

## Apresentações 1<sup>a</sup> Parte

Fórum Novas Tecnologias 2019 | 28 de maio | Matosinhos



## Painel A inteligência muda tudo

Carlos Leite, Managing Director, HPE Portugal Juan L Polo, EMEA Regional Account Director, Intel Luís Paulo Reis, Associate Professor of FEUP, Director of LIACC and Vice-President of APPIA

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## Intel® Cascade Lake

https://www.youtube.com/watch?v=pMJmfLvRKss









## Plataforma de Dados Inteligente

Pedro Morais Storage Category Manager, HPE Portugal

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HPE delivers the world's most intelligent storage for your hybrid cloud world



#### AUTONOMOUS & AWARE



BUILT FOR CLOUD

EASY DATA MOBILITY



### AS-A-SERVICE EXPERIENCE

ALIGNED TO ECONOMIC<sup>36</sup> NEEDS

99.3554

Hewlett Packard Enterprise

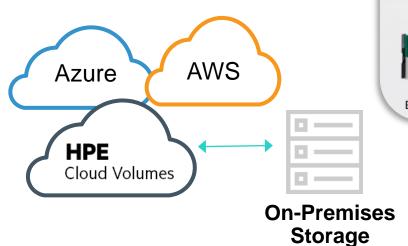


## **Novidades HPE Storage**

- -HPE StoreMore Guarantee
- -Nimble Peer Persistence
- -DIPU Data in Place Upgrade
- -HPE Peer Copy powered by RMC
  - Mobilidade entre 3PAR e Nimble

(intel)

-HPE Cloud Volumes



Peer Persistence With Automatic Switch Over









## Obrigado



# As componentes que tornam os Servidores HPE Inteligentes e Seguros

Luís Rilhó Computing Category Manager, HPE Portugal

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### Introducing a new Compute experience



#### Powered by the world's most secure industry standard servers





## Server tuning technology developed in partnership with Intel HPE Intelligent Systems Tuning



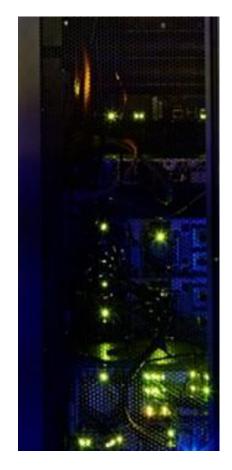
Jitter smoothing	
Core boosting*	
Workload matching	

- Reduce latency, and deliver deterministic and reliable performance by mitigating processor frequency fluctuation
- Ideal for workloads where processor frequency is highly variable (e.g. High Frequency Traders, HPC)
- Utilize fewer processors while improving workload performance with higher processor frequencies on more active cores than standard Intel processor profiles.
- Reduce core-based licensing costs by enabling higher performance across fewer processors
- Automatically match the internal server resources to the specific requirements of your workload.
- Improve performance using preconfigured workload profiles to tune internal server resources



## **HPE Secure Compute Lifecycle**

#### Security



	<ul> <li>Anchoring the root of trust into the silicon</li> </ul>		
	<ul> <li>Only HPE offers industry standard servers with major firmware anchored into the silicon</li> </ul>		
Silicon Root of Trust	<ul> <li>Provides impenetrable protection through entire supply chain: manufacturing, distribution shipping, configuration, &amp; installation.</li> </ul>		
	<ul> <li>Millions of lines of FW code run before server operating system boots</li> </ul>		
	<ul> <li>Daily checking of firmware every 24 hours verifying validity and credibility of UEFI, CPLD, iLO, IE, and ME.</li> </ul>		
Firmware Runtime	<ul> <li>Valid and secure FW copy stored in lock-box</li> </ul>		
Verification	<ul> <li>FW on other HPE options like drives and NICs can be checked as well</li> </ul>		
	<ul> <li>Alert of compromised code through iLO audit logs</li> </ul>		
	<ul> <li>Recovering firmware to known good state after detection of compromised code</li> </ul>		
Secure Recovery	<ul> <li>Options to recover to factory settings or last know good or not recovering at all taking server off-line</li> </ul>		
	<ul> <li>Ability to recover other server settings</li> </ul>		
	<ul> <li>Highest level of security not offered by any other industry server providers</li> </ul>		

#### - Typically used for handling the most confidential and secret information

- Uses the highest level of cryptography in the industry
- No increase in server latency





Trazido até si pela HPE e pela Intel®

**Commercial National** 

**Security Algorithms** 

## **Composable Infrastructure**

Architectural design principles

## ^</> O B Ď **O**A **Composable Infrastructure Unified API S**oftware-Defined Intelligence **Fluid Resource Pools**

### **Unified API**

- Single line of code to abstract every element of infrastructure
- Full infrastructure programmability
- Bare metal interface for Infrastructure as a Service

#### Software-Defined Intelligence

- Template-driven workload composition
- Frictionless operations

#### Fluid Resource Pools

- Single infrastructure of disaggregated resource pools
- Physical, virtual, and containers
- Auto-integrating of resource capacity

**Hewlett Packard** Enterprise



## Precisely compose and recompose resources for each application

HPE Synergy Composer powered by HPE OneView

LIBRARY

Cloud Template	Cloud Template
Image 4	Image 4

A single interface to precisely compose and recompose resources for each application





## HPE Synergy: Engine for the Idea Economy

#### **Composable Frame**

Everything needed to run applications, so IT can be quickly setup and consumed

Auto-integrating makes scaling simple and automated at rack/row scale



#### **Composable Fabric**

Rack scale multi-fabric connectivity eliminates standalone TOR switches

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#### **Composable Storage**

High-density integrated storage to compose any compute with any storage (SDS, DAS, SAN)



#### Composer

Integrated software-defined intelligence to self-discover, auto-integrate, provision and scale from racks to rows



#### **Composable Compute**

Provides the performance, scalability, density optimization, storage simplicity, and configuration flexibility

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Unique innovations enable the composable experience Private bare metal cloud ready to run any application and delivered as infrastructure as code

#### **Single Management Interface:**

One interface to discover, compose, update, and troubleshoot

#### **Image Streamer:**

Instantly provision operating environments on stateless infrastructure

## Template Based Composition:

Templates composes the infrastructure to match the workload's needs



#### Frictionless Change: Firmware and driver updates delivered seamlessly as one

#### **Unified API:**

Operations changes can be easily automated and Developers can program the infrastructure as code

#### **Developer Portal:**

Presents a private bare metal cloud through unified API & SDK







## Obrigado



## Clearpass: Redes Seguras e Inteligentes

Pedro Lourenço Systems Engineer, Aruba a Hewlett Packard Enterprise Company Portugal

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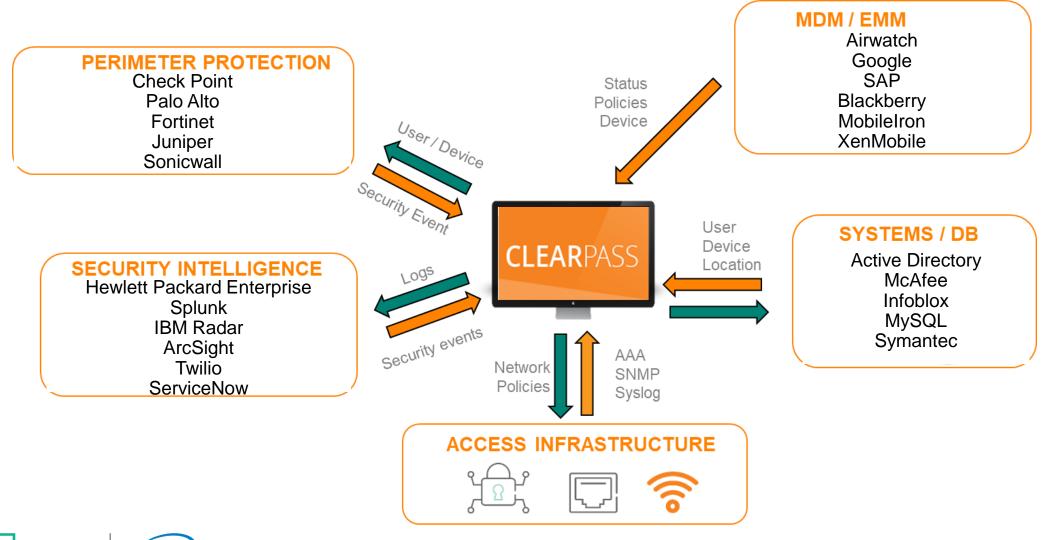
## **CONTEXT-AWARE, NETWORK- DRIVEN SECURE ACCESS**





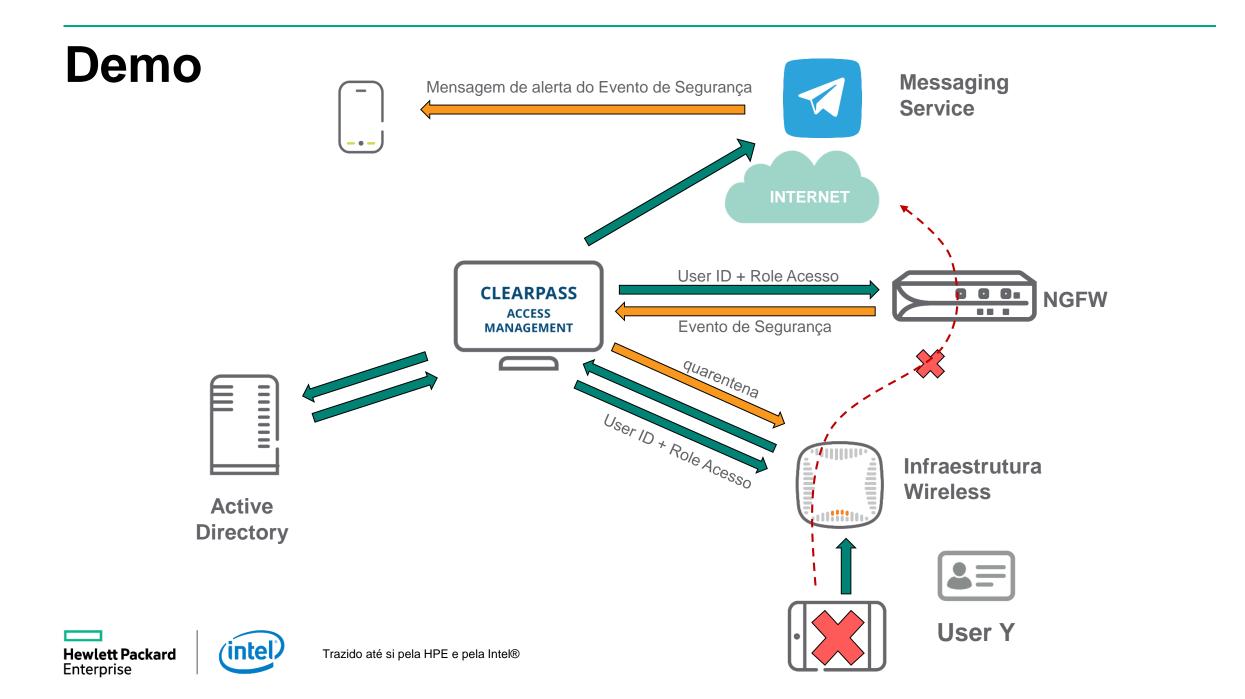


## The Inteligent Edge is able to Communicate and Adapt



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## Obrigado





## HPE GreenLake: A Cloud Híbrida mais Inteligente

Luís Abreu Country Attach Lead, HPE Portugal

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## HPE GreenLake: Cloud-like Consumption with On-Prem Control

Expanding choice and agility for hybrid cloud

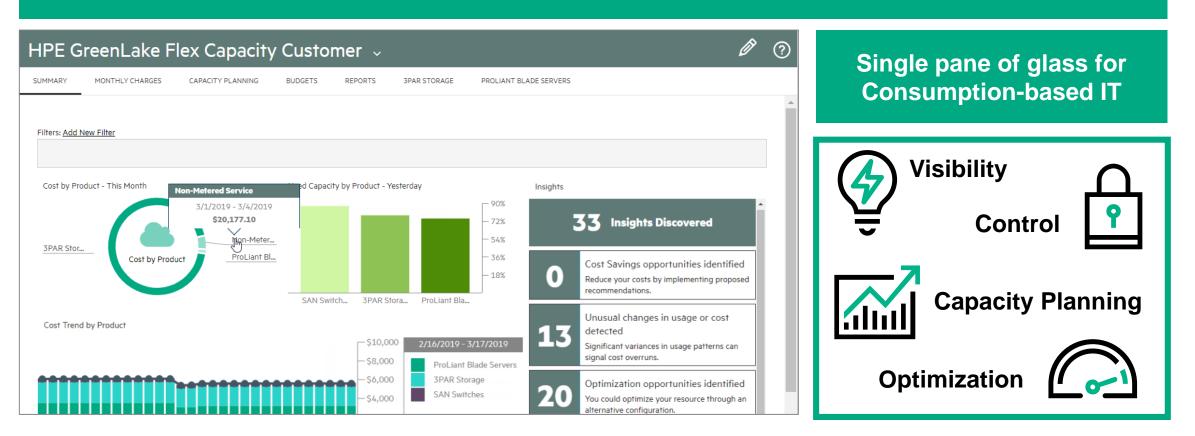
Nutanix AHV	Google Cloud	<b>Consumption Analytics Portal</b>
Nutanix AHV + HPE GreenLake delivers lower TCO for VMs	Containers as a Service (CaaS) for Anthos with HPE GreenLake	Single pane of glass for Consumption-based IT
<ul> <li>Freedom of Choice</li> <li>Lower Cost than the equivalent hypervisor</li> <li>ONE-CLICK simplicity for VM and application management</li> </ul>	<ul> <li>On-Prem: HPE Validated Designs for Google Anthos</li> <li>Benefits GKE environment On-Prem:         <ul> <li><u>Faster</u> Deployment</li> <li><u>Better</u> Productivity</li> <li><u>Less</u> Overprovisioning</li> </ul> </li> </ul>	Visibility ControlImage: ControlImage: Control



## HPE GreenLake: Cloud-like Consumption with On-Prem Control

Expanding choice and agility for hybrid cloud

#### **Consumption Analytics Portal**



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## Obrigado



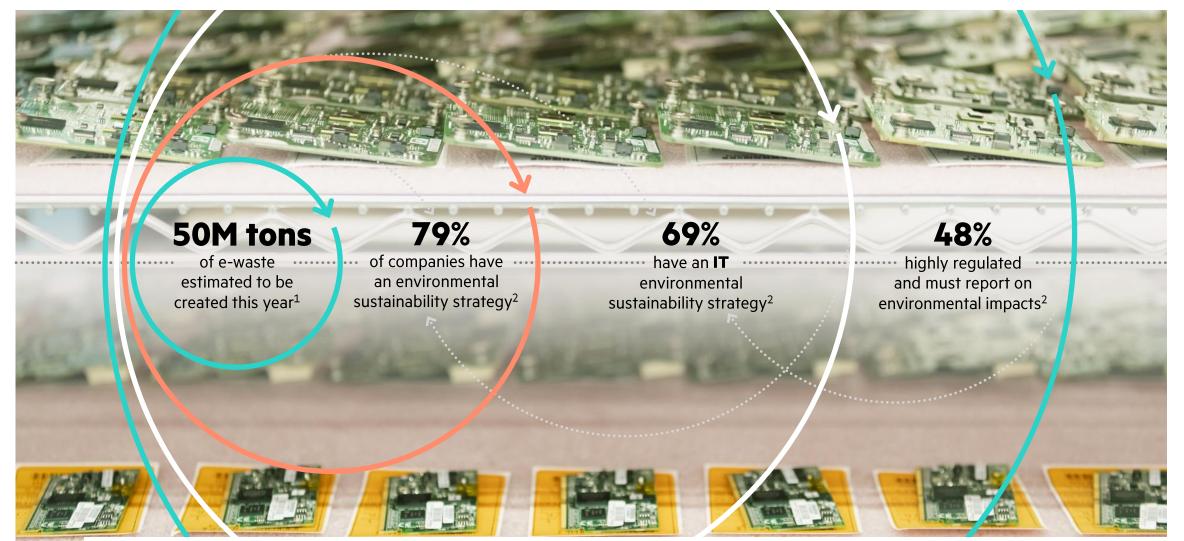


## Utilização inteligente de recursos de TI na Economia Circular

Paulo Santos Country Financial Services Account Manager, HPE Portugal

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## Sustainability and Circular Economy are critical... Now



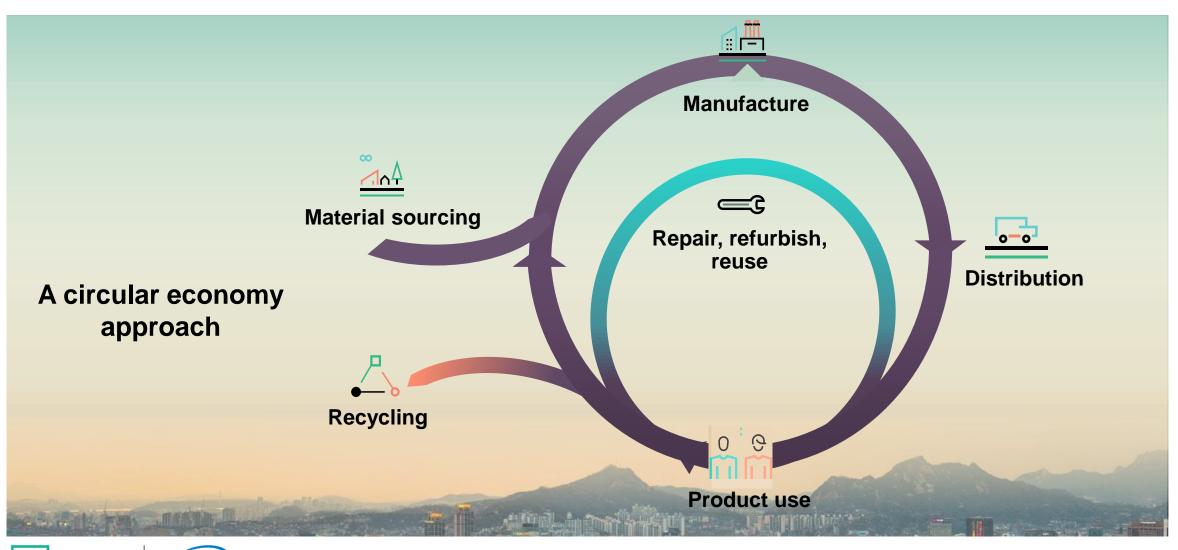




1 University of the West of England

2 HPE Financial Services, The Circular Economy and IT Mindsets Study, September 2018

### Sustainably meet the technology demands of the future







## Maximizing the value of end-of-use assets

Capture the residual value of IT assets

Put your retired IT Equipment through a verifiable renewal vendor that tracks all components through the process

#### **HPE Asset Upcycling Services**

- Send retired assets to a trusted Technology Renewal center
- Set goals for IT asset retirement, renewal, and remarketing
- Use value from retired assets to fund future IT

#### **HPE Certified Pre-owned Products**

- Extend the life of legacy systems and environments
- Custom configured systems with 1-year warranty
- Factory authorized operating system licensing

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## Maximizing the value of end-of-use assets

Capture the residual value of IT assets

#### New Circular Economy Report available to HPE Financial Services Lease Return and Asset Upcycling Services customers<sup>1</sup>

HPE Financial Services **Circular Economy Report** Company XYZ April, 2018-August, 2018



Your reco

Enterprise (u

A summary of the iter recycled materials.

Server

REFURBISHED

40%

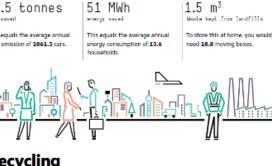
RECYCLE

PRODUCT TYPE	REFURBISHED	RECYCLED	
Server	231	34	
Network	251	34	
Storage	231	34	
Accessories	251	34	
TOTAL	1983	689	

Hewlett Packa

			-		
		-	*	Savings	
over	ed items	21		By refurbishing and recycling IT products with HPE Fin enhance productivity, capture new value from retired a realize associated environmental benefits. The impact a achieved using our IT Asset Lifecycle solutions can be	ssets and s
units)		atatua an mfurbia	abod or	13.5 tonnes 51 MWh	1.
enis you	Network	St	orade	This equals the average annual CO2 emission of <b>2861.3</b> cars. This equals the average annual energy consumption of <b>13.6</b> households.	To
)	60% REFURRISHED 40% RECYCLED		0% RBISHED 0% YCLED		<u>-</u>
)				// /\ ₩ Recycling	
	REFURDSHED 231 231	RECYCLED 34 34	205 205	The rapid pace of innovation in electronic products and a "take, make, dispose" production and consumption cy need for a circular economy. Below you can see represe recoverable raw material contained in the products you	/cle, a entat
	231	34	205	1.16 tonnes  0.88 tonnes	1

ial Services, you ts, and additionally, savings you have n below,



owing impacts of are increasing the ations depicting the lurned.

.16 tonnes	0.88 tonnes	1.52 tonnes
astic	non-ferrous metals	ferrous metals

This is the equivilent of 23,168 This is the equivilent of 2 plastic bottles. commercial jet engines

This is the equivilent of 1.4 automobiles

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Available on a limited basis at launch, check with your HPE Financial Services rep

CIRCLE AR ECONOMY REPORT









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