



FEATURES  
& BENEFITS

## Application Visibility Features & Benefits

### The Autonomic Networking

**System™ (ANS™)** links application performance over the network with the enterprise's business goals.

Self-learning, self-adapting and self-healing, ANS offers tightly coupled features that together bring a unique level of intelligence to the enterprise network:

- **Application Visibility** provides full understanding of application usage and performance over the global network - from the smallest detail up to SLA-based application performance management;
- **Application Control** dynamically adjusts network behavior and resources to the exact application traffic demand - guaranteeing critical application performance in the most complex and changing traffic situations;
- **WAN Optimization** accelerates application response times and offers additional virtual bandwidth to the network;
- **Dynamic WAN Selection** enables Dynamic Hybrid Networking for multi-networked branch offices, selecting in real-time the best path according to actual performance and application traffic characteristics.

### OVERVIEW

In order to guarantee the performance of business applications, an enterprise's IT organization needs in-depth understanding of its applications ecosystem. This requires full visibility on application usage and quality of performance, and the ability to communicate outcomes to internal stakeholders during all steps of implementation and running modes:

**During Rollout:** Assess network readiness and the impact of a new application. Track the deployment, confirm assumptions and adapt accordingly.

**In Run Mode:** Continuously monitor real application usage and performance, from a **high-level SLA dashboard** view to very detailed I information. Communicate to business-lines actual results against the expected internal SLA.

**In Incident Management:** Detect problems before end-users have a chance to complain.

**During Budget and Capacity Planning:** Justify network upgrades with documented facts and propose a scenario aligned with business objectives.

**Application Visibility** is fully integrated with other Ipanema system features as the first step for enterprises to regain control over their network. It enables IT to establish application performance baselines and verifying the benefits of each Ipanema features.

### WHY IPANEMA IS RECOGNIZED AS THE LEADING SOLUTION <sup>(1)</sup>:

- **Comprehensive set of reports:** from CxO dashboards to deliver a high-level overview of network and applications conditions down to very detailed insights into real-time traffic flows
- **Highly granular to aggregated data views:** analyze data based on the whole organization, business lines, geographies, sites, applications or group of applications
- **Application Quality Score (AQS):** unique scoring can be used as a common KPI applicable to all applications to report end-user experience and alignment with Business Objectives
- **All IP packets are measured:** measurements are made on the actual data packets, and not on samples of packets or simulated flows
- **Cost-effective:** the Ipanema system does not require equipping all network sites to view application usage and performance over the network
- **Scale to all network sizes:** Ipanema's central management platform and automatic on-boarding process allows to manage thousands of sites as one single

### HOW IPANEMA'S APPLICATION VISIBILITY WORKS

The Ipanema system identifies applications and computes metrics for all IP packets that go through physical or virtual network our devices deployed in your data centers and the branch offices. The data are collected and stored centrally to be delivered

(1) *Gartner Magic Quadrant 2012: Ipanema has "Unmatched scalability for visibility and application SLAs, proved in large and complex network deployments."*



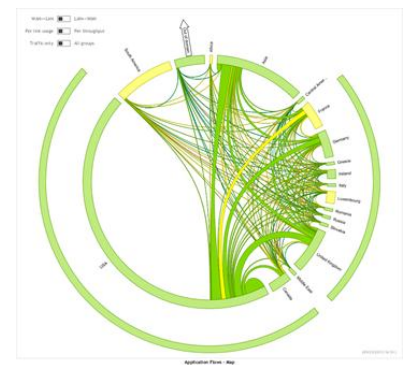
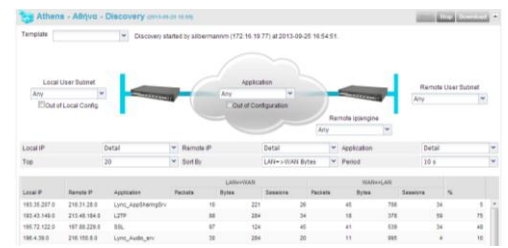
## FEATURES & BENEFITS

through real-time and historical web-based reports. Ipanema's Application Visibility is achieved with:

- **Deep Packet Inspection:** Recognizes and classifies all business and recreational applications, on premises or in the cloud (Layer 7).
- **Network Metrics:** Measures activity (throughput, sessions ...) and performance metrics (one way delay, jitter, loss, RTT...) for each application flow from WAN-to-WAN and LAN-to-LAN.
- **Application Quality Score:** Ipanema's unique scoring a tool enables enterprises to see how application performance is perceived by end users and how it is aligned with business. The score is a weighted mean computed by the Ipanema system by comparing measured metrics with predefined Application Performance Objectives (APOs). In addition, the Ipanema system provides MOS measurement, which is the standard for Voice codecs.
- **Usage and Service Level Metrics:** Measures volumes per application, quality evolution, and % of the time when a given SLA is met by site and by application.
- **Real-Time Dashboard:** Provides an instantaneous view of network and application conditions. **Historical reports** can also be viewed with aggregation of data per month, per week, per day or per hour.
- **Metaviews and Tags:** Enables aggregating reports and network views by grouping sites and applications, which is particularly useful for complex network environments.
- **Troubleshooting Tools:** Expedites incident resolution by showing in real time which flows run from any site to any other and the associated metrics.
- **Cloud Applications Monitoring:** Provides a powerful set of reports, including application usage and quality metrics, to specifically monitor the performance and differentiate issues between networks and SaaS providers (servers) and network impact of cloud providers.
- **Service-Activity Monitoring:** Provides performance indicators as part of the Ipanema system's integrated Application Control and WAN Optimization features.
- **Application Flows Map:** a revolutionary real-time bird's eye view that enables top-down approach for understanding flows topologies, very useful for understanding Peer-to-Peer flows such as Unified Communications.
- **Manageability:** our system includes backup & restore capabilities, as well as export functions to standard office tools. Alarms can also be defined (email, trap)
- **Information Protection and Confidentiality:** the contents of user packets are not, at any time, stored, saved or even transmitted between the different system components.



Site	Web		MSSQL		FTP		SIP		App. %	APL %	QoS	Avg. Latency	Max. Latency	Jitter	Loss	RTT	MOS	SLA	
	Usage	AQS	Usage	AQS	Usage	AQS	Usage	AQS											
Athens - Athens	2.05Mpps	65%	2.05Mpps	10%	2.05Mpps	15%	2.05Mpps	10%	100%	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Amsterdam	2.05Mpps	10%	2.05Mpps	15%	2.05Mpps	15%	2.05Mpps	10%	100%	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Barcelona - IPN	4.10Mpps	15%	4.10Mpps	10%	4.10Mpps	15%	4.10Mpps	15%	100%	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Beijing - B2F	2.05Mpps	15%	2.05Mpps	15%	2.05Mpps	15%	2.05Mpps	15%	100%	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Berkeley	2.05Mpps	15%	2.05Mpps	15%	2.05Mpps	15%	2.05Mpps	15%	100%	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Boston	2.05Mpps	15%	2.05Mpps	15%	2.05Mpps	15%	2.05Mpps	15%	100%	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Chicago - M2F	2.05Mpps	15%	2.05Mpps	15%	2.05Mpps	15%	2.05Mpps	15%	100%	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Frankfurt	2.05Mpps	15%	2.05Mpps	15%	2.05Mpps	15%	2.05Mpps	15%	100%	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25



## BENEFITS

**For the enterprise as a whole:** Increase IT organization maturity and contribution to the Business with stronger processes of Communication and Governance. Enable decision making on documented facts and measured outcomes during steering committees, SLA reviews and budgetary exercises.

**For the IT organization:** Streamline operations and project workloads. Reduce helpdesk calls and staffing requirements. Reduce the network team's Mean-Time-To-Innocence (MTTI), improving the reputation of IT as a whole within the enterprise.

**For the end-user:** Improve end-user experience by proactively detecting application performance issues before helpdesk calls. Troubleshoot helpdesk calls in real time, expediting root-cause resolutions.