

Cloud Services Connectivity

- SPARKLE | IP&DATA
- SPARKLE CLOUD & DATA CENTER
- SPARKLE | CORPORATE
- SPARKLE | MOBILE
- SPARKLE VOICE



Sparkle Overview

- A LEADING GLOBAL OPERATOR with an unparalleled experience and know-how in a multiplicity of
 diverse markets, Sparkle, with its IP&Data, Cloud & Data Center, Corporate, Mobile and Voice
 Platforms, actively takes part in the development of worldwide communications, providing the best
 global connectivity solution to Fixed and Mobile Carriers, ISPs, OTTs, Media & Content Players,
 Application Service Providers and Multinational Corporations, before they know they need it
- Wholly owned subsidiary of TIM Group created in 2003 with the objective of developing the
 international wholesale and the retail multinational corporate businesses, as well as of supporting
 TIM Group business units for the provisioning of International Service

Company Data

Headcount

753

Countries of presence

37

Network coverage

#PoPs 122

PoPs via partners

> 1,000

Key figures

Voice Traffic

14.5 Bn minutes

Revenues

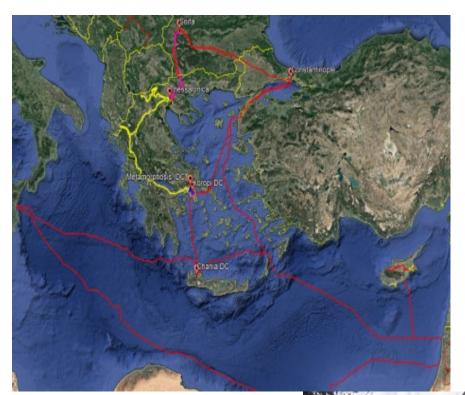
1.4 Bn €



Greece Network and DCs





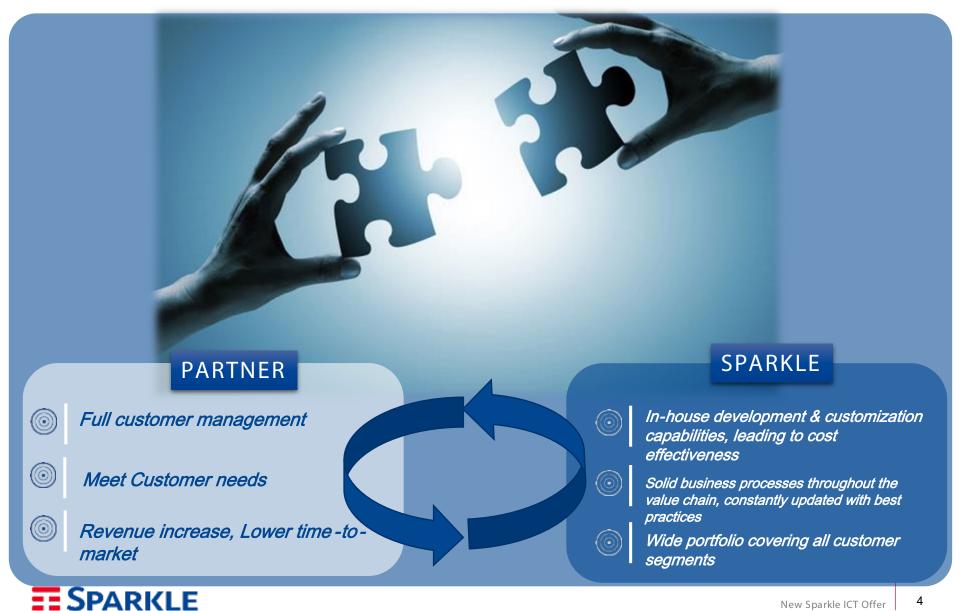








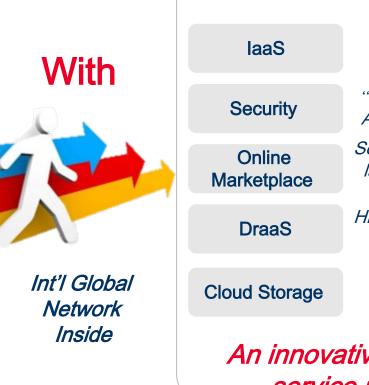
Cooperation & Partnership



Cloud & Data Center Solutions

Data Center 6 DC Hubs Colocation Worldwide Located Best Technology in Power the Market Everything you need to Cabling be connected Colo Data Center *360*° **Professional** Support **Services**

A modern DC born to offer Telco and MNC's services



Cloud

Scalable and Flexible

"Best of Breed" Strong
Authentication Service

Self-Management white label marketplace and Advanced SaaS High business agility and continuity

Secure, Robust and Scalable

An innovative and wide service portfolio

...and a unique Set of Cloud/Data Centers and Network Infrastructure

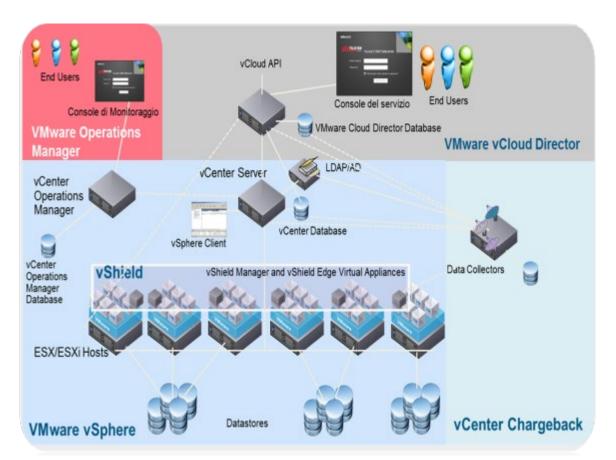
Colo and Hosting capabilities, completely integrated with Sparkle's network services worldwide

Regional Data Centers in Italy, Greece and Turkey that leverage on Sparkle's unique protected terrestrial and submarine network to Europe



laaS Solutions - Self Data Center (SDC)

• SDC service is based on VMware vCloud Director and other components of VMware Cloud Infrastructure Management (vSphere, vCloud Director, vShield, vCenter Chargeback e vCenter Operation, ogoing deployment NSX-V).





Sparkle Self Data
Center delivers cloud
computing for existing
datacenters by
pooling virtual
infrastructure
resources and
delivering them to
users as catalogbased services.



NEW Solutions!

SAP HANA

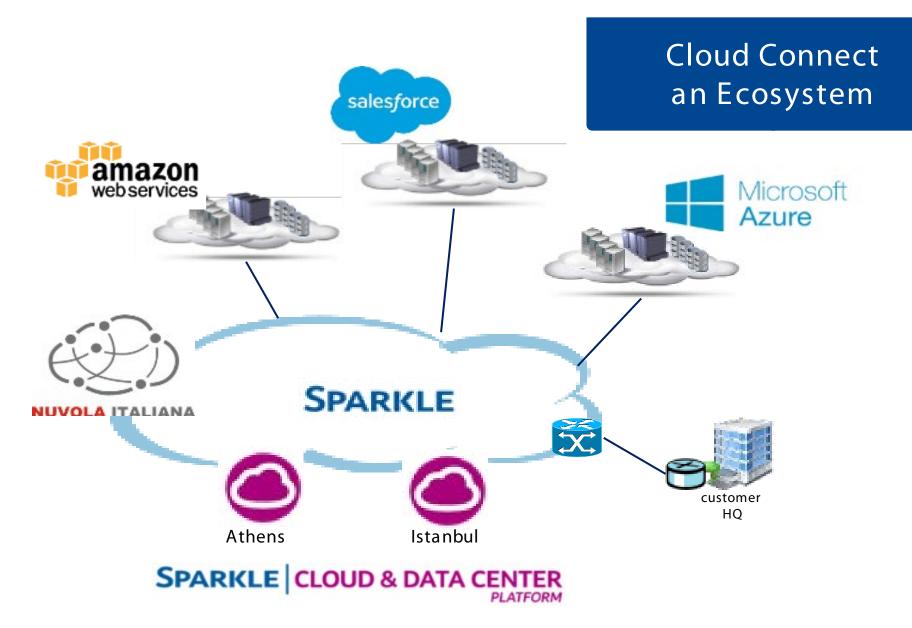
- ✓ Infrastructure Services for SAP HANA are deployed in TI Sparkle DCs with Collaboration with a SAP Certified hardware vendor such as IBM.
- SAP HANA Infrastructure is provided via a monthly subscription.
- Customers bring their onpremise SAP HANA licenses which will be deployed on their SAP HANA Infrastructure Services. It automatically provides the provisioning of SAP HANA software.

POWERED BY Zerto

DRaaS

- Better Odds of Success by eliminating the need of strong DR competencies and focusing on core business
- ✓ Server and Storage Motion
- ✓ Reduced Recovery Time
- ✓ Cost Reduction
- ✓ Ease of Management
- ✓ Remarkably Effective
- ✓ Scalability
- ✓ Application environment Recovery
- ✓ Granularity (VM-level protection)
- ✓ Hardware-agnostic







Cloud Connect - THE OFFER



WHAT IT IS

- Cloud Connect extends Customer's network into the cloud capabilities of the most important Cloud Providers using a dedicated private connection.
- With Cloud Connect the Customer can establish private connectivity to multi-player cloud services, such as Microsoft and AWS

NEEDS TO SATISFY

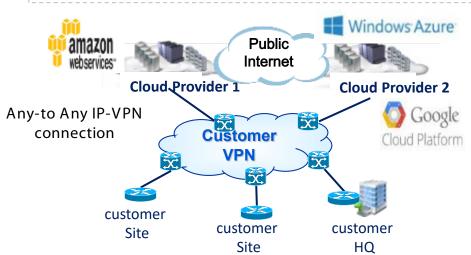
Cloud Connect offers more reliability, higher speed, lower latencies, and higher security than typical connections over the Internet, providing a more consistent network experience than Internet-based connections.

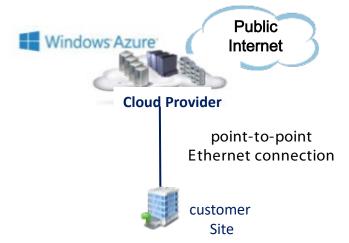
WHO NEEDS CLOUD CONNECT?

- Domestic Carriers who want to extend their reachability/offer to the main Cloud Providers
- Corporates who would like to enjoy a direct connection with their cloud installations

HOW

- Connectivity can be based on IP VPN or a point-to-point Ethernet link
- Connectivity can be managed or unmanaged







Cloud Connect - Cloud providers and destinations

Cloud Connect is based on direct interconnections (50Mb – 1G) with Cloud Providers (CP) in the most important areas throughout the world.



Cloud Providers	Cloud Region	Status
amazon webservices™	EU West 1 (Ireland)	Ready
	EU Central (Frankfurt)	Ready
	US East1 (Ashburn)	Ready
	AP Southeast (Singapore)	On request
Microsoft Azure	W est Europe (Amsterdam)	Ready
	East US (Ashburn)	Ready
	Southeast Asia (Singapore)	On request
salesforce	Frankfurt	On request
O Google Cloud Platform	London, Frankfurt, Amsterdam	On request
SOFTLAYER	Amsterdam, Ashburn, Singapore	On request



Cloud Connect - Benefits

Cloud Connect offers important benefits in terms of performances and geographic reach:

- Opportunity to reach, quickly and easily, the Cloud Providers already interconnected
- Reliability, guaranteed bandwidth, low latencies, and high security
- Customer retains full control of its negotiations with Cloud Provider
- Bandwidth scalability
- Certainty of project economics (flat rate)





Thank You

