

Sistemas Operacionais

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Introdução

- Um computador moderno consiste em:
 - Um ou mais processadores
 - Memória principal
 - Discos
 - Impressoras
 - Vários dispositivos de entrada/saída

A gestão de todos estes componentes requer uma camada de software - o
 Sistema Operacional



Introdução

Para dar apoio ao SO, alguns aspectos devem ser levados em consideração

Processos Shell

Espaços de endereços Memórias

Arquivos Hardware de proteção

Entrada/saída Discos

Proteção Memória virtual

 No contexto atual, alguns desses aspectos já não são pensados em termos de computadores solitários



Utilização comum

- Sistemas Operacionais são a base de operação fundamental em termos de infraestrutura. Conectando aplicações e equipamento, existem várias áreas de aplicação:
 - Mainframes
 - Servidores
 - Distribuídos
 - Computadores pessoais
 - Portáteis
 - Incorporados (Embbeded)
 - Robótica
- Em algumas dessas aplicações, é possível ligar esses computadores para compartilhar recursos



Situação no Mercado - Produtos

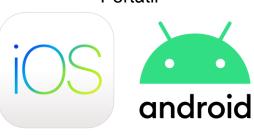
Mainframe



Uso pessoal



Portátil



Servidores, embarcados, distribuídos





Red Hat





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Robótica





Situação no Mercado - Produtos



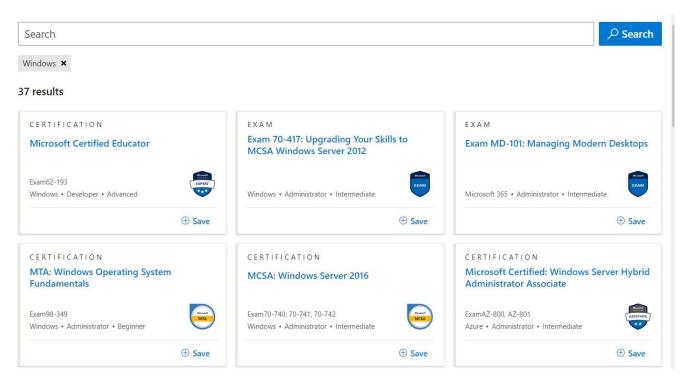




Situação no Mercado - Utilização

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Situação no Mercado - Utilização



RED HAT CERTIFICATION

Red Hat Certified Engineer

A Red Hat® Certified Engineer (RHCE®) is a Red Hat Certified System Administrator (RHCSA) who is ready to automate Red Hat® Enterprise Linux® tasks, integrate Red Hat emerging technologies, and apply automation for efficiency and innovation.

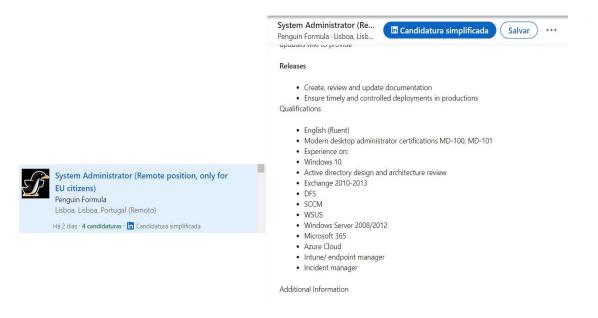








Situação no Mercado - Utilização





Diogo - CN



Casos de Uso

Significant enterprise savings

Sustainable open source at the lowest cost, everywhere.

Rethink what's possible with Linux and open source.

Companies engage Canonical to drive down open source operating costs. Automate everything: multi-cloud operations, bare metal provisioning, edge clusters and IoT.

- No mandatory subscriptions for Ubuntu
- Security, support and fully managed infra and apps
- Public cloud, data centre, edge cluster and appliances
- Long term maintenance commitment

Let's talk open source >



- Switch from VMware to OpenStack
- TCO analysis of Open Infra
- ◆ 451 study on private/public cloud costs





Casos de Uso

Ubuntu Core in industrial applications

Bosch Rexroth reinvents automation

Bosch adopts Ubuntu Core and snaps for app-based ctrl-X industry 4.0 platform. ctrlX AUTOMATION leverages Ubuntu Core, designed for embedded devices, and snaps - the universal Linux application containers - to deliver an open source platform that removes the barriers between machine control, IT and OT.



Bosch Rexroth adopts Ubuntu Core and snaps >

Rigado cuts customers' time to market with Ubuntu Core

In the fast-paced world of IoT, being able to reduce time-to-market is a priority. Rigado's core mission is to provide scalable and secure infrastructure for their customers' commercial IoT deployments.



Rigado cuts customers' time-to-market with Ubuntu Core and AWS>



Casos de Uso

October 12, 2022



ĽORÉAL

For more than 100 years, L'Oréal has focused on providing the best beauty products on the planet for quality, efficacy, and safety. Delivering on that mission has made L'Oréal the largest cosmetics brand in the work, with an annual revenue of £28 billion. Maintaining that success requires constant investment in beauty tech such as Al-powered skin diagnostic tools and 3D-printed packaging. "We're always striving to change the future of beauty, which means going beyond products to improve experiences and services for our customers." Say Sullaume Pires, Giobal Modern Workplace Director at L'Oréal. "With Windows 11 Enterprise, we can deliver a more secure environment to protect our innovations and support our employees with innovative experiences so they can do their best work."

Learn More

Windows 11 Enterprise

Microsoft Intune

Windows 11 2022 Update blog post

→

 Hakutsuru Sake enhances hybrid work with Dynabook Windows 11 Pro devices





Hakutsuru Sake Brewing has been creating fine sakes in Nada, Japan, since 1743. Named for the graceful white crane, the company combines its traditional techniques and recipes with innovative technology to evolve its products, making it the number one exported sake. Hakutsuru recently upgraded to Dynabook laptops powered by Windows 11 Pro to better support its hybrid work environment and increase security for its global workforce.

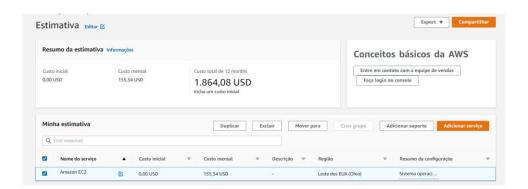


Cenário

- Transição de uma equipe de Administradores de Sistemas local para nuvem, com certificação
- Equipe também é responsável pelo BD em SQL
- 2 analistas, sem custos locais além dos descritos (já tem disponível tudo que é necessário)



Cenário



Bandwidth for a current generation instance with less than 32 vCPUs is limited to 5 Gbps.

1000~5000 usuários simultâneos



400 USD - certificação

Visit partner website →

2000 BRL - viagem + acomodações



Cenário

Treinamento

- 2 certificações 2 * 400 USD
- 2 viagens para Belém 2 * 2000 BRL

Infraestrutura

- Amazon EC2 (1 ano) 1864,08 USD
- Total (Dolár em 5,38)
 - ((1864,08 + (2 * 400)) * 5,38) + 2 * 2000 = 18.332,75