

**CloudSigma**



**Platform Capabilities**

# Overview

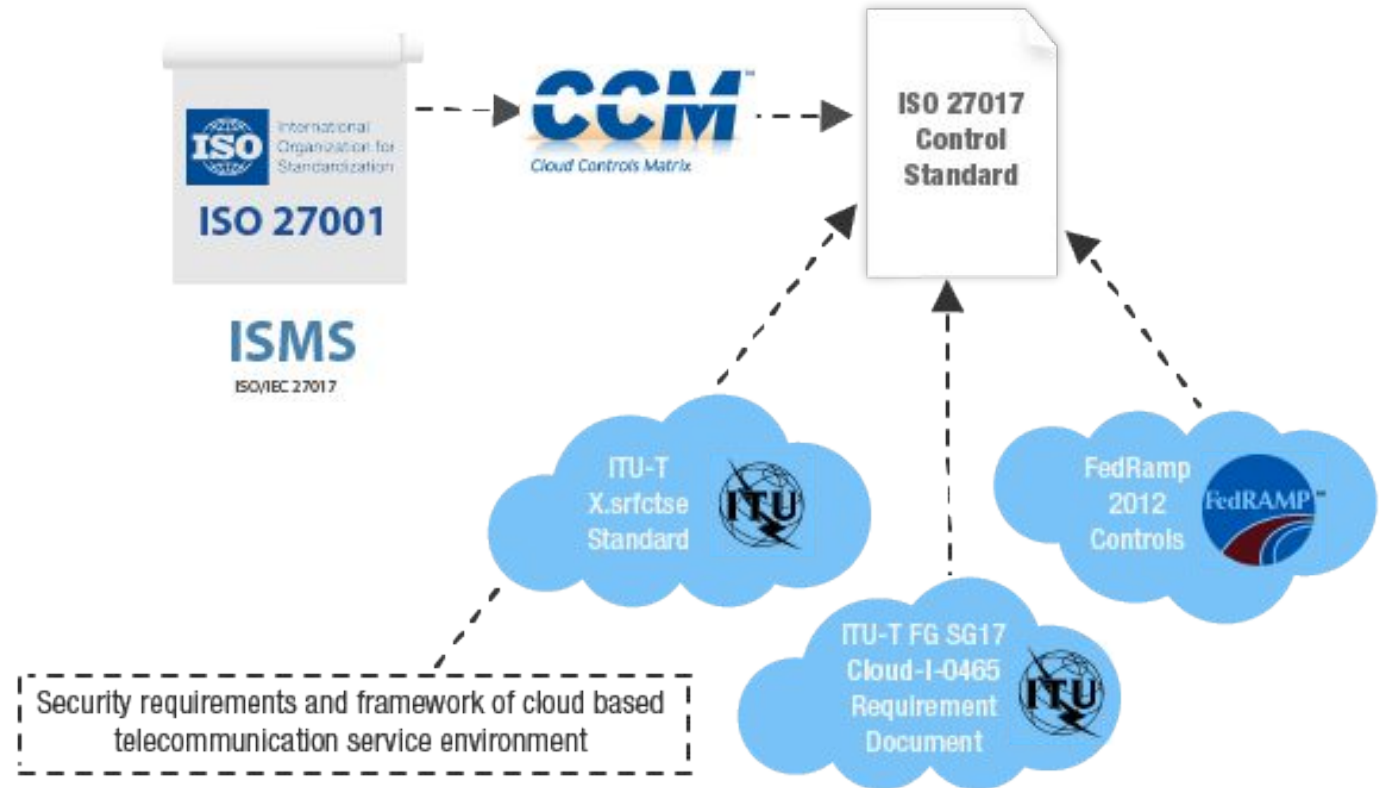
- About CloudSigma
- Cloud Platform Capabilities
- The Ecosystem Concept & Value-added Services
- Networking Capabilities
- GÉANT Use Cases
- Roadmap 2017

# About CloudSigma

- Swiss company founded in 2009, currently with just over 50 employees.
- Leading European IaaS provider with a focus on flexibility & performance.
- Direct connectivity to GÉANT.
- Three European cloud locations in Zurich, Frankfurt and Warsaw, and a few more planned for 2017-2018.
- A global location network (Washington DC, Miami, San Jose, Honolulu, Perth, Melbourne and Manila).



# Certificates





Next Generation Power Station for Digital Energy

# Trusted by Industry Leaders

- European provider
- Year-long experience with clients with the following challenges:
  - big data workloads
  - media volumes
  - e-commerce related scalability
  - SaaS scaling up & automation
  - on-demand testing & research environments



# Our Customers about Us

- Neutral and flexible platform
- Higher price-performance ratio through efficient resources purchasing & improved virtual infrastructure configuration
- Excellent customer service & strict SLAs
- Agile and market-driven company culture

# Neutral & Flexible Platform

- Flexible configuration of unbundled resources
- Full sole root/admin access

*“With CloudSigma, we are not subject to unrealistic bundled resources as it delivers transparent and efficient resource purchasing.” - Patrick Rodies, CTO of Preview Networks.*

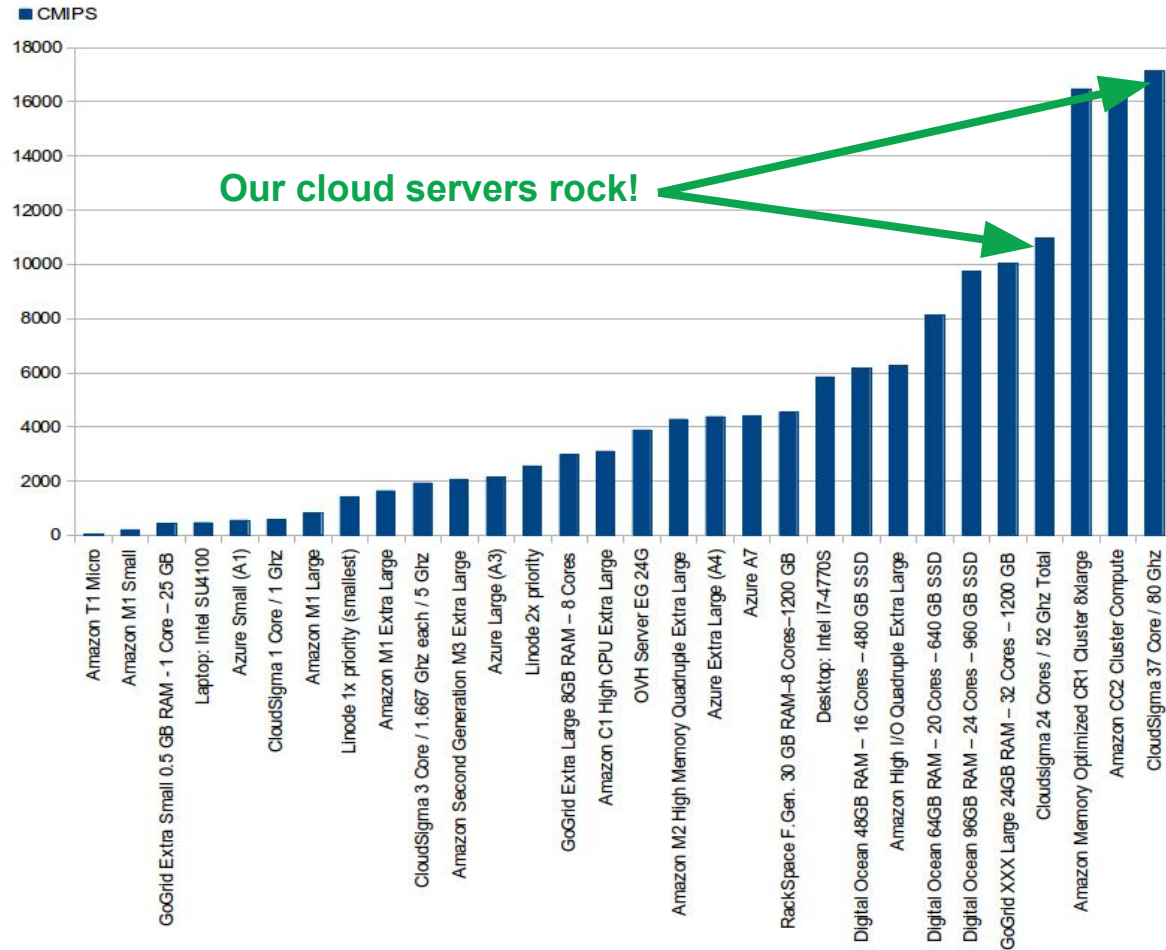
- Run any x86 OS unmodified
- Full compatibility with ‘legacy’ und new private infrastructure

*“Cloudsigma offered everything we needed to deploy our infrastructure 1:1 to the Cloud without a single change to the PicturePark application.” - Nick Berthet, CTO of PicturePark.*

# Neutral & Flexible Platform

The screenshot displays the CloudSigma management interface. On the left is a dark sidebar with navigation items: Dashboard, Compute (highlighted), Storage, Networking, Tags, Devops Tools, Access & Security, Usage & Billing, Control Panel, Refer a Friend, Support, and Documentation. The main content area shows the configuration for a VM instance. At the top right, there are navigation icons, a 'Tags' dropdown, and user information: CHF41.75, vanya.nikova, and a 'Log out' button. Below the navigation is a horizontal menu with tabs: Properties (selected), SSH Keys, Drives, Network, Advanced, and Meta. The configuration details include: Name (empty text box), Description (Add description link), Hypervisor (KVM with info icon), CPU Type (Intel), CPU (slider set to 2.00 GHz), RAM (slider set to 1.00 GB), and Optimize for (Custom dropdown with info icon and CloudInit checkbox with info icon).

# Higher Price-Performance Ratio



*“Fast networking and top performance are the main reasons for choosing CloudSigma over other providers.” - Ricardo Correa, ECMWF.*

*“In terms of pricing, I think CloudSigma is very competitive, especially when you consider the performance. CloudSigma is for sure one of the fastest solutions available.” - Nick Berthet, CTO of PicturePark.*

# Higher Price-Performance Ratio

**CloudSigma**

- Dashboard
- Compute
- Storage
- Networking
- Tags
- Devops Tools
- Access & Security
- Usage & Billing
  - Usage & Purchasing
  - Pricing
  - Add Funds
  - Subscriptions
  - Reports
  - Billing Logs
  - Payment History
- Control Panel
- Refer a Friend
- Support
- Documentation

CHF41.75 vanya.nikova Log out

### Compute Resources

		Subscription Pricing	Burst pricing		
			Min	Current	Max
Intel	CPU (GHz/hour)	0.007	0.009	0.009	0.036
	RAM (GB/hour)	0.007	0.010	0.010	0.030
Distributed SSD (GB/month)		0.120	0.240	0.240	0.240
Scale-out Magnetic (GB/month)		0.050	0.099	0.099	0.099

**Note:** Burst pricing calculates the utilisation of our cloud and adjusts the price level according to a 20 level matrix. During less busier times the cost of resources is significantly reduced. Prices are calculated every five minutes on a rolling basis. You can see the current and next price level at all times.

### Network Resources

	Price per Unit per Month
Static IP	2.00
Private Network	5.00
Equinix Cloud eXchange (ECX) VLAN 200**	111.33
Equinix Cloud eXchange (ECX) VLAN 500**	200.39
Equinix Cloud eXchange (ECX) VLAN 1000**	356.25

\*\* Equinix Cloud eXchange (ECX) VLAN connection. 200Mbps, 500Mbps and 1000Mbps accordingly

### Software Licenses

	Subscription Pricing	Burst pricing
SQL Server Enterprise Edition <small>(per core per month)</small>	303.60	-
SQL Server Standard Edition <small>(per core per month)</small>	79.17	-
Windows Server <small>(per core per month)</small>	8.41	16.82
SQL Server Web <small>(per core per month)</small>	4.95	-

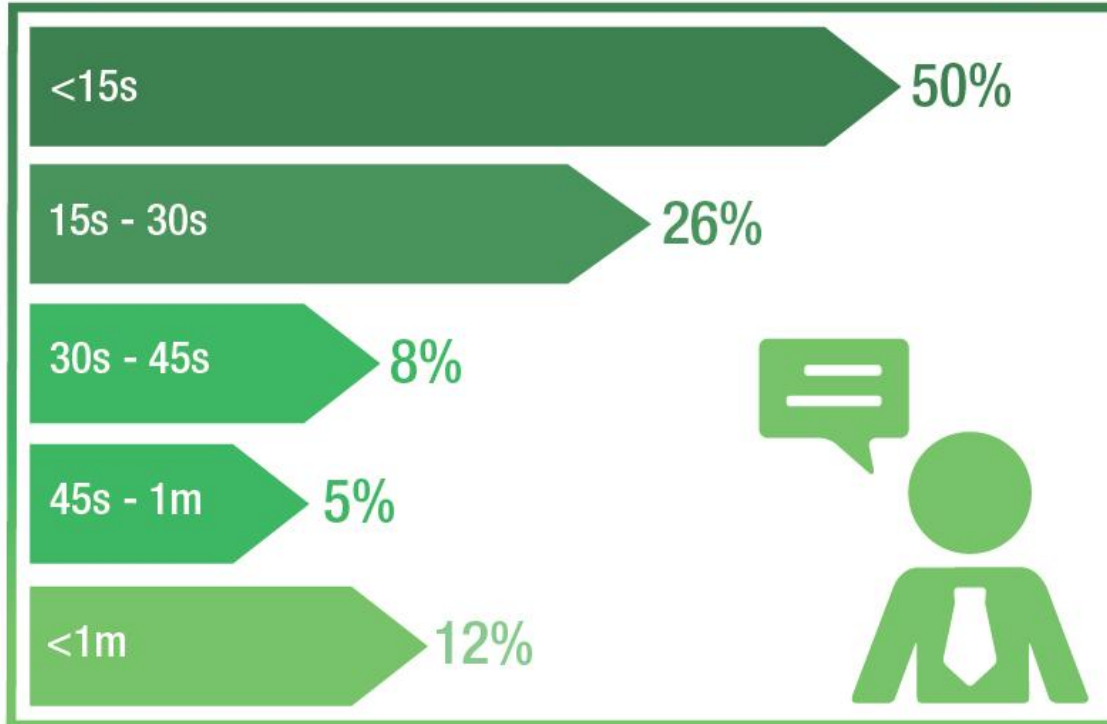
### Data Transfer

	Outgoing Data Transfer (GB)
Subscription Pricing	0.040
Current Burst Use Pricing	0.118

**Note:** All prices in CHF.

# Excellent Customer Service & Strict SLAs

## Response time of our 24/7 free technical support



CloudSigma provides 24/7 live support via Telephone, Chat, Email and our Zendesk online ticketing system. [www.cloudsigma.com](http://www.cloudsigma.com)

*“The unprecedented support, high SLA and ability to tailor our virtual machines per our exact needs were our top reasons to choose CloudSigma as our infrastructure partner.” - Riccardo Ferrucci, CIO at Genio Group.*

*“We are very closely connected to CloudSigma’s technical and support staff. We always get the important answers right away. - Nick Berthet, CTO of PicturePark.*

# Agile & Market-driven Company Culture

- The whole product pipeline of CloudSigma is defined following our customer requirements

*“Very quickly at your end your networking guys changed the routing from what we call the ‘normal’ internet connection to the GEANT connectivity and this is how we were able to achieve the bandwidth we needed.” - Ricardo Correa, ECMWF.*

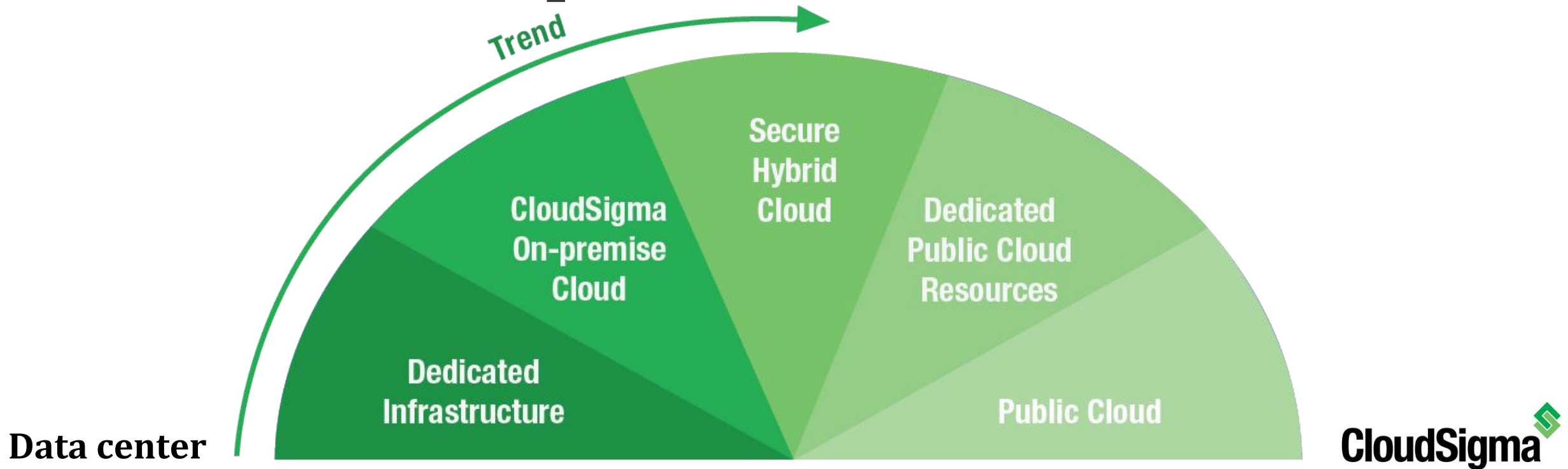
- The entire work of all devops teams is organized in bi-weekly cycles

*“I really appreciate that CloudSigma tackles issues at the core and works on eliminating them at the core.” - Stepan Seycek, CTO at BOC Group.*



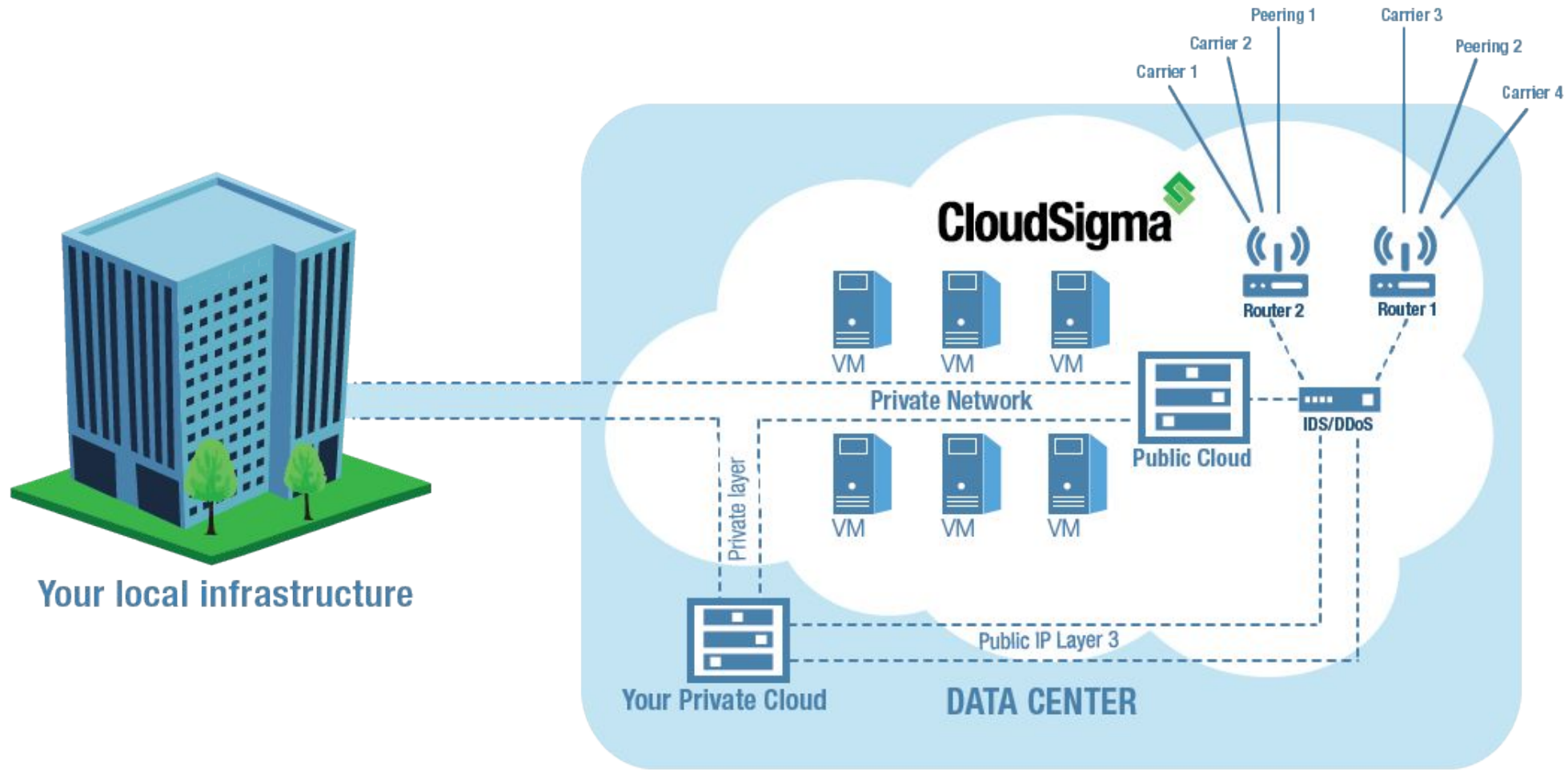
# The Ecosystem Model

# Full Service Spectrum



Combining our cloud offering with the extensive capabilities of our data center partners, our customers can receive the full spectrum of infrastructure delivery.

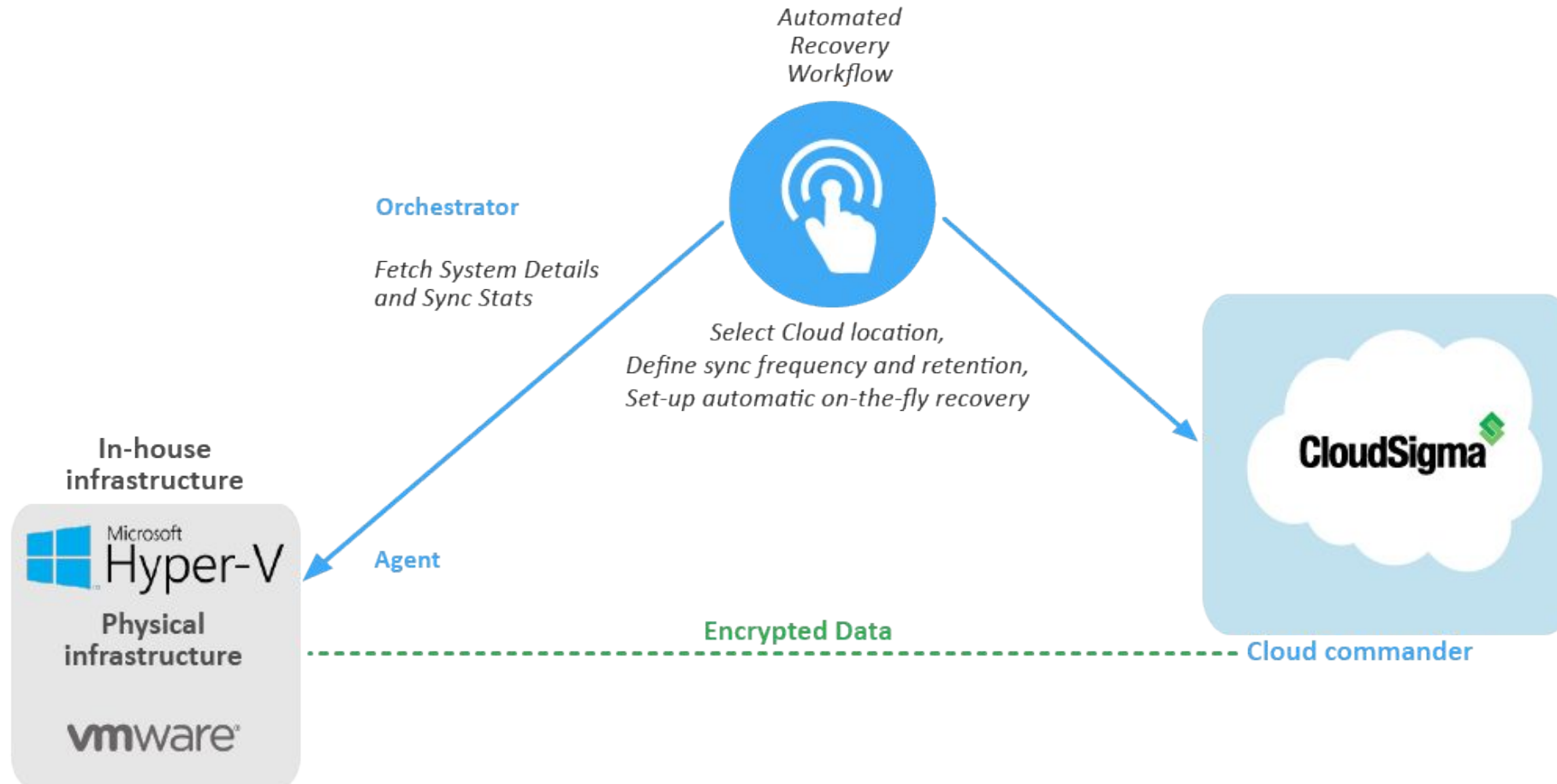
# The Hybrid Cloud Infrastructure



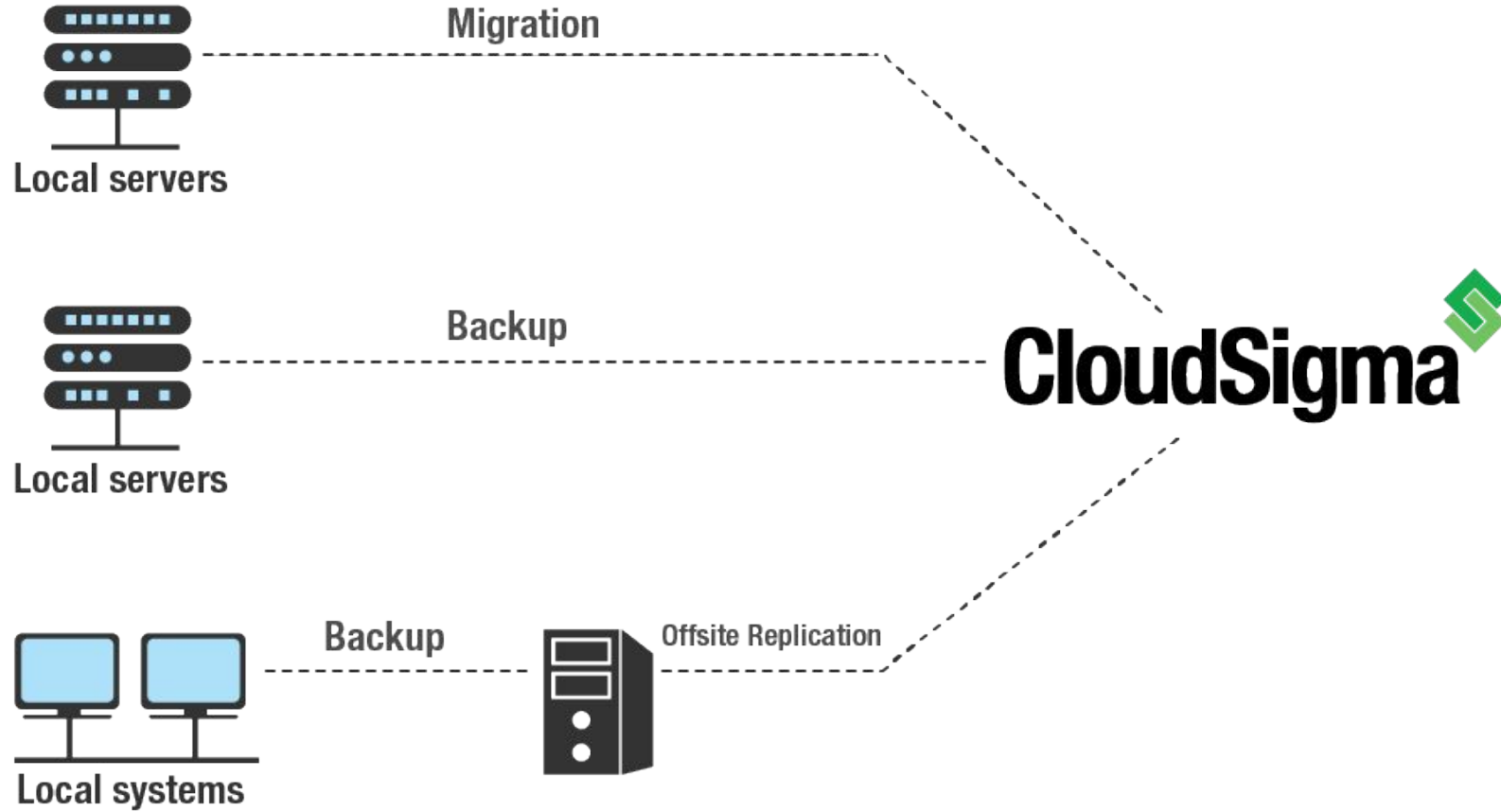
# Disaster-Recovery-as-a-Service

- Mirror virtual or physical in-house infrastructure to the cloud
- Create an entire shadow DR environment with a complete automatic recovery workflow
- An application independent solution that works with all Windows & Linux environments
- Official release in Q2 2017

# DRaaS System Component Overview



# Supported Business Models



# Networking Capabilities

- CloudSigma maintains carrier-neutral 10Gbps Internet pipes across multiple suppliers into the network backbone as well as direct peering lines to major Internet exchange points.
- We work with the following major connectivity carriers Level3, Cogent, SwitchNap's LVS data center carriers, AMS-IX, Tinet, De-CIX and Telia.
- The connectivity between racks is dual 40Gbps with dual 10 Gbps internally within each rack to the node level.
- In addition, CloudSigma has a direct private peering to GÉANT.

# Networking Success Story with



- The challenge: ECMWF needed to send **large volumes of weather forecast data** to Member States globally **at exact scheduled times**
- During a POC, ECMWF needed to sustain **up to 3Gbps of real application data transfers** from ECMWF to the CloudSigma cloud installation.
- The results as reported by ECMWF are presented below:
  - A single TCP stream from 1 host to 1 VM is aprox 500 Mbps
  - Multiple TCP streams from 1 host to 1 VM is aprox 2 Gbps
  - Multiple TCP streams from multiple host to 1 VM is aprox 3.2 Gbps
  - Multiple TCP streams from multiple host to 1 VM is aprox 3.2 Gbps
  - Multiple TCP streams from multiple host to 3 VM is aprox 7 Gbps

*“With CloudSigma, today we can offer to our Member States something we could not offer before.”*

*Ricardo Correa, ECMWF.*

# Use Case 1: Research Departments

- Challenge: a combination between predictable ICT capacity and unplanned ad-hoc ICT capacity requirements from various research projects and faculties.
- Solution: CloudSigma offers two purchase models - subscription and pay-as-you-go burst pricing:
  - Subscriptions are the cost-efficient option used for the predictable capacity. Pay-as-you-go burst is applied every 5 minutes allowing for ad-hoc and short-term scalability.
  - Combination between subscription (for permanent workloads) and scalable on-demand cloud resources (for any on-demand research computing needed) is also possible.



# Use Case 2: Professors IT Classes

- Challenge: professors need a large number of limited cloud accounts, which the students can use for experiments in their IT/cloud computing classes. The accounts should be limited in capacity to avoid abuse and overbill.
- Solution: CloudSigma already has a similar standard offering - the trials:
  - Via a promo code the students can get an account with the exact amount of resources and a pre-installed OS required by the professor.
  - If a student want to use more resources, he will have to add funds himself, an unexpected overbill is not possible.
  - CloudSigma already works successfully with professors from Sheffield University and Dublin City University based on such a model.

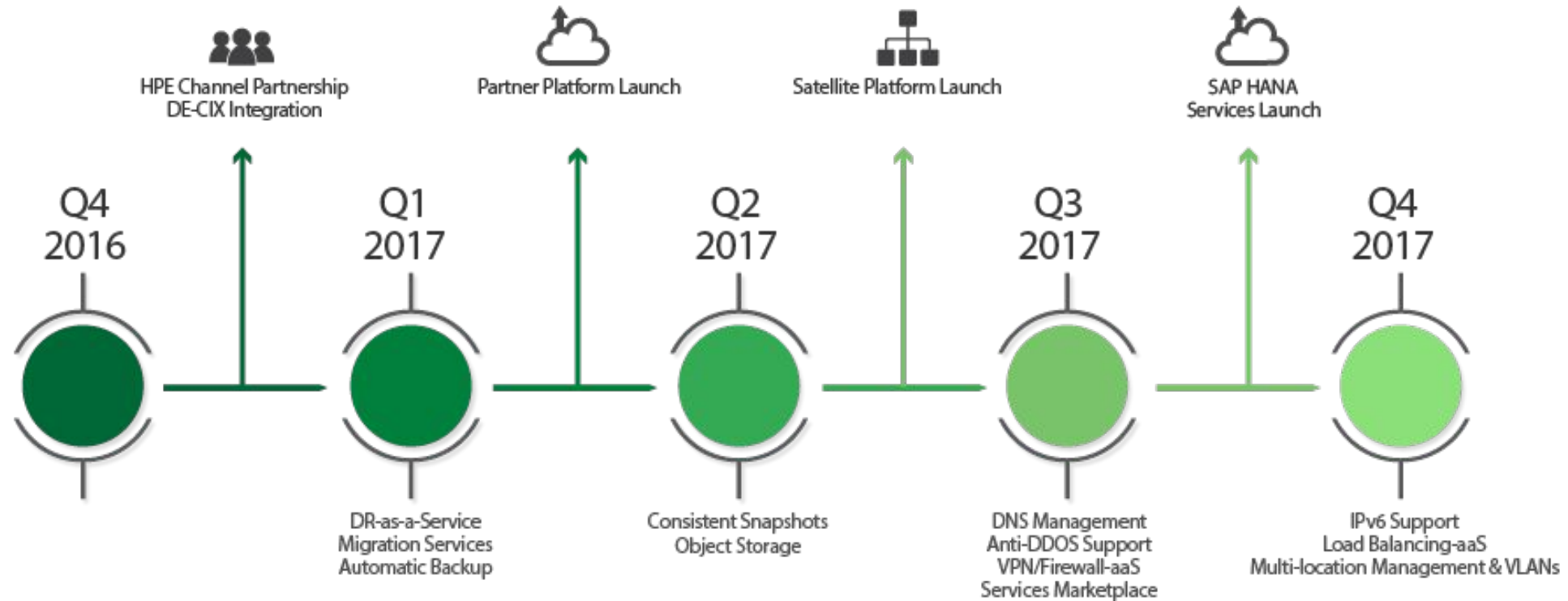


# Use Case 3: Academic Marketplaces

- Challenge: There isn't a central and easy way for the academic community to purchase cloud resources.
- Solution: CloudSigma has experience with cloud brokers and marketplaces:
  - Several NRENs are planning to offer marketplace of services to their academic community.
  - Despite the fact that at CloudSigma users can define the infrastructure configuration the way they want, we also offer the so called simple server creation and can expose different packages of cloud resources to a common marketplace of services.



# Roadmap 2017





**Thank you for your attention!**

Simeon Glabadanidis \* [simeon.glabadanidis@cloudsigma.com](mailto:simeon.glabadanidis@cloudsigma.com) \* @SimeonGlabadanidis  
[www.cloudsigma.com](http://www.cloudsigma.com)