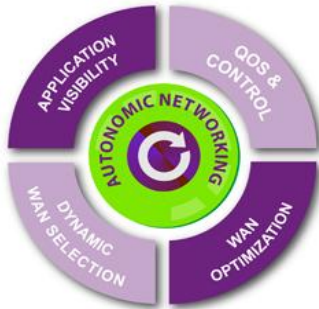
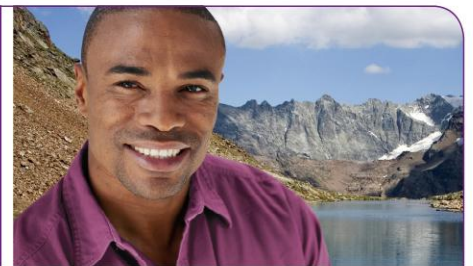


# Product Datasheet

## Beyond the Network...



### IPANEMA'S STACK ARCHITECTURE

**Ipanema's Stack** clustering architecture for Ipanema's ipEngines allows enterprises to scale Application Visibility, QoS, Control and WAN Optimization up to 8 Gbps throughput on WAN links. Both international and domestic organizations in the private and public sectors can deploy **Ipanema's Stack** to get full control of their very large datacenters and deliver guaranteed quality of experience to thousands of users through their global network. Implementing global WAN Governance is now possible, even for the largest network and datacenter architectures.

**Ipanema's Stack** architecture leverages industry standard EtherChannel port trunking technology, enabling both high capacity and high availability ipEngine appliance deployments.

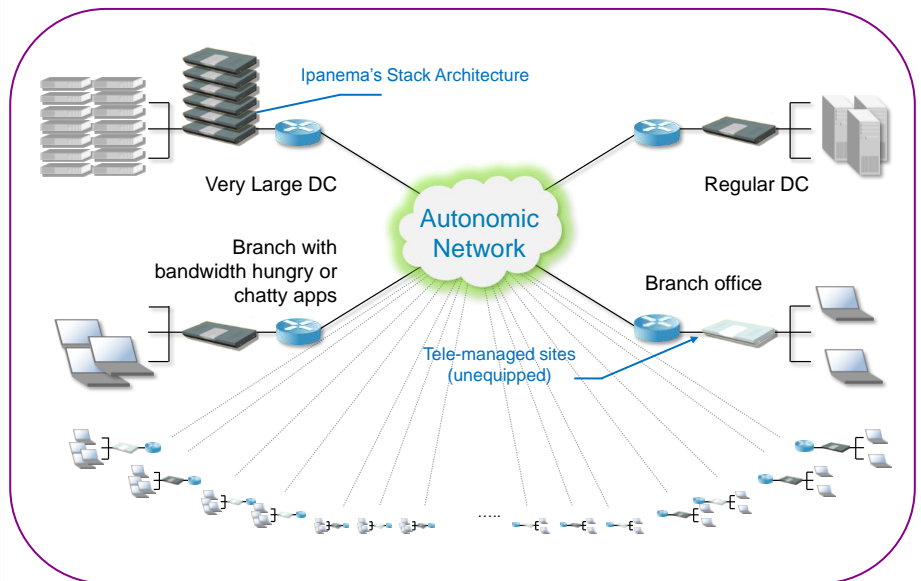
This deployment option can manage up to 8 Gbps on WAN links using up to 8 active ipEngine 1800ax. The architecture supports high availability with 1 to 8 additional ipEngines deployed as hot backups.

Through intelligent coordination, the ipEngines in the cluster behave like one big device. All the benefits of Ipanema's unique Autonomic Networking system, including Application Visibility, QoS and Control and WAN Optimization are delivered seamlessly in very large datacenter environments.

**Ipanema's Stack** architecture leverages Ipanema's unique Autonomic Networking architecture that allows for automated, intelligent coordination between appliances. Appliances in a cluster constantly collaborate to manage the traffic they handle, behaving as if they were a single unit.

Ipanema's Autonomic Networking System is at the heart of our ability to connect the network infrastructure to the enterprise's business goals. Self-learning, self-adapting and self-healing, the Ipanema System offers tightly coupled features that together bring a unique level of intelligence to the enterprise network:

- ❑ **Application Visibility**, providing full understanding of application usage and performance over the global network - from the smallest detail up to high-level SLA-based application performance management and capacity planning,
- ❑ **QoS & Control**, dynamically adjusting network behavior and resources to the exact application traffic demand - guaranteeing critical application performance in the most complex and changing traffic situations,
- ❑ **WAN Optimization**, accelerating application response times and offering additional virtual bandwidth to the network,
- ❑ **Dynamic WAN Selection** for multi-networked branch offices, automatically selecting the best network according to actual performance and application traffic characteristics in real time.



# Product Datasheet

## Beyond the Network...

### IPANEMA'S STACK FEATURES

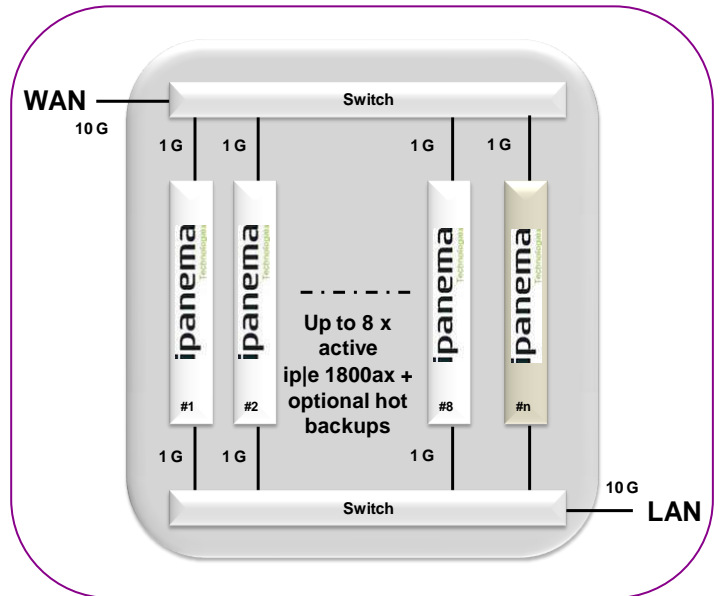
Using **Ipanema's Stack** all the applications are classified up to layer 7 enabling the distinction between business critical and non business critical traffic.

A total visibility is obtained for all the datacenter flows both for usage and quality information.

Dynamic global Quality of Service (QoS) is applied on each individual session.

Chatty or bandwidth hungry applications are accelerated using a central disk cache of up to 18 Terabytes.

Working in synergy with TCP acceleration and application specific acceleration such as CIFS, Ipanema's redundancy elimination can deliver state of the art response time reduction to support the largest server consolidation or datacenter replication initiatives.



### IPANEMA'S STACK CONFIGURATIONS

**Ipanema's Stack** architecture supports up to 8 active ip|engine 1800ax to manage up to 8 WAN Gbps links and up to 1.2 Gbps accelerated/compressed throughput.

**Ipanema's Stack** leverage the industry proven EtherChannel port trunking technology and can be used with either IEEE 802.3ad Link Aggregation Control Protocol (LACP) or CISCO Port Aggregation Protocol (PAgP).

A pair of mid range CISCO switches like the Catalyst 3750E can be used to build the stack.

Up to 8 additional ip|engines can be added to the stack to behave as hot spares. When an active ip|engine fails the stack automatically detects it and one of the spare ip|engine is immediately used to ensure service continuity.

Ipanema's Stack configuration examples	Total WAN Capacity	Acceleration WAN Capacity	LAN Interfaces	Memory	Format
2 x ip e 1800ax	2 Gbit/s full duplex	310 Mbit/s full duplex	10GBASE-T	4.5 Tb disk	Rack 6U
4 x ip e 1800ax	4 Gbit/s full duplex	620 Mbit/s full duplex	10GBASE-T	9 Tb disk	Rack 10U
6 x ip e 1800ax	6 Gbit/s full duplex	930 Mbit/s full duplex	10GBASE-T	13,5 Tb disk	Rack 14U
8 x ip e 1800ax	8 Gbit/s full duplex	1.24 Gbit/s full duplex	10GBASE-T	18 Tb disk	Rack 18U