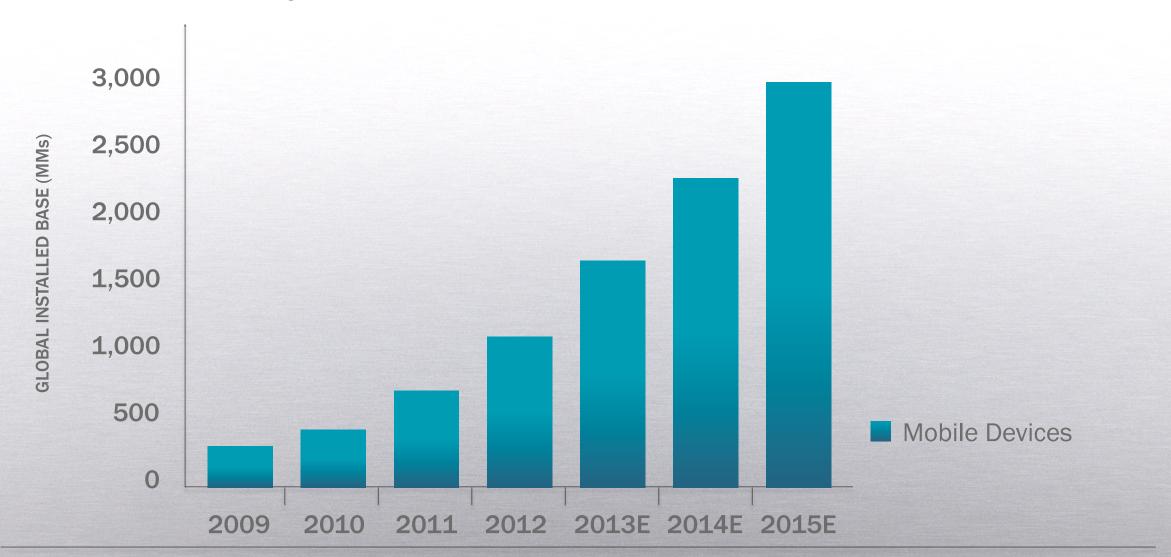
#### Over \$24B Will be Spent on SaaS by the End of Next Year



#### Web Apps Now Feature Rich and Fully Capable



#### Explosive Growth of Mobile Devices



#### Enterprise Mobile Apps Just Getting Started



#### Broadest Range of Location Independent Computing Technologies











Steelhead



Performance Management



Cloud Steelhead



Stingray



Performance Management



Steelhead Mobile



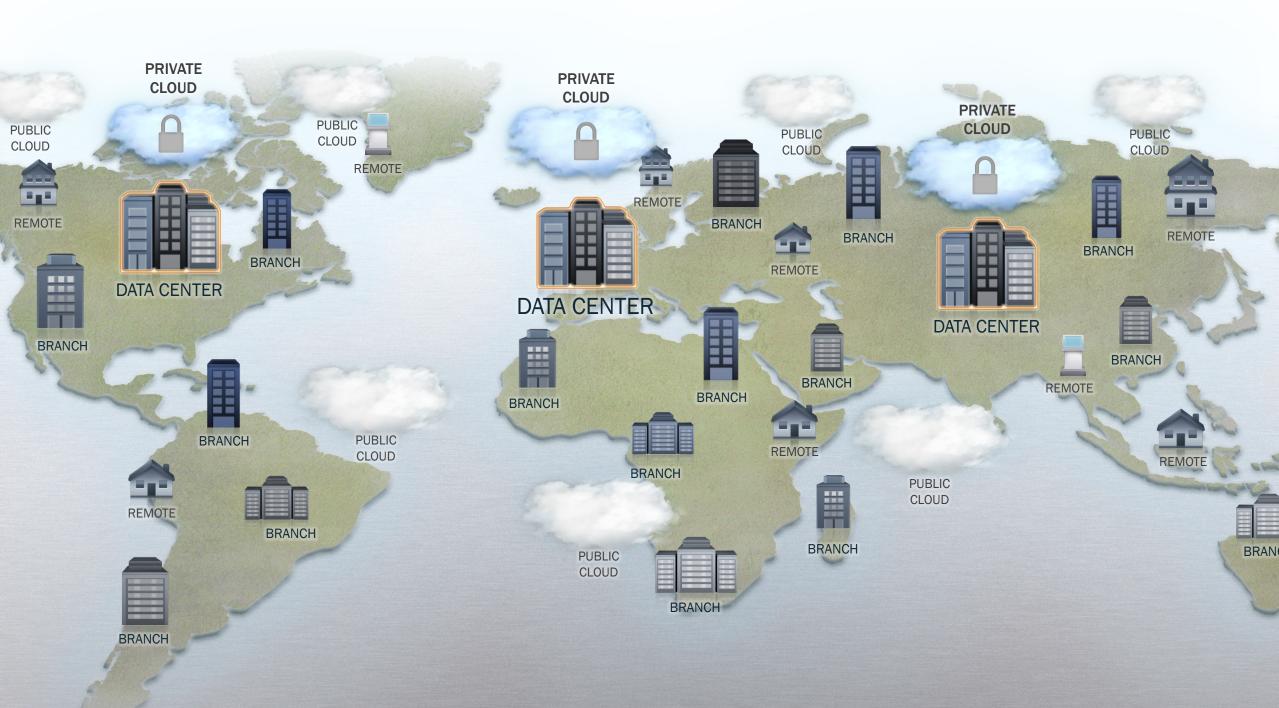
Stingray



Performance Management

## The IT Organization's Perspective



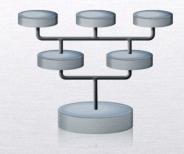


#### Agility, Mobility, and Visibility Challenges



#### SOFTWARE-DEFINED DATA CENTERS

Virtual machine migration limited by bandwidth



#### SOFTWARE-DEFINED NETWORKS

Virtual networks obscures visibility



#### CLOUD COMPUTING

Heterogeneous infrastructure at cloud providers limit workload applicability



#### DATA COMPLIANCE

Data retention policies managed based on geographic boundaries

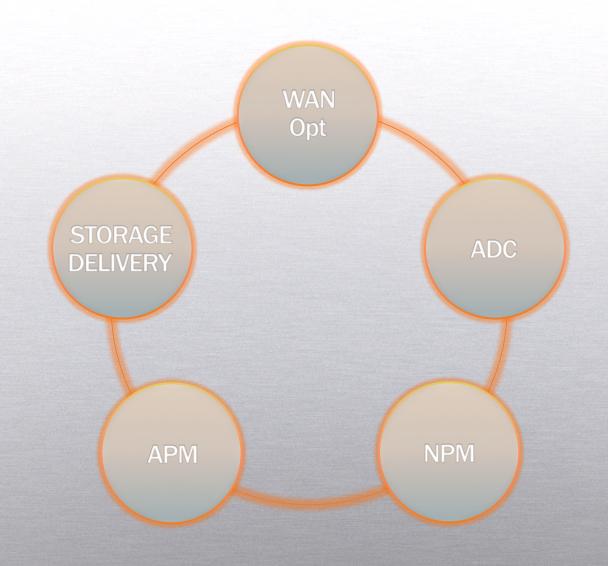


#### **VDI**

Bandwidth and latency affects quality and fidelity



#### Application Performance Platform



WHERE WE HAVE BEEN

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#### Three Areas of Focus

## LOCATION-INDEPENDENT ACCESS

#### LOCATION-INDEPENDENT INFRASTRUCTURE

## VISIBILITY AND MANAGEMENT

#### Location Independent Access

## ADAPTABLE ACCELERATION

Symmetric and asymmetric acceleration techniques

Acceleration everywhere, consistent across all form factors

Continued application-specific acceleration across SaaS and on-prem apps

#### HYBRID NETWORKING

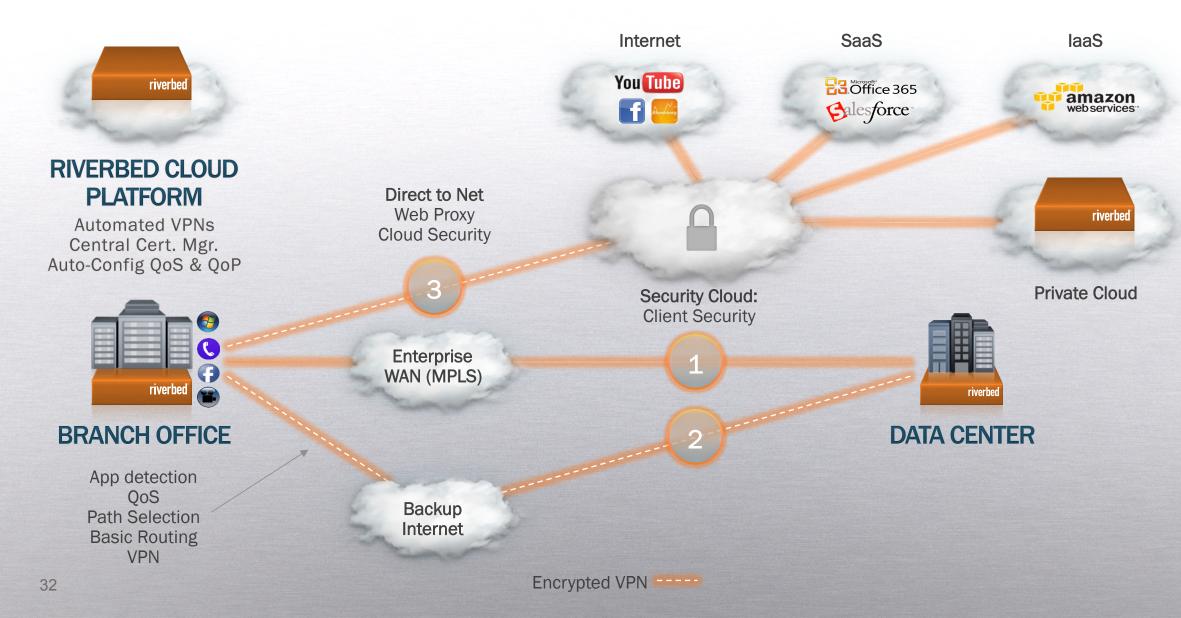
Improvement of QoS and application routing intelligence

Improved support of BYOD and SaaS options

Integrated visibility, reporting, and automated path selection management



#### Hybrid Networking



#### Location-Independent Infrastructure

## STORAGE DELIVERY CONTROLLER

Increased scalability and capacity

Improved virtualization integration

Continued disaggregation of compute and storage

## SOFTWARE DEFINED INFRASTRUCTURE

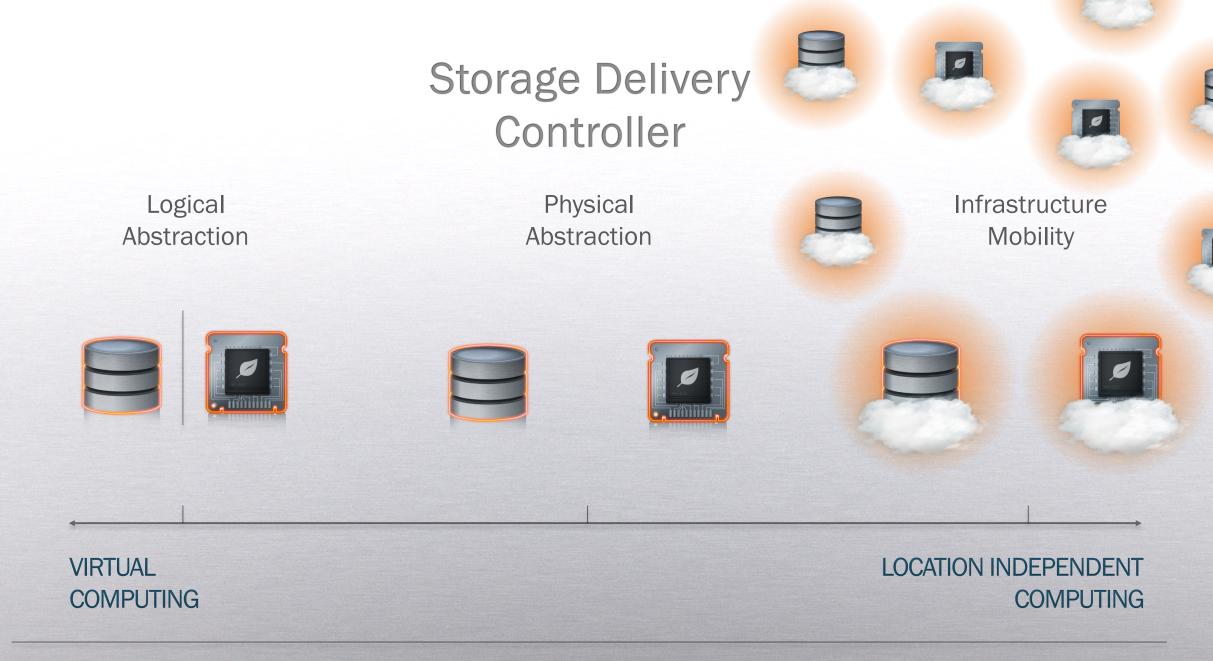
Micro-instances for per-app infrastructure

Continued separation of control and data planes

Hypervisor and OS agnostic appliances & virtualization support

Flexible licensing and provisioning





#### Riverbed Stingray Elastic ADC

#### **STRINGRAY SERVICES CONTROLLER**

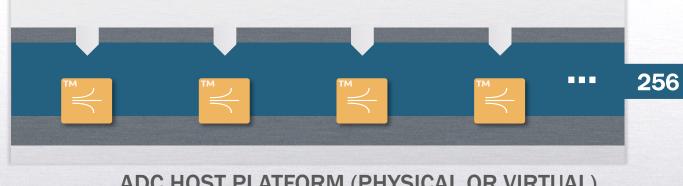
Self-Service Interface

Automated Deployment and Inventory Service

Instantaneous Licensing Service

**Usage Based** Metering Service

#### STRINGRAY TRAFFIC MANAGER INSTANCES



ADC HOST PLATFORM (PHYSICAL OR VIRTUAL)



**RESTful API** 

Interface to any orchestration platform or SDN controller











Infinite ADC Host

**Platforms** 

#### Visibility & Management

### SCALABLE USER EXPERIENCES

Increased locations managed and reported on

Innovative new visibility across all devices

Multi-nodal, scalable monitoring

## BIG DATA ANALYTICS

Pervasive, real-time user experience monitoring

Improved correlation and predictive analytics

Extending big data analytics platform for partner ecosystem

## PROGRAMMABLE INFRASTRUCTURE

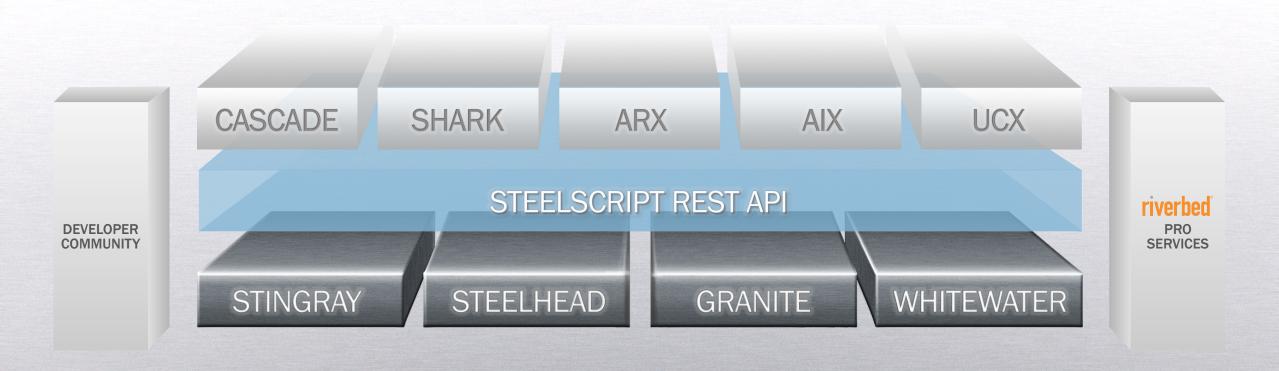
**REST-based API** 

Automated, closed-loop provisioning

New controller architecture to support scale-out architectures



#### Programmable Infrastructure





#### IT is becoming more dynamic.

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## riverbed®