



OFICINA DE GESTIÓN DE PROYECTOS INTERNACIONALES
UNIVERSIDAD DE ALICANTE

Hardware infrastructure: What are our needs? Should we buy or lease?

Pedro Caselles(pcaselles@ua.es)
ICT for IROs
Rome, 15-16 November 2011





Hardware resources- Specifications

- Processing and storage capacity
- Reliability, robustness and fault tolerance (redundancy))
- Compatibility and interoperability



Needings

- Network infrastructure
- Personal computers
- Laptops
- Servers
- Periphals (printer, scanner, etc)



Network infrastructure

- Backbone
- LAN // VLAN
- WI-FI +/- security
- Security
 - HTTPS
 - VPN
- Switches, routers and cabling





Personal computers

- Workstation
- Laptop
- Netbooks (atom)
 - Low cost
 - Low performance
- Low cost computers vs professional line computers
- OS: Windows, MacOS, Linux...



Servers

- Public services- web
- Office services
- Databases
- Applications
- Manufacturers: DELL, HP, ACER, SUPERMICRO, SUN, IBM, Apple, etc.
- Location: CPD (data center)
- **High TCO**
- Virtualization





Hardware renting

- Often done with servers
- Options: Hosting, housing or VPS*
- Companies providing services, even complete servers: AMEN, hostalia, NOVA, etc...

- Plesk – Complete administration via web
- LAMP is the most common and easiest.
 - Linux + Apache + MySQL + PHP

(*Virtual Private Server)



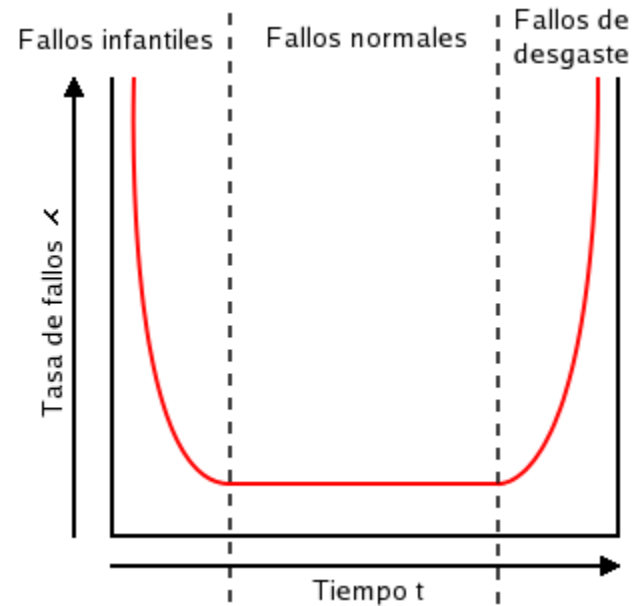
Lifetime and amortization

- **Life time:** estimated life time performing as expected
- **Amortization:** cost per year
 - Only taking in account the estimate life time
- Examples of estimated life time: estimated (possible)
 - Server 6 (10) years
 - PC 3 (6) years
 - Laptop 2 (4) years
- Possible *upgrade* in order to enlarge the lifetime



Faults

- We have to take into account hardware faults
- Murphy's law
- Solutions:
 - Warranty extension (recomend.)
 - Maintenance contract
 - Costs increasement





Decision keys

- Economical
- Estimate the real needings
 - Do not overestimate!!



And what about you?

- **What are your office needings? Own, renting, virtualization?**
- What problems have you found?
- What have been the results?
- Questions...
- Thanks...