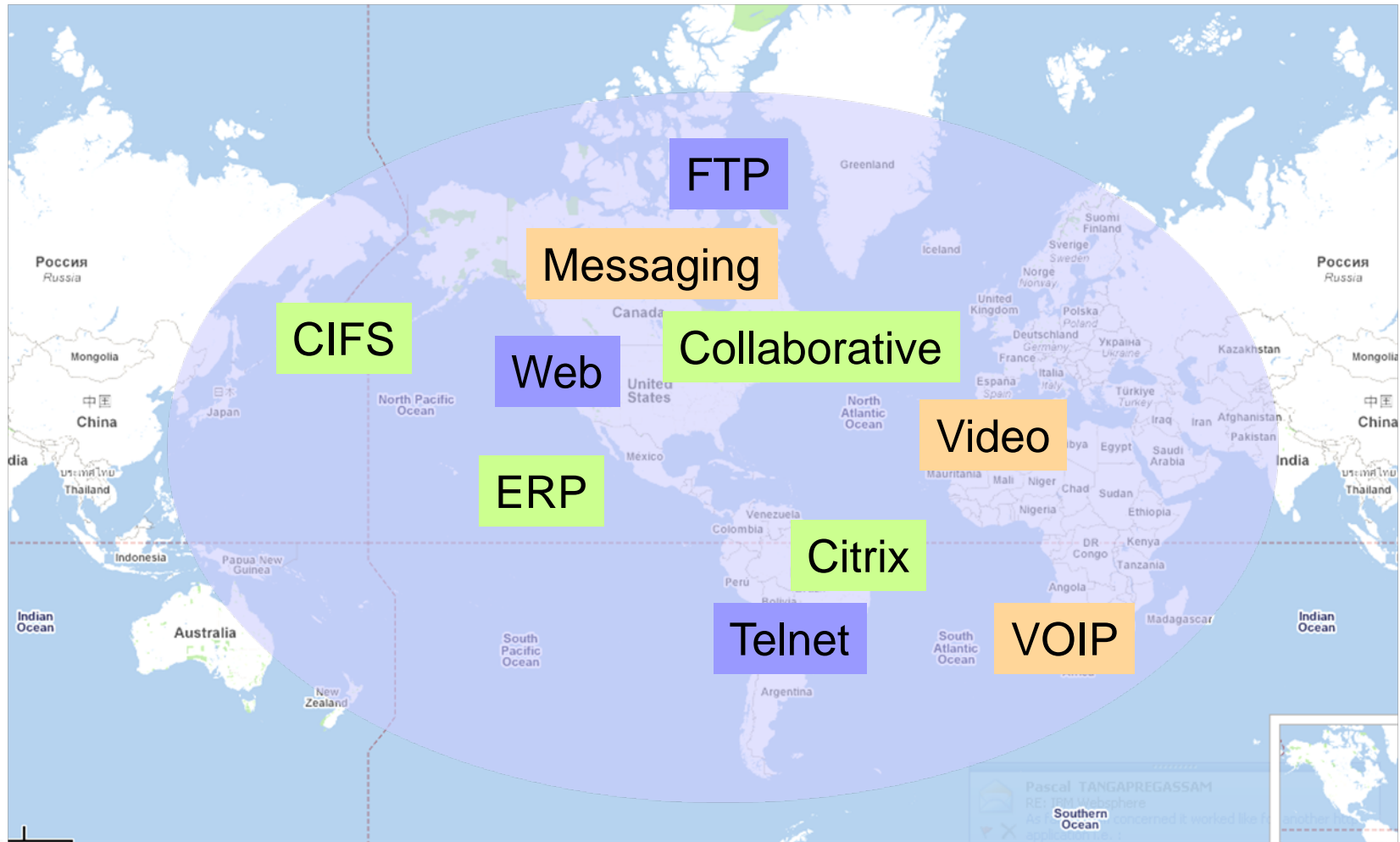


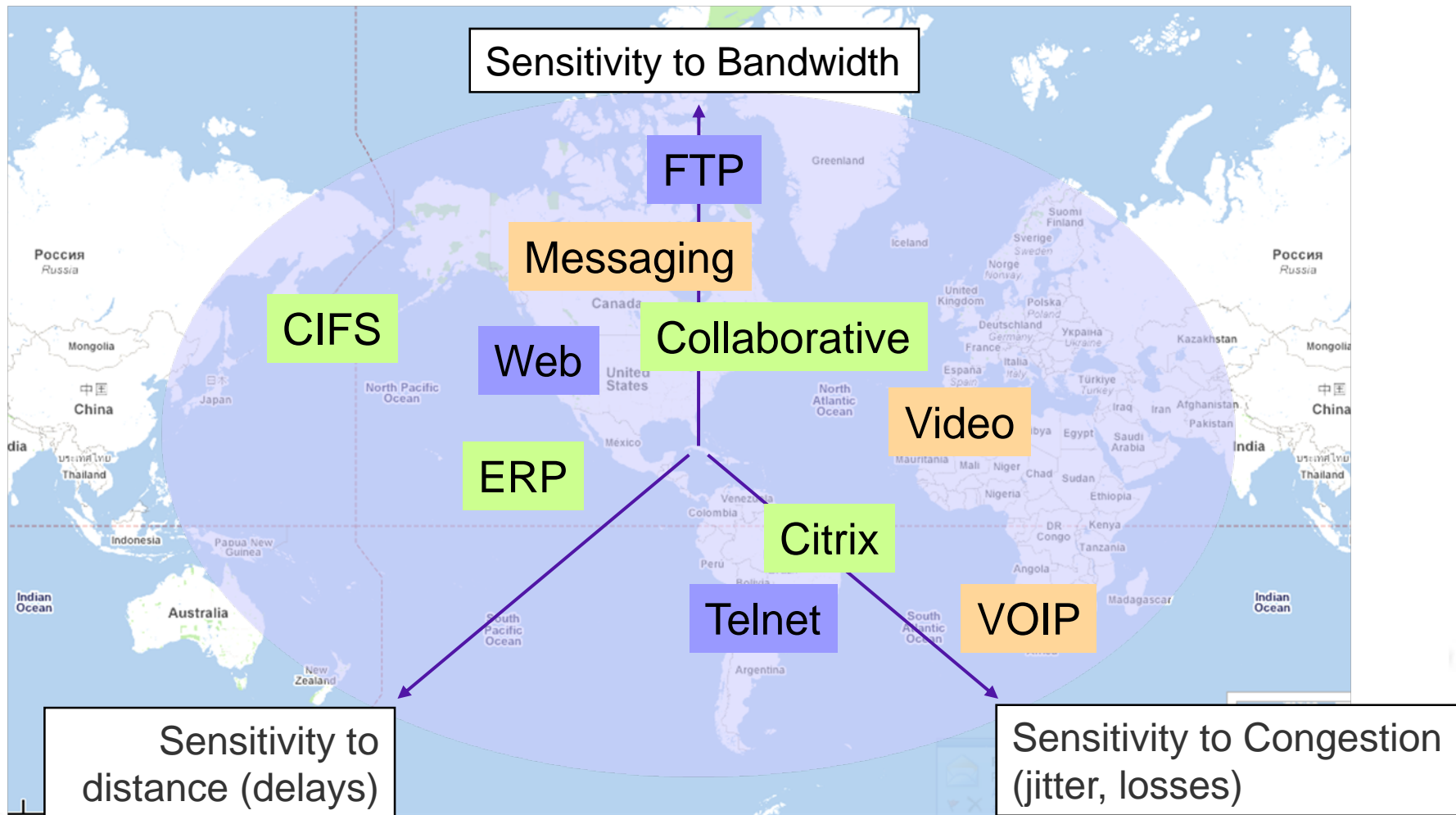
Challenges for Strategic WAN Optimization/WAFS Deployment over MPLS VPNs



The challenge: delivering appropriate and consistent quality of experience to the global workforce over an MPLS WAN

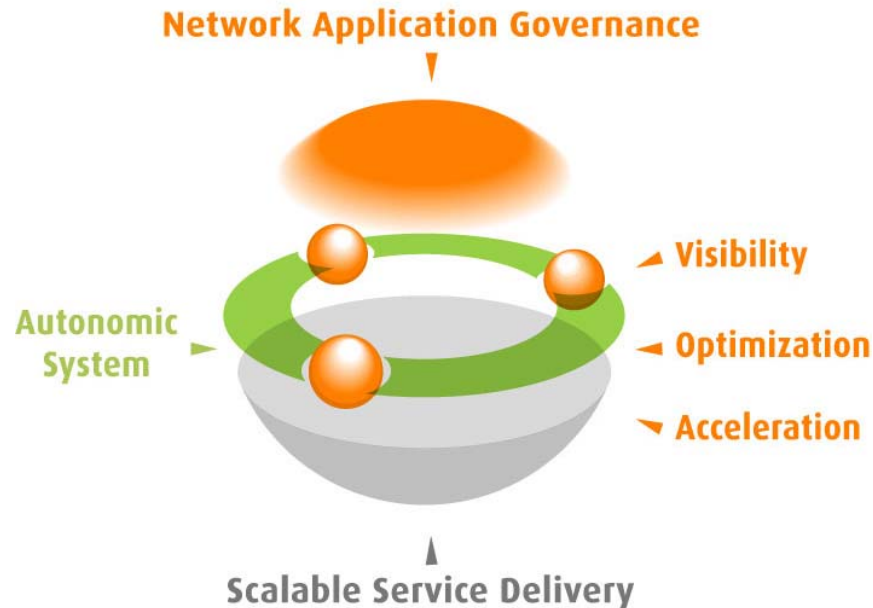


Competition among flows and the physics of networks directly affect application performance...



WAN Optimization addresses all 3 constraints for all apps

Beyond the legacy protocol band-aid: WAN optimization as a strategic enterprise tool



- ❑ Efficient in modern MPLS networks
- ❑ Unparalleled scalability
- ❑ Automated operations
- ❑ Global and tailored deployment capabilities
- ❑ All in one solution
- ❑ Accelerate while guaranteeing application performance
- ❑ Monitor end-user experience
- ❑ Network Application Governance

Unparalleled scalability: Ipanema customers are large organizations that have deployed WAN optimization as a global strategic tool

Customer	Number of devices	Number of managed sites	Domestic/ International
Pharmaceutical Leader	300+	300+	International
Europcar 	15+	1500+	International
SGS 	100+	700+	International
French Employment agencies 	2	1300+	Domestic
French Army 	500+	500+	Domestic

Efficient in modern MPLS networks: Ipanema manages and accelerates application flows dynamically and globally from User QoE objectives

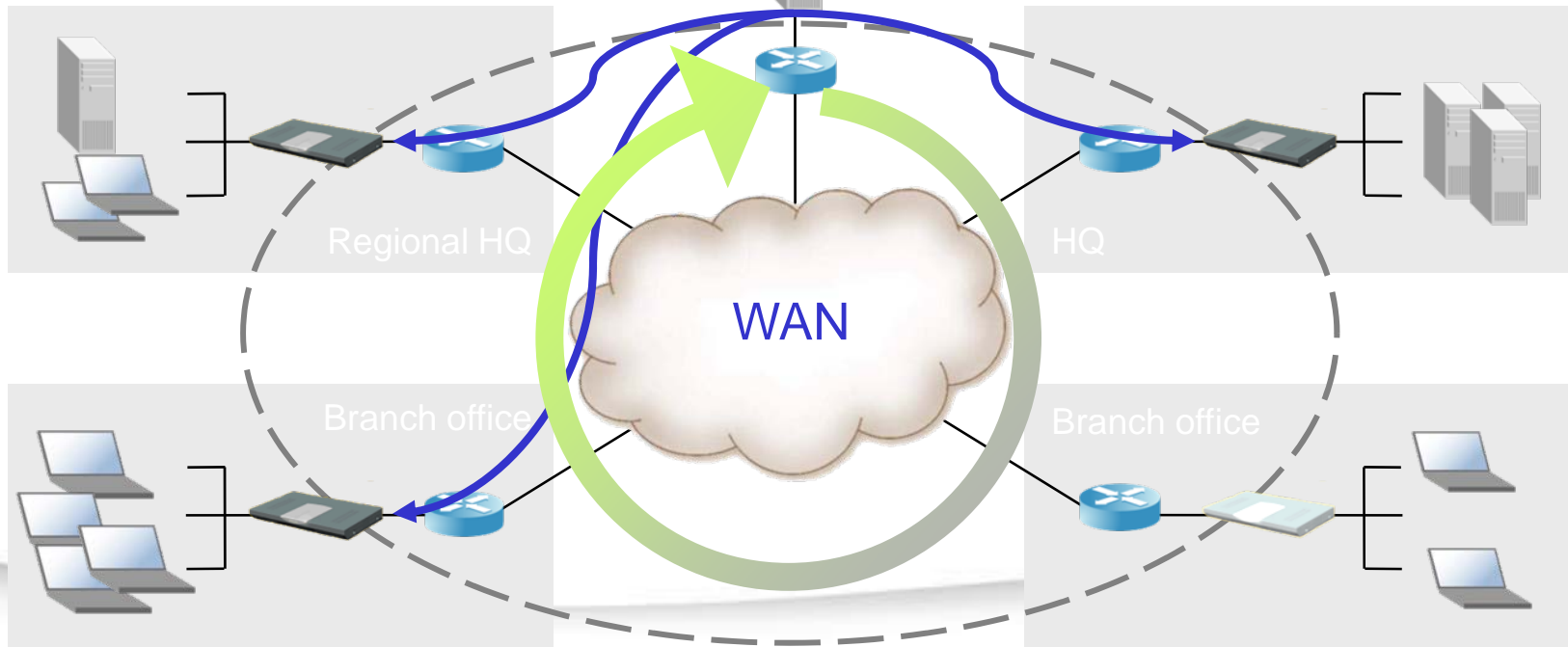
Global objectives

Key Applications		Performance Objectives	
Application	Priority	Latency	Throughput
VoIP	High	Low	High
Video (H.264)	High	Low	High
Web (HTTP)	Medium	Low	High
FTP	Low	High	High
Other	Low	High	High

Real-time traffic analysis



Automated global computation of local parameters every second

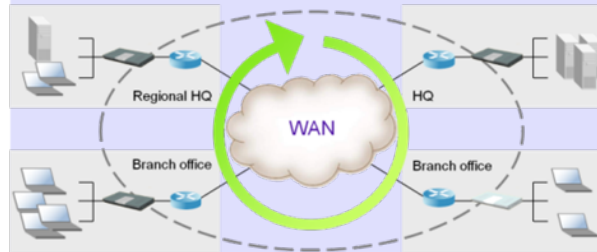


WAN optimization benefits as seen by enterprises

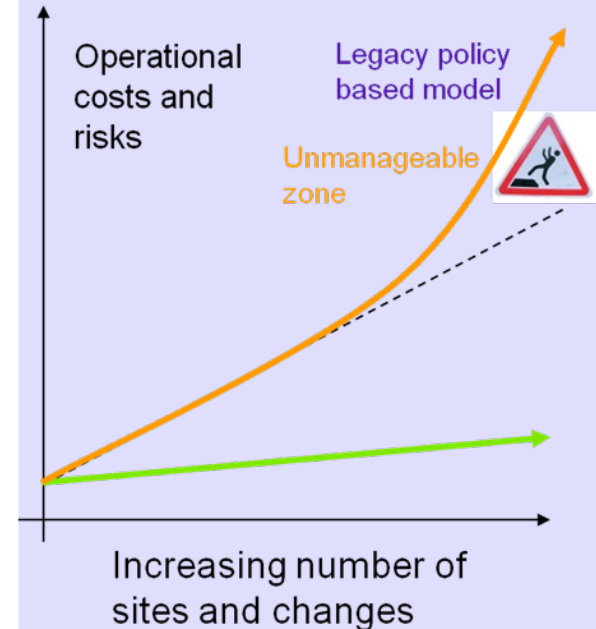
Global & simple management thru end-to-end Application performance objectives

Key Applications		Per User Service Level Definition Library			
Application	Criticality	Bandwidth (Kbps)	Delay (ms)	Jitter (ms)	Loss (%)
SAP	Top	20	100-300	nil	1-3
Citrix (CRM)	Top	20	100-300	nil	1-3
VoIP (G729)	High	20	50-150	40-60	0-1
Oracle	High	20	100-300	nil	1-3
Citrix (MS Office)	Medium	20	100-300	nil	1-3
Web (http://intranet*)	Medium	20	200-1000	nil	1-5
Other	Low	20	200-1000	nil	1-5
FTP	Low	10	200-1000	nil	1-5
CIFS	Low	10	200-1000	nil	1-5
Email	Low	10	200-1000	nil	1-5

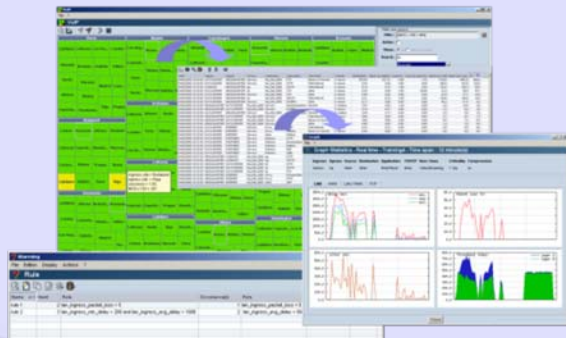
Global dynamic Optimization and Acceleration



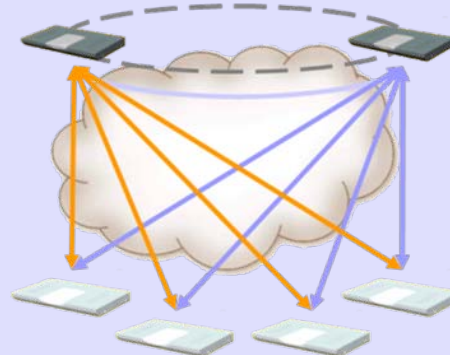
Objective based control yields lowest TCO & eliminates black art



Global visibility for reporting and helpdesk



Cooperative Tele-Management for cost effective deployment

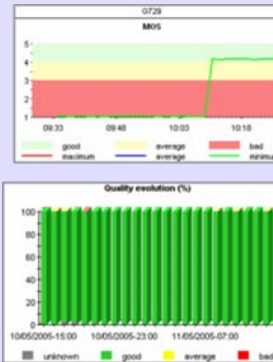


Additional benefits as seen by NSPs

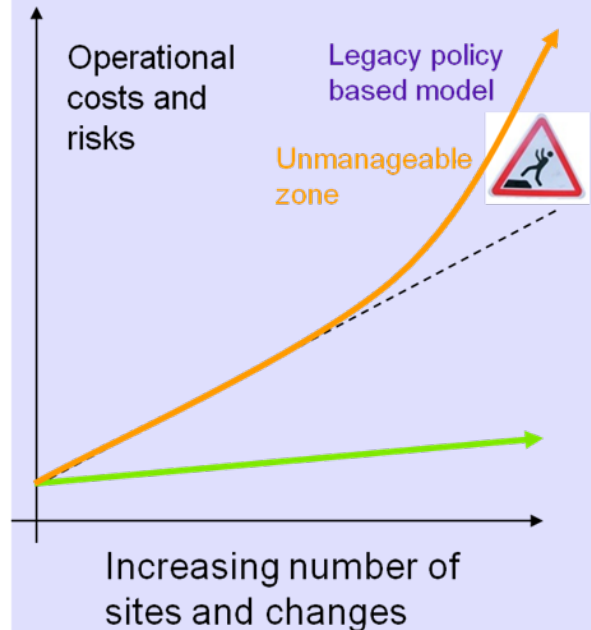
Co-managed services
thru end-end
performance objectives

Key Applications		Per User Service Level Definition Library			
Application	Criticality	Bandwidth (Kbps)	Delay (ms)	Jitter (ms)	Loss (%)
SAP	Top	100-300	nil	1-3	1-3
Citrix (CRM)	Top	100-300	nil	1-3	1-3
VoIP (G729)	High	20	50-150	40-60	0-1
Oracle	High	20	100-300	nil	1-5
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Other	Low	10	200-1000	nil	1-5
FTP	Low				
CIFS	Low				
Email	Low				

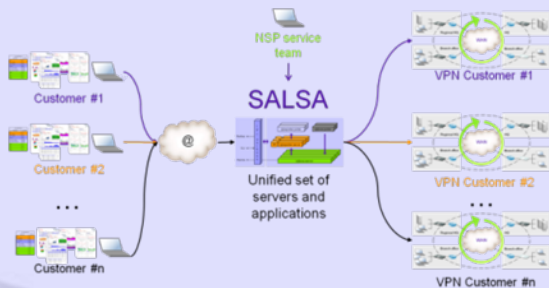
Application SLAs:
Voice (MOS) & Data (AQS)



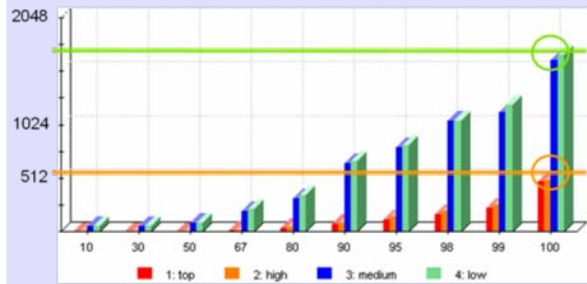
Objective based control
reduces operational costs
for highest service profitability



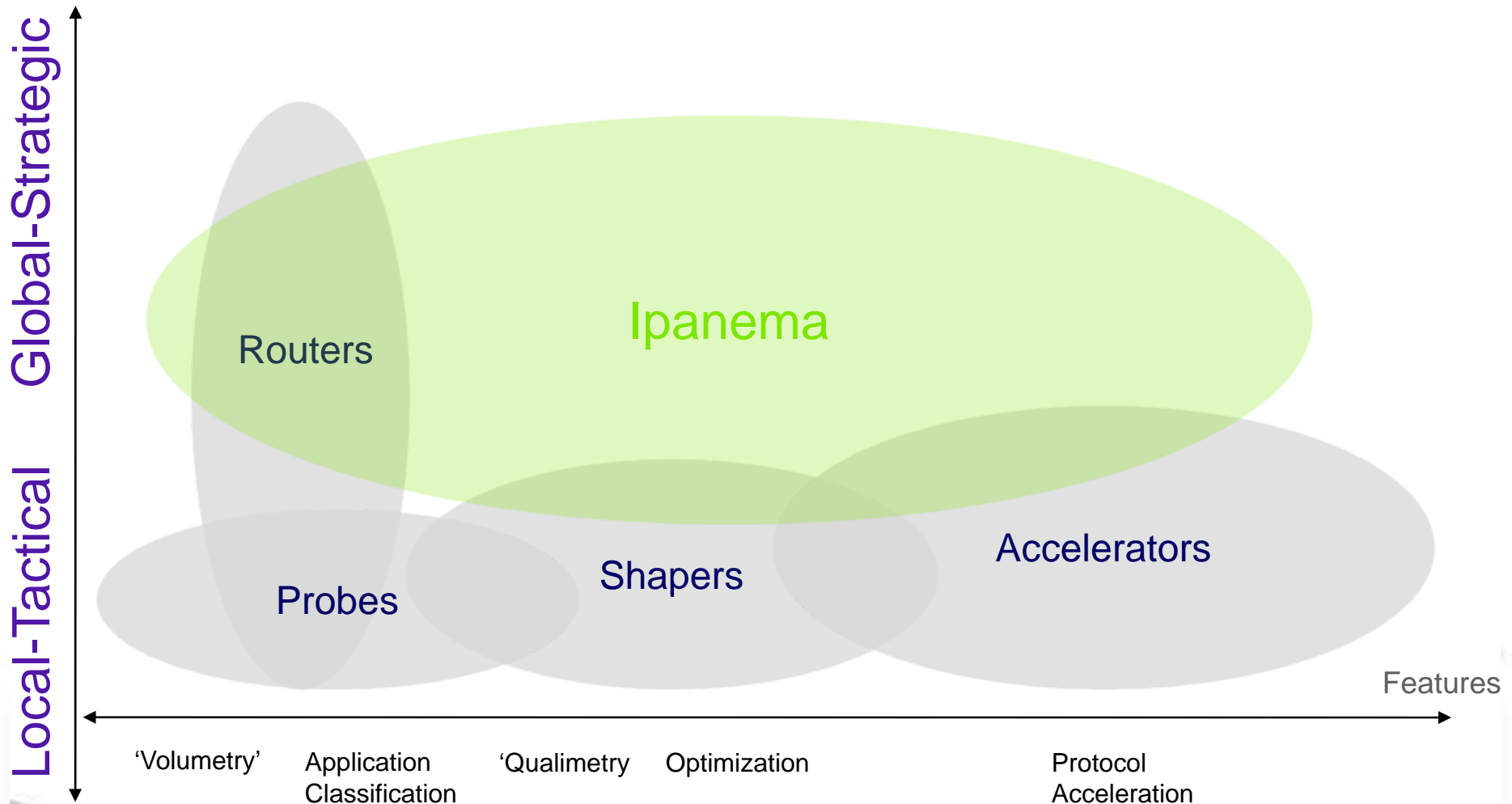
Unified multi-customer platform
for scalability, simplicity and
repeatability



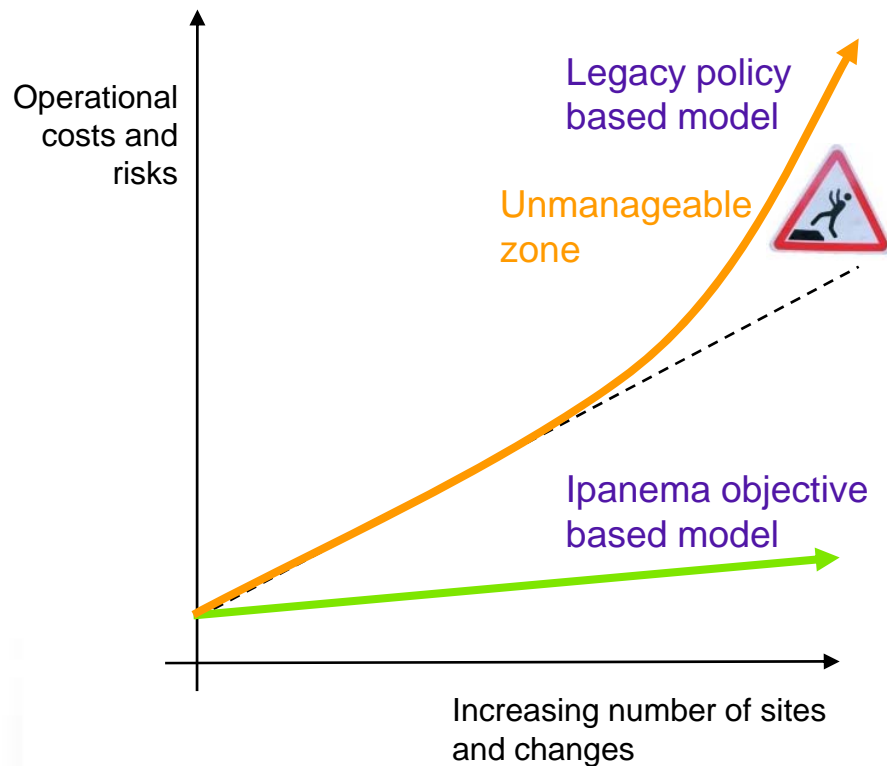
Rightsizing for trust
and SLA guarantee



Ipanema offers the best feature set for global and strategic application-aware services



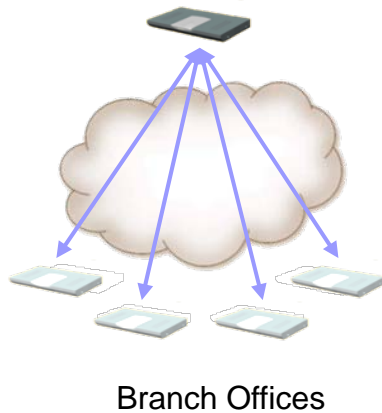
Automated operations: simplifies change management, accelerates operations and minimizes TCO



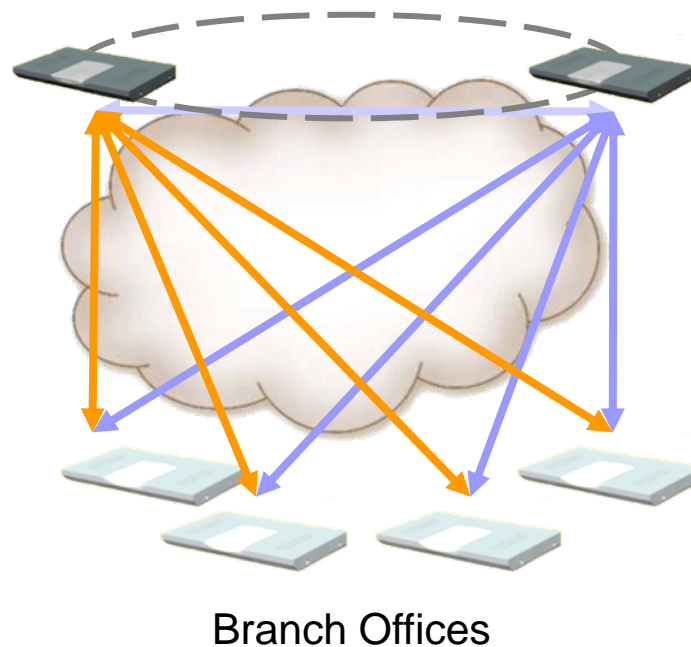
WAN changes	Ipanema operations
The number of users of SAP in London offices increase by 20%	Automatic
An application is migrated from principal to secondary datacenter	Automatic
A new CRM is launched in the network	Create centrally a new Application Performance Objective and click "update"
The company opens a site	Create centrally a new site and click "update"
Deny globally a new recreational application	Create centrally a new objective at 0 kbps and click "update"

Deploy devices only where needed, rather than simply swapping branch servers for WAFS BOBs

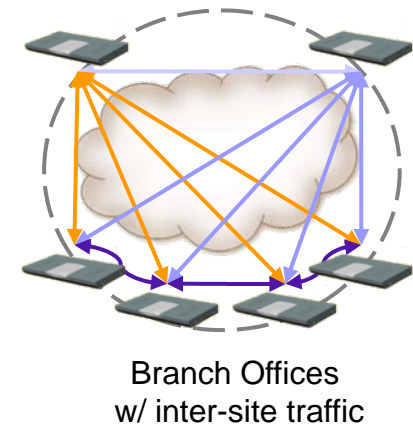
One to Any
Single Data Center






Some to Any
Multiple Data Centers



Any to Any
Multiple Data Centers



-  Tele-managed site (unequipped)
-  Physical device
-  Real-time cooperation

The features of an all-in-one solution for good end user QoE

▣ Visibility

- ▣ Understand how applications are using the network
- ▣ Understand how applications are performing over the WAN

▣ Optimization

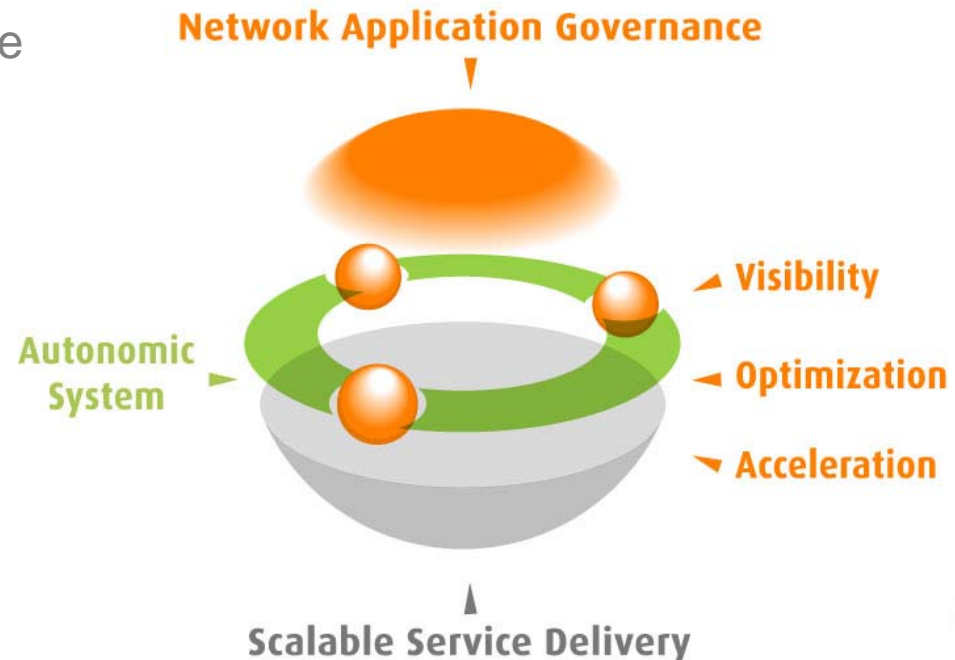
- ▣ Guarantee that users get their share of network resources in a consistent fashion

▣ Acceleration

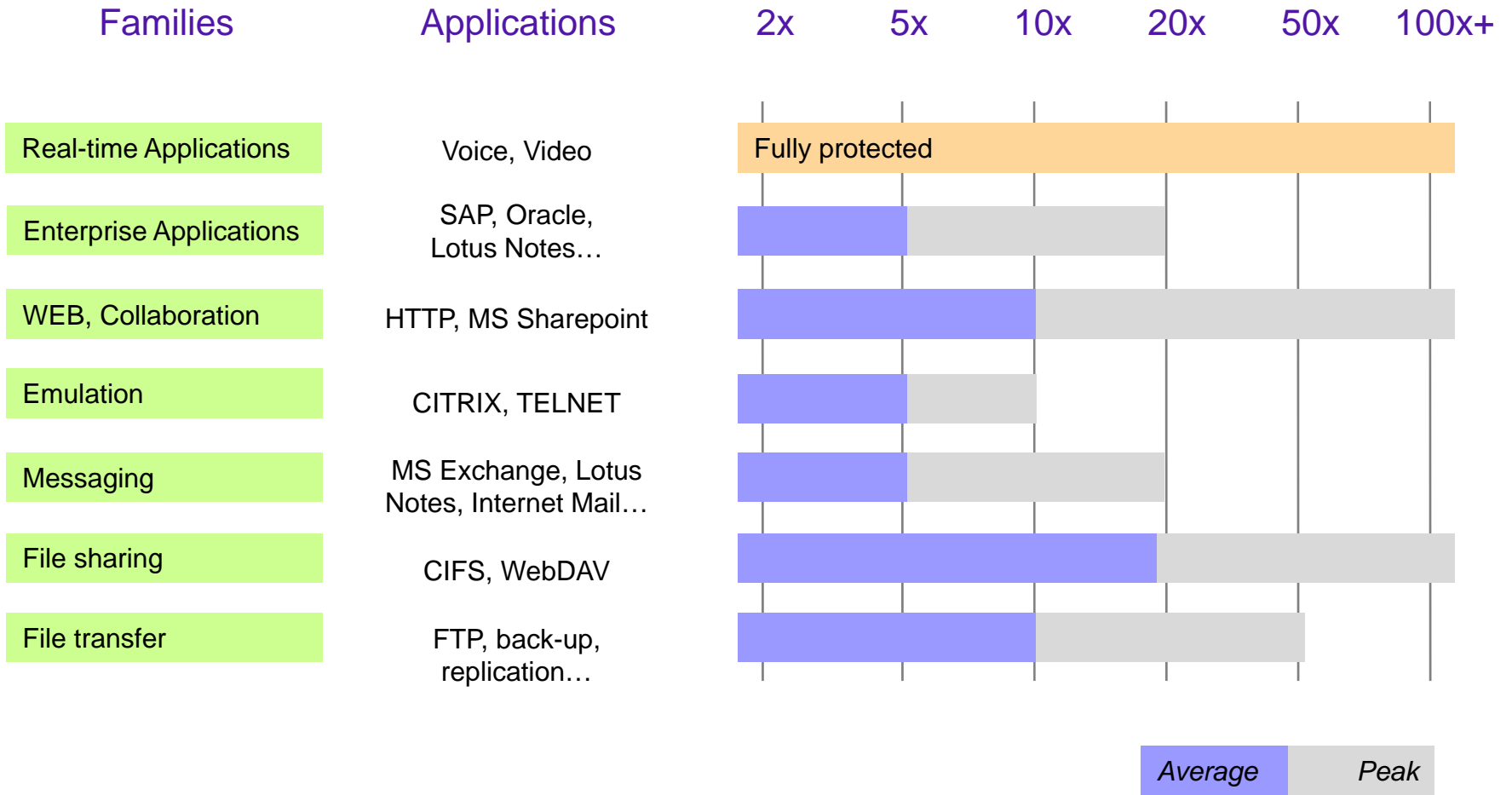
- ▣ Reduce response time of bandwidth hungry or chatty applications

▣ Network Application Governance

- ▣ Higher level WAN Optimization functions for Application Performance Management

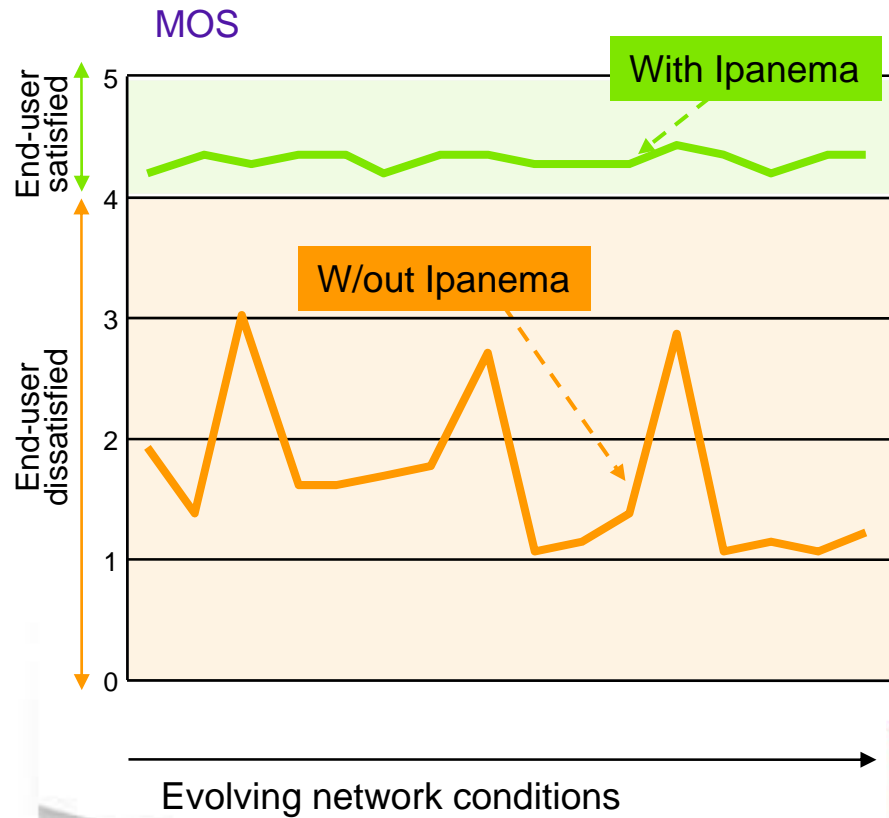


Accelerate...

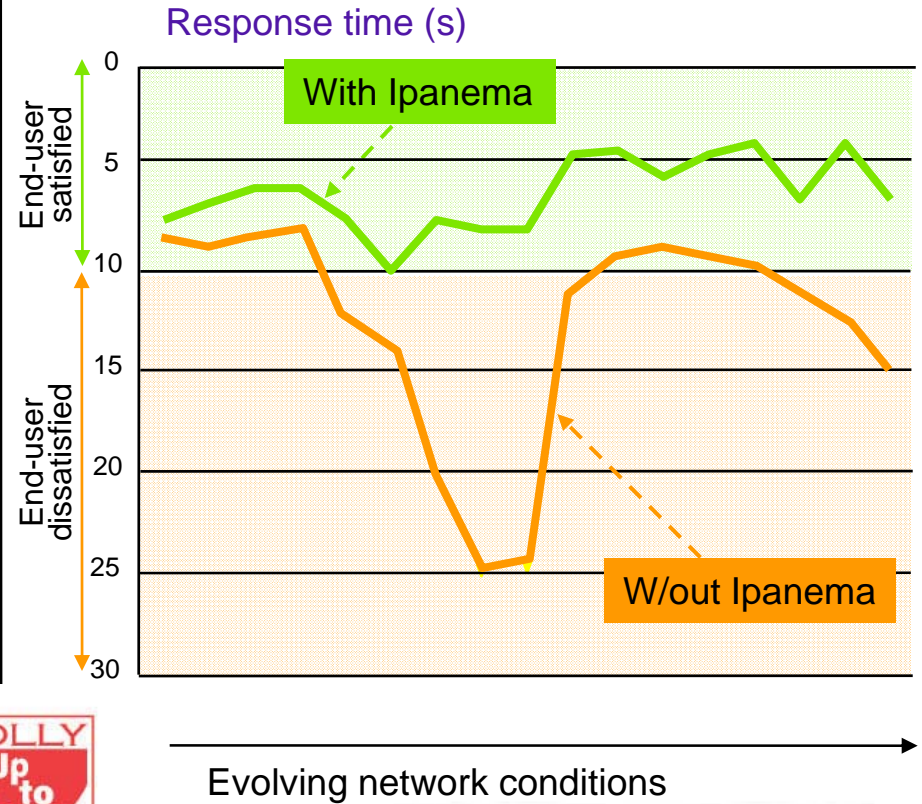


... while guaranteeing application performance, under all conditions

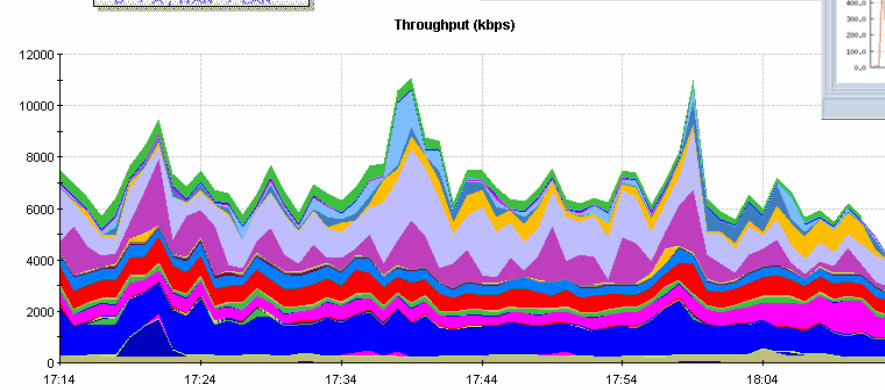
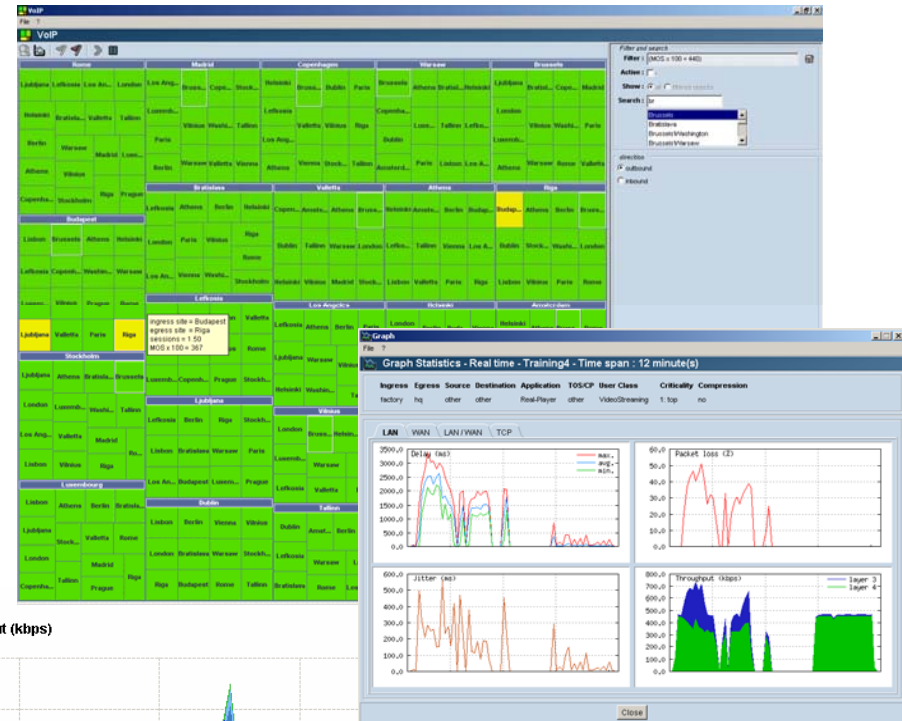
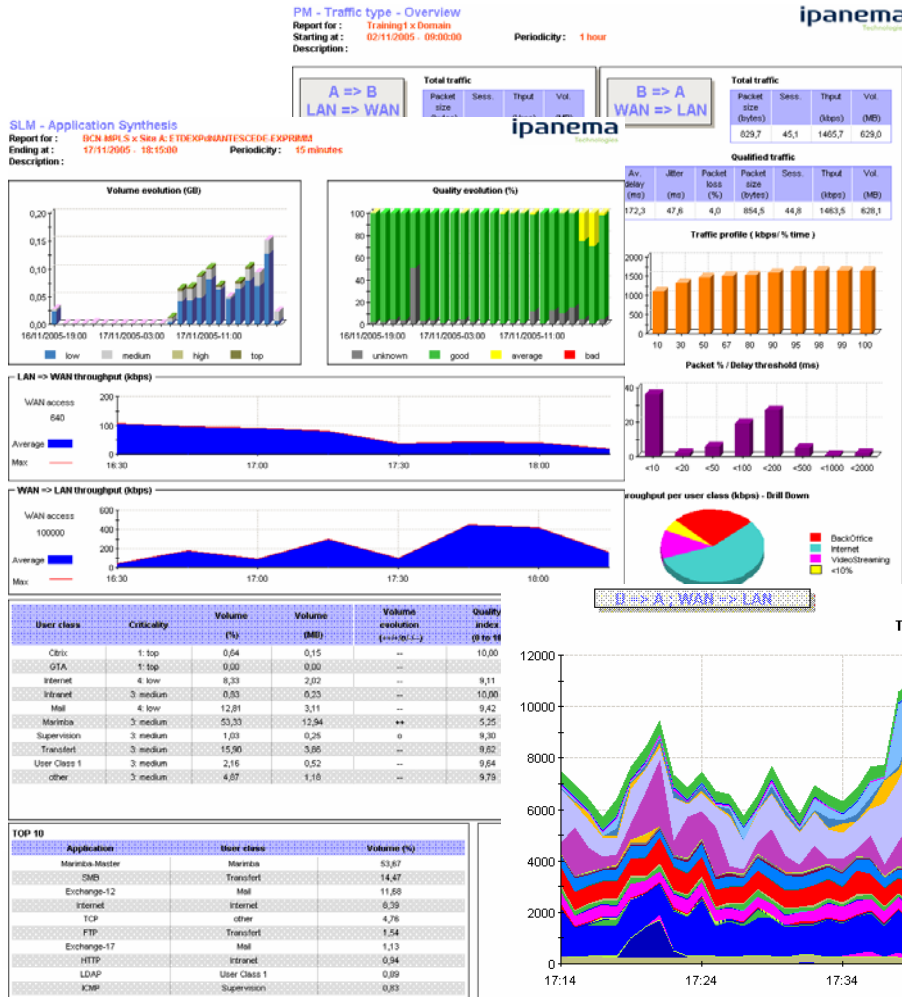
Example of performance of VoIP calls with and without Ipanema



Example of performance of an HTTP based business application with and without Ipanema



Centrally monitor end-user QoE: automated application discovery, bird's eye views, alarming and drill down, usage and performance reporting

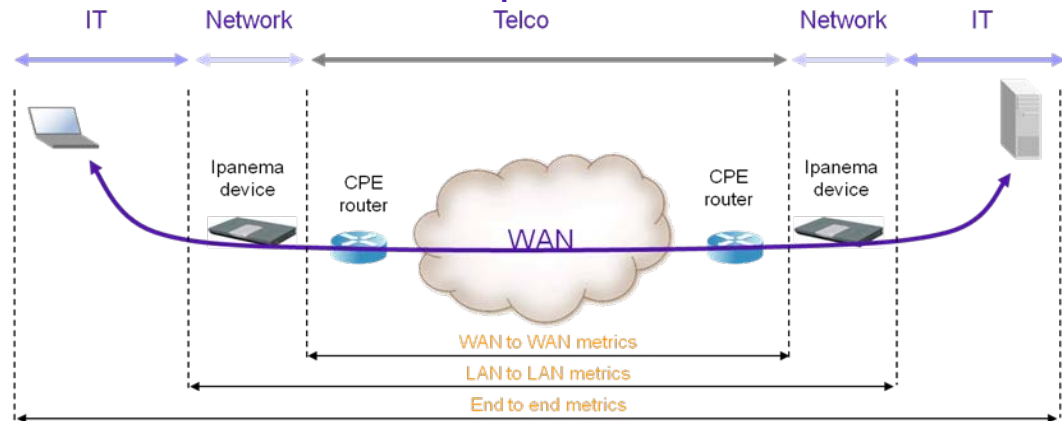


Network Application Governance: higher level functions that leverage automation and global control

Define, monitor and enforce Application SLAs

Key Applications		Per User Service Level Definition Library			
Application	Criticality	Bandwidth (Kbps)	Delay (ms)	Jitter (ms)	Loss (%)
SAP	Top	10	100-200	ms	1-3
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FTP	Low	10	200-1000	ms	1-5
CIFS	Low	10	200-1000	ms	1-5
Email	Low	10	200-1000	ms	1-5

Allocate responsibilities between WAN and IT components



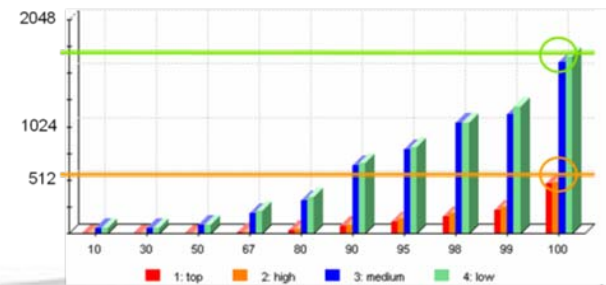
Intelligently chargeback

Allocation per sites and B.U. Weighted Business criticality Real delivered quality

Departments	Volume (Gbytes)	Criticality Index	AQS/MOS Index	(K€)
Finances	4 351	0.55	0.88	283
Sales & Marketing	1 211	0.43	0.92	64
R&D	5 933	0.28	0.77	173
Manufacturing Europe	18 285	0.32	0.93	736
Manufacturing RoW	23 335	0.40	0.92	1 154
Common services	17 733	0.72	0.69	1 190
Total	70 848	0.46	0.85	3 600

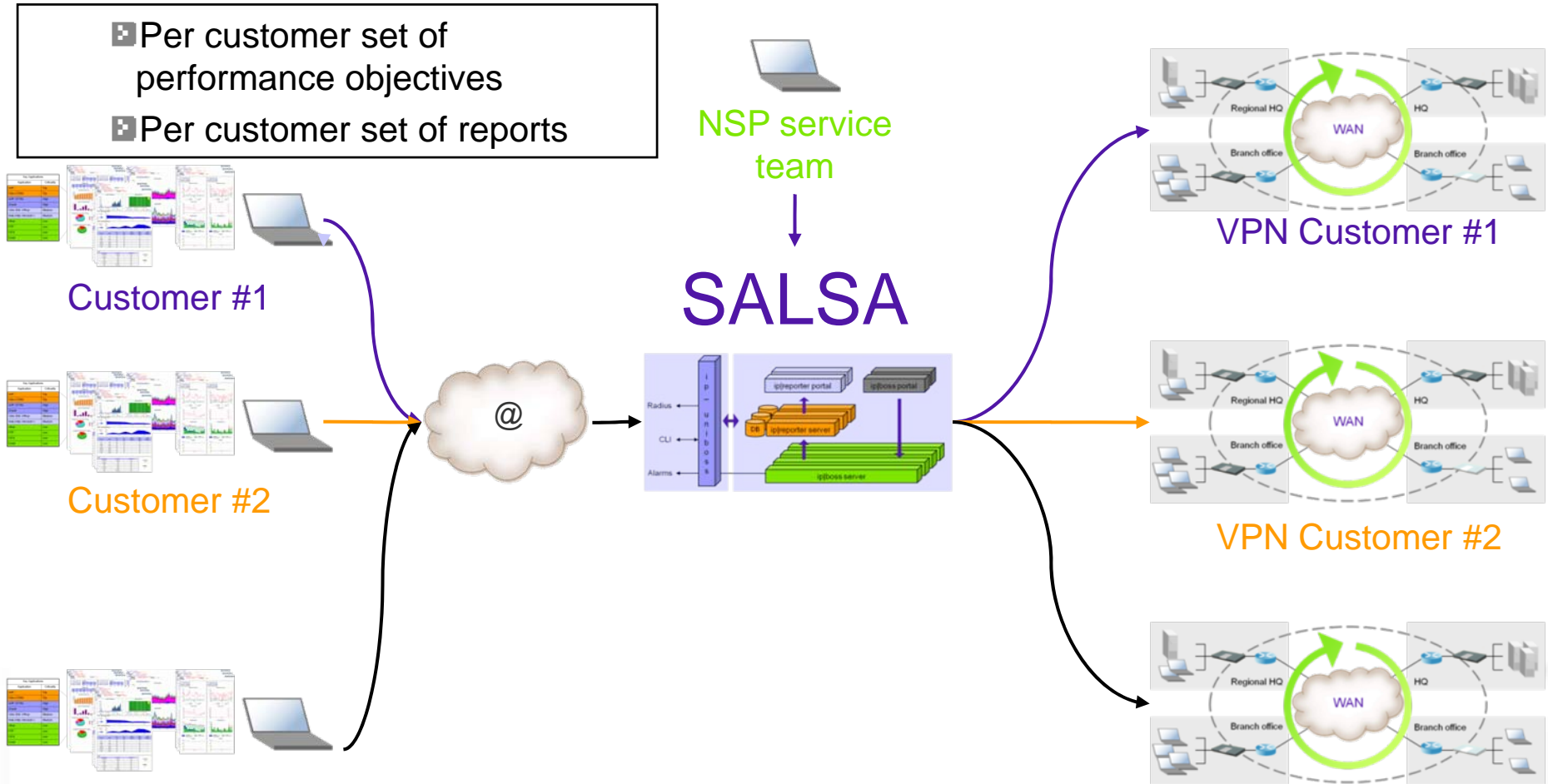
Regions	Volume (Gbytes)	Criticality Index	AQS/MOS Index	(K€)
Asia	22 412	0.51	0.91	1 296
Europe	25 603	0.54	0.74	1 269
North America	22 832	0.40	0.91	1 035
Total	70 848	0.46	0.85	3 600

Plan your WAN according to SLAs



ipanema
Technology

Unified multi-customer platform for scalability, simplicity and repeatability



Q & A

Thanks for your time

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