

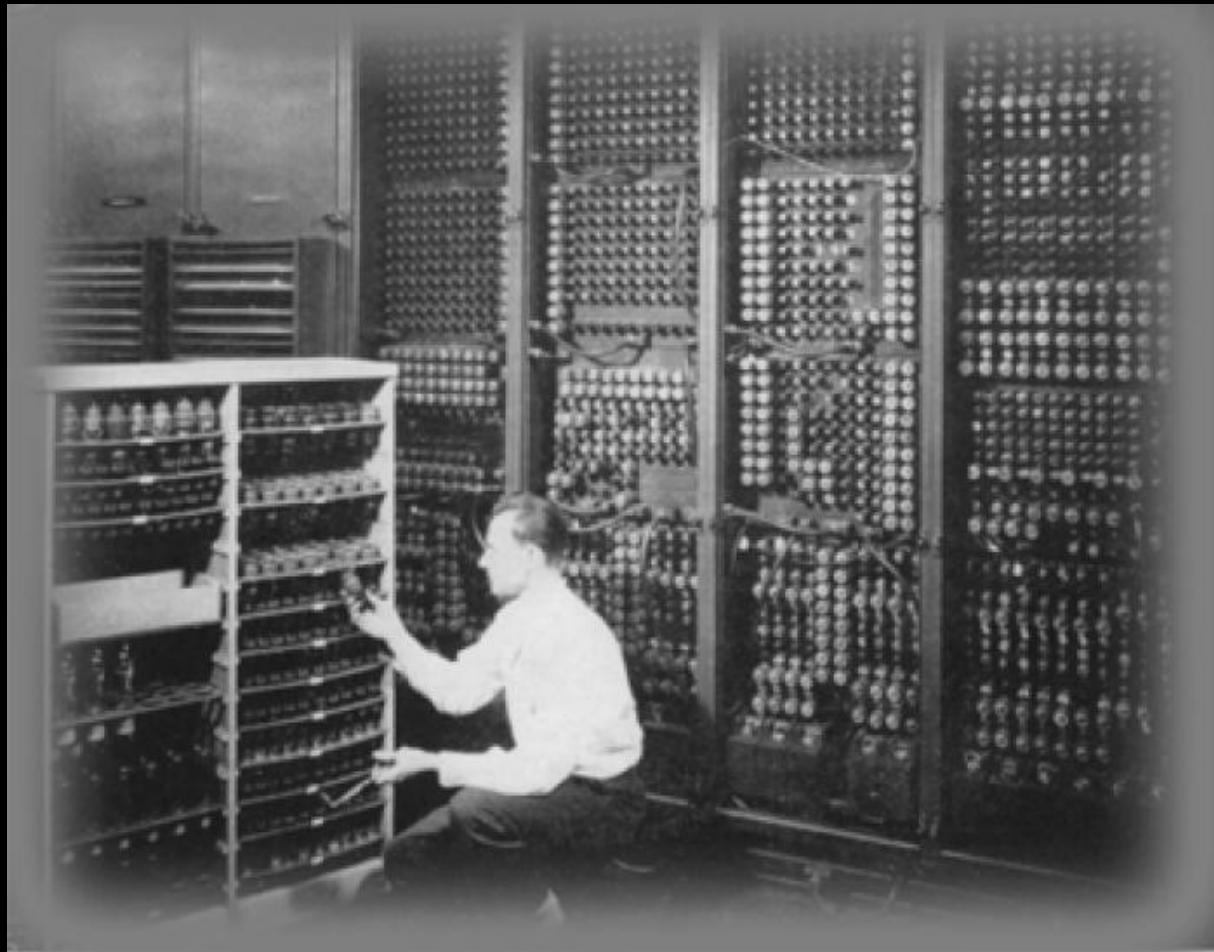
Wirtualizacja To Fakt ?

Wojciech A. Koszek

2009.06.03

WTF?

Komputery dawno temu



Komputer trochę później



Komputery nie tak dawno temu



Komputer wczoraj



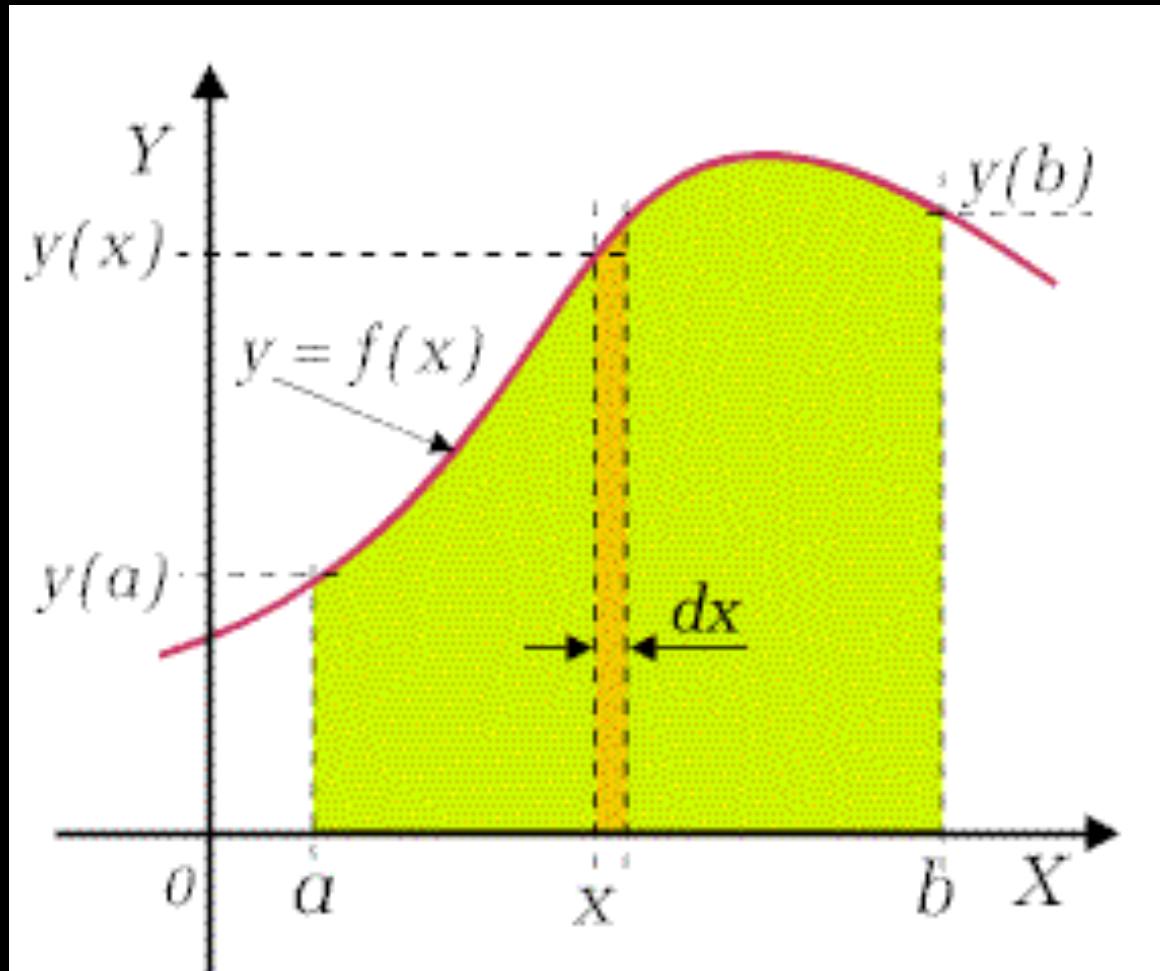
Komputery dziś



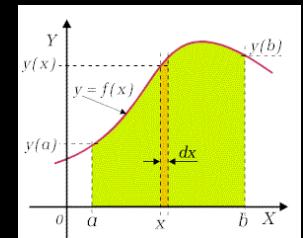
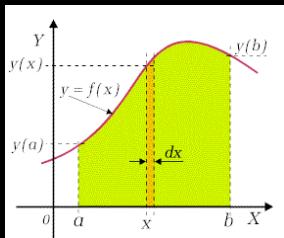
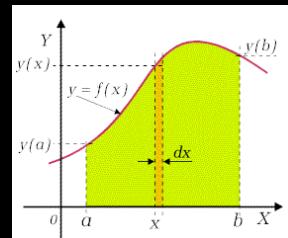
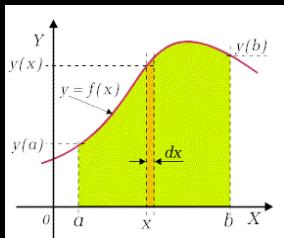
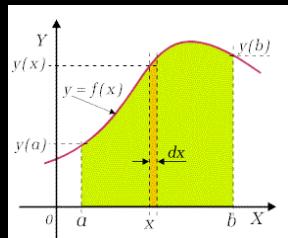
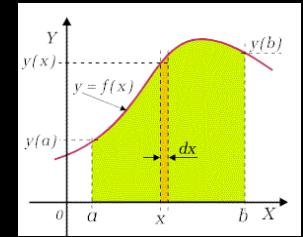
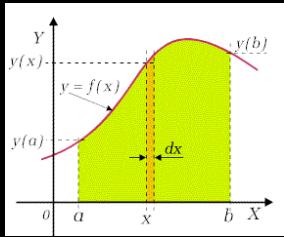
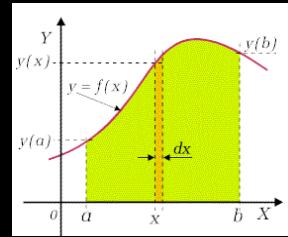
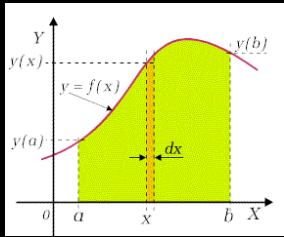
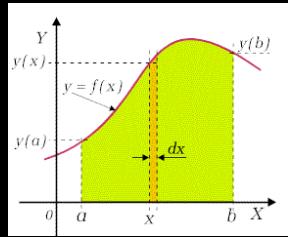
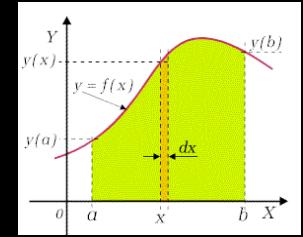
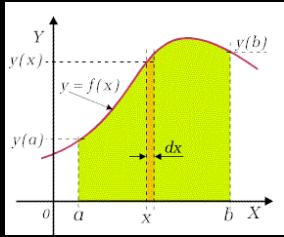
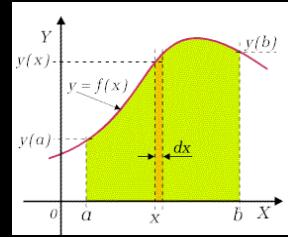
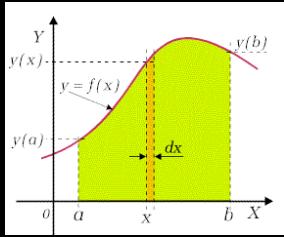
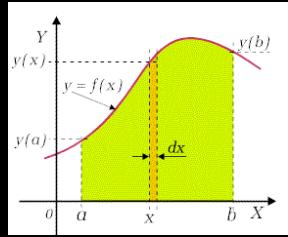
Potrzeby użytkowników



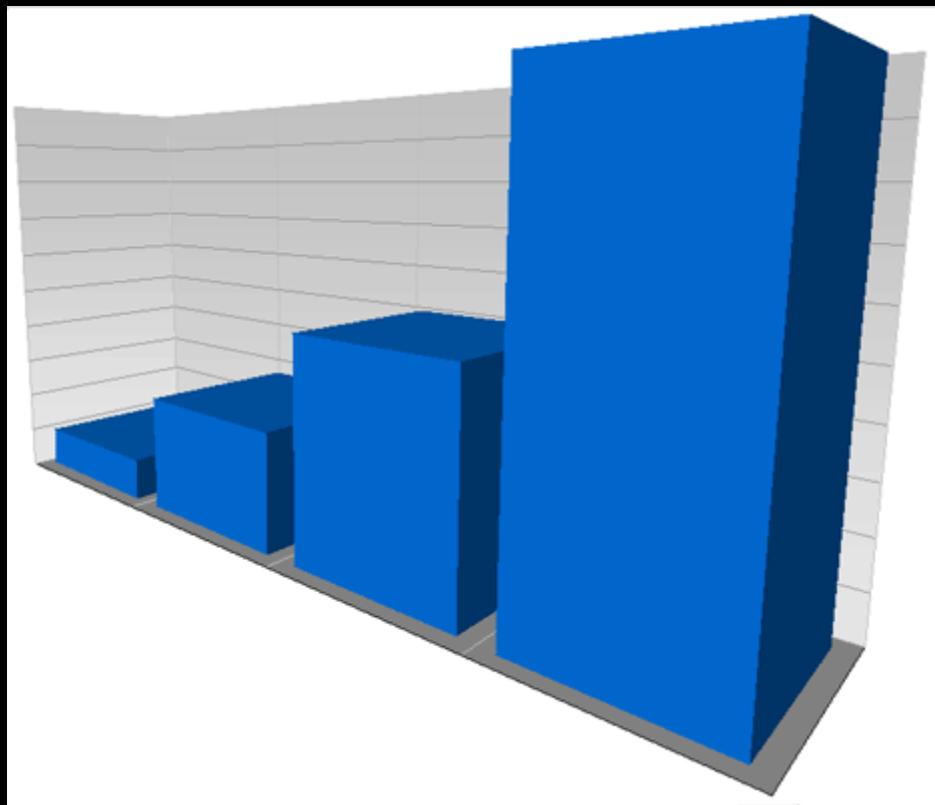
Policzyć całkę



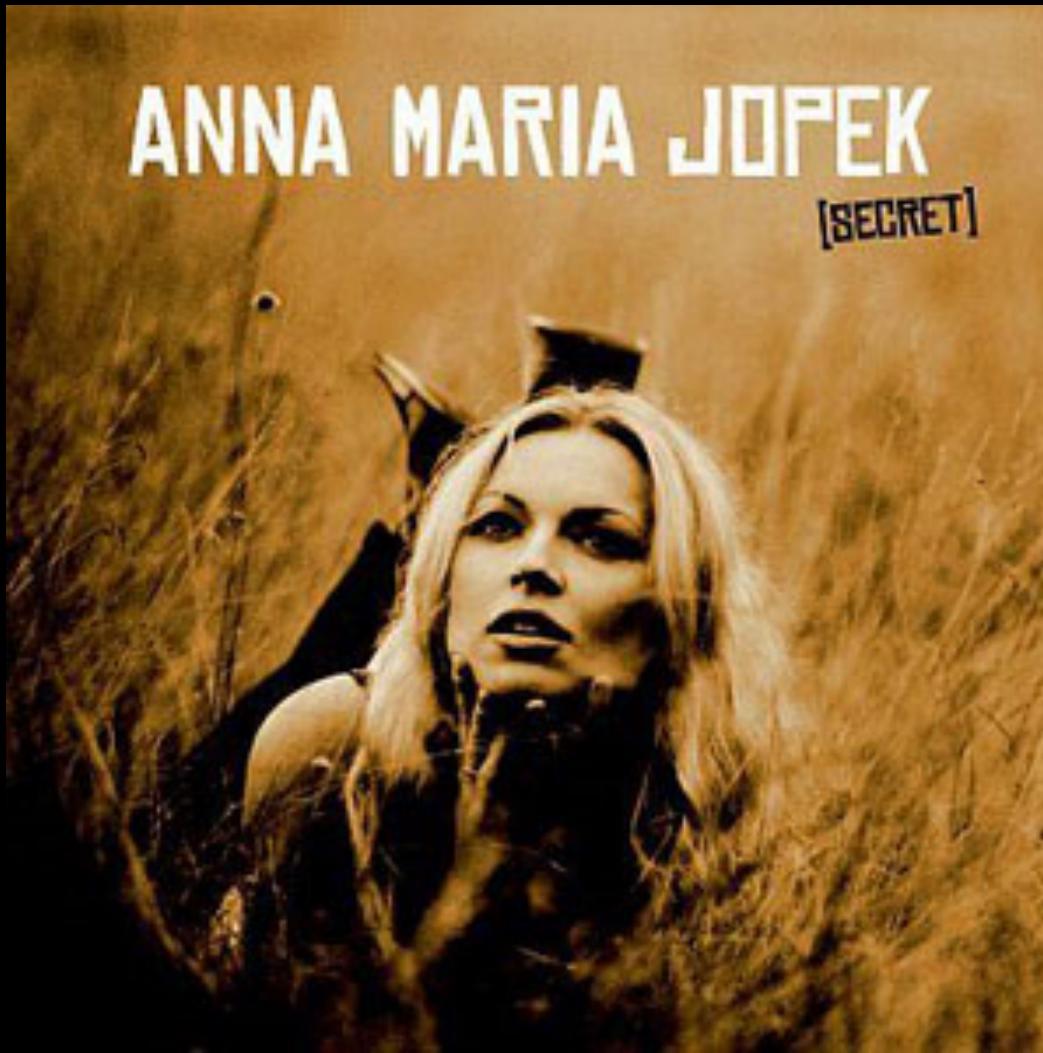
Policzyć dziesiątki całek



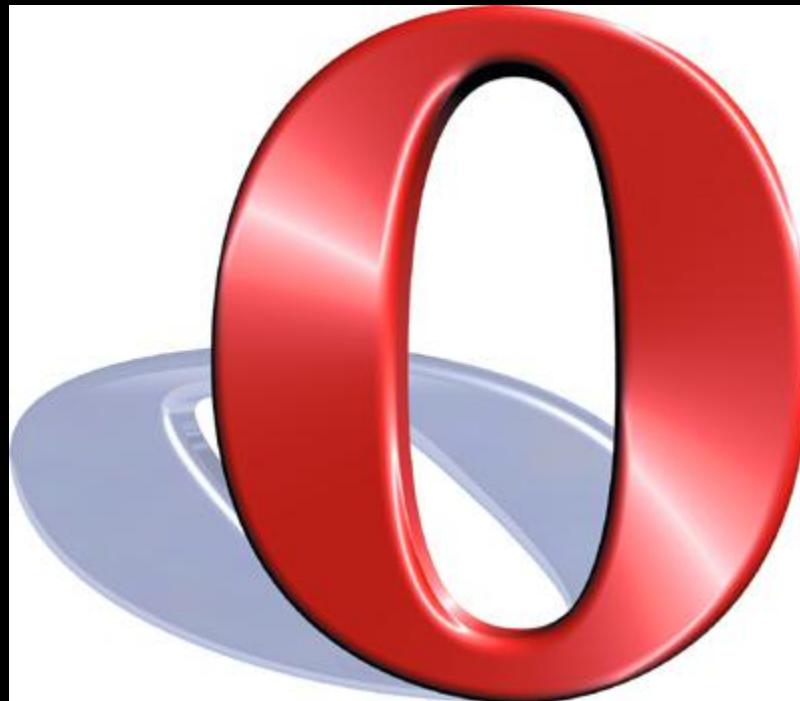
Zrobić podsumowanie roczne firmy...



...i wyświetlić je w ładnej postaci...



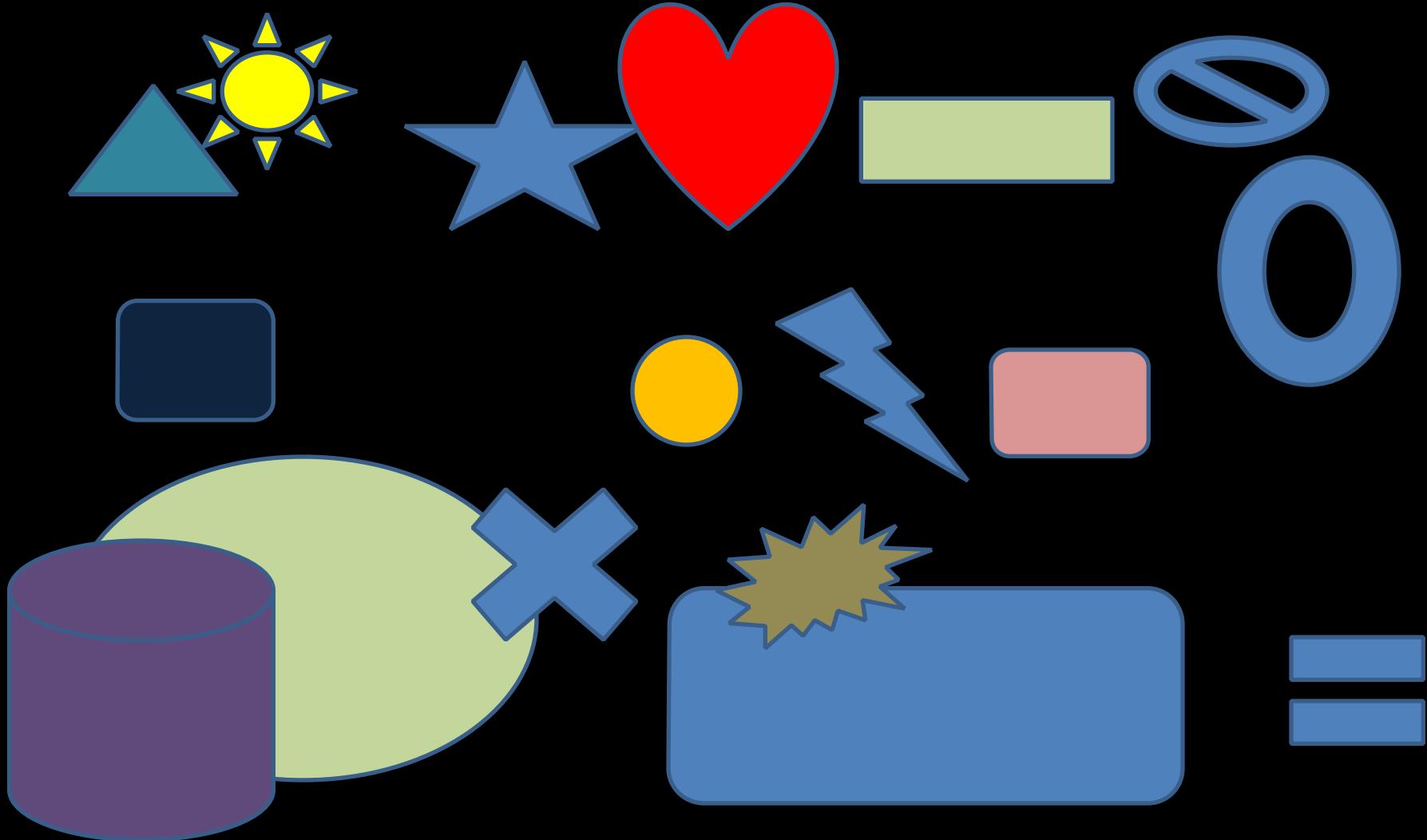
...najlepiej w przeglądarce WWW



Złożoność oprogramowania kiedyś



Złożoność oprogramowania dziś...



Ludzkie możliwości są ograniczone



Gdy wszystko działa dobrze...



Wszystko jest..



OK



Jednak gdy idzie źle jest...



Przestaje być OK!



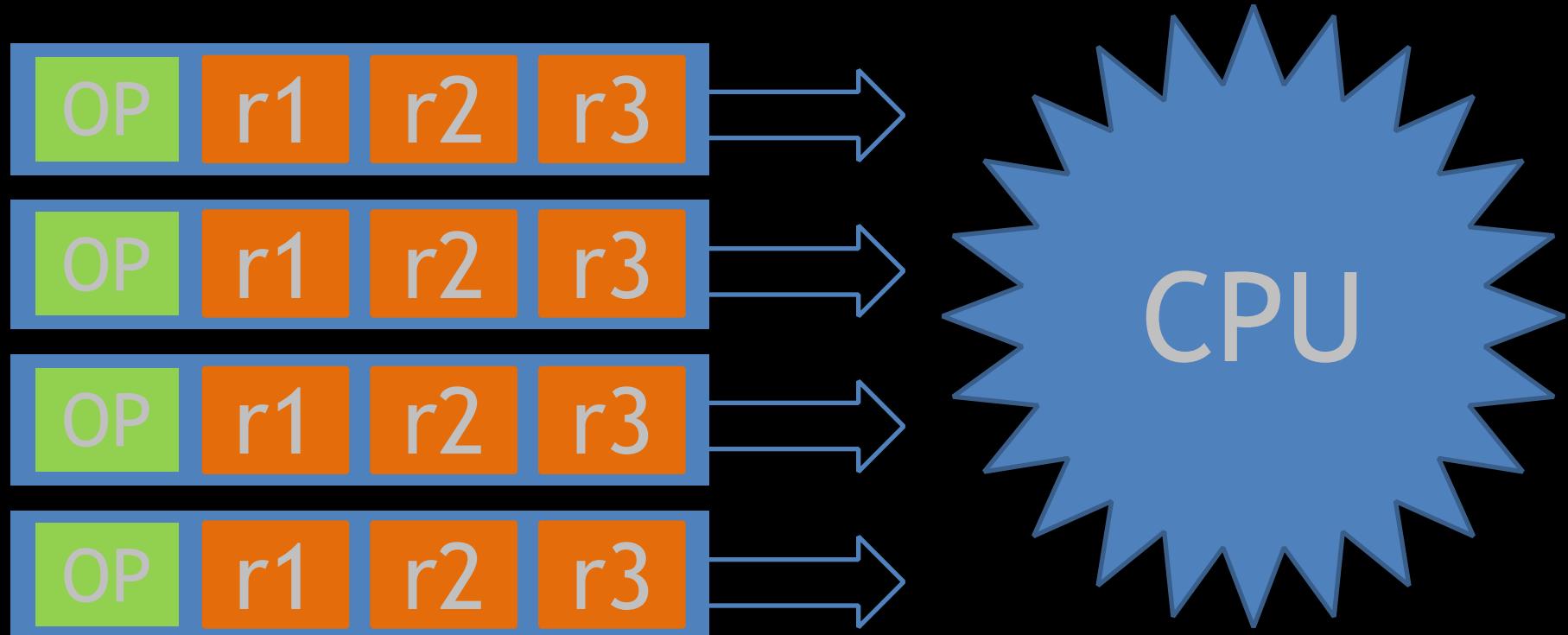
Możliwe rozwiązanie



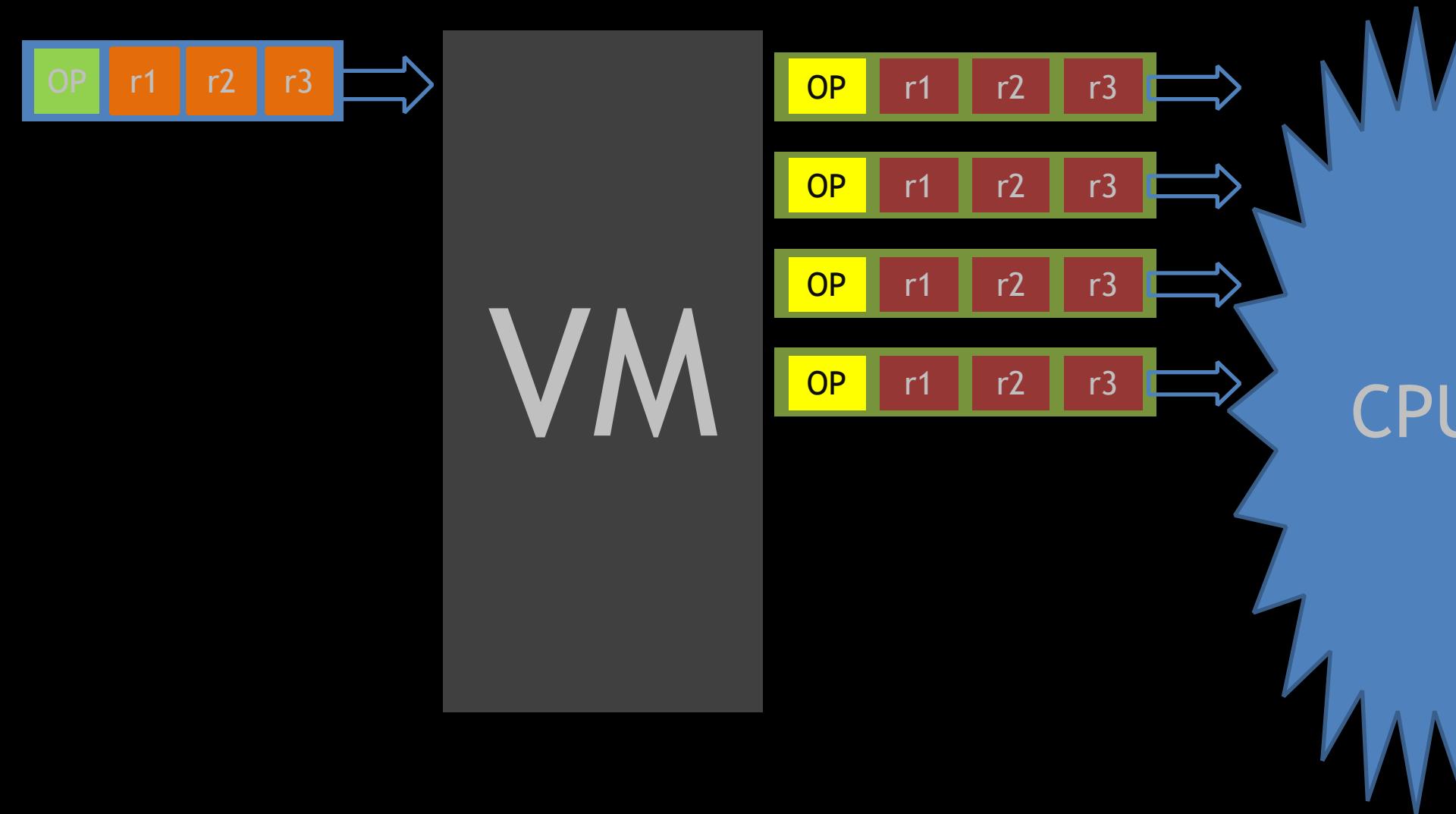
Bezpieczne języki programowania



Zamiast typowych instrukcji...



...instrukcje wirtualne (JAVA / MSIL)



Korzyści?



Brak problemów z zarządzaniem pamięcią



Łatwa kontrola kodem



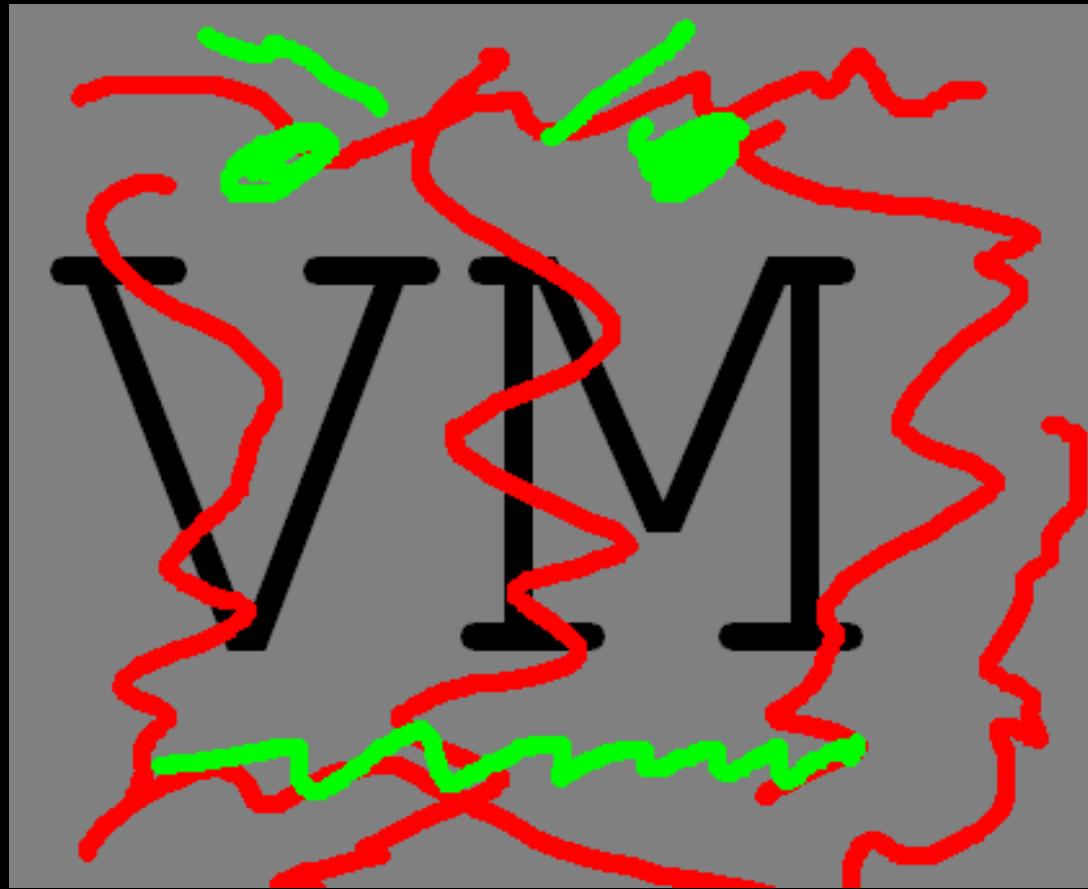
Zamiast typowego wyjątku...



...wyjątek zwracamy do VM



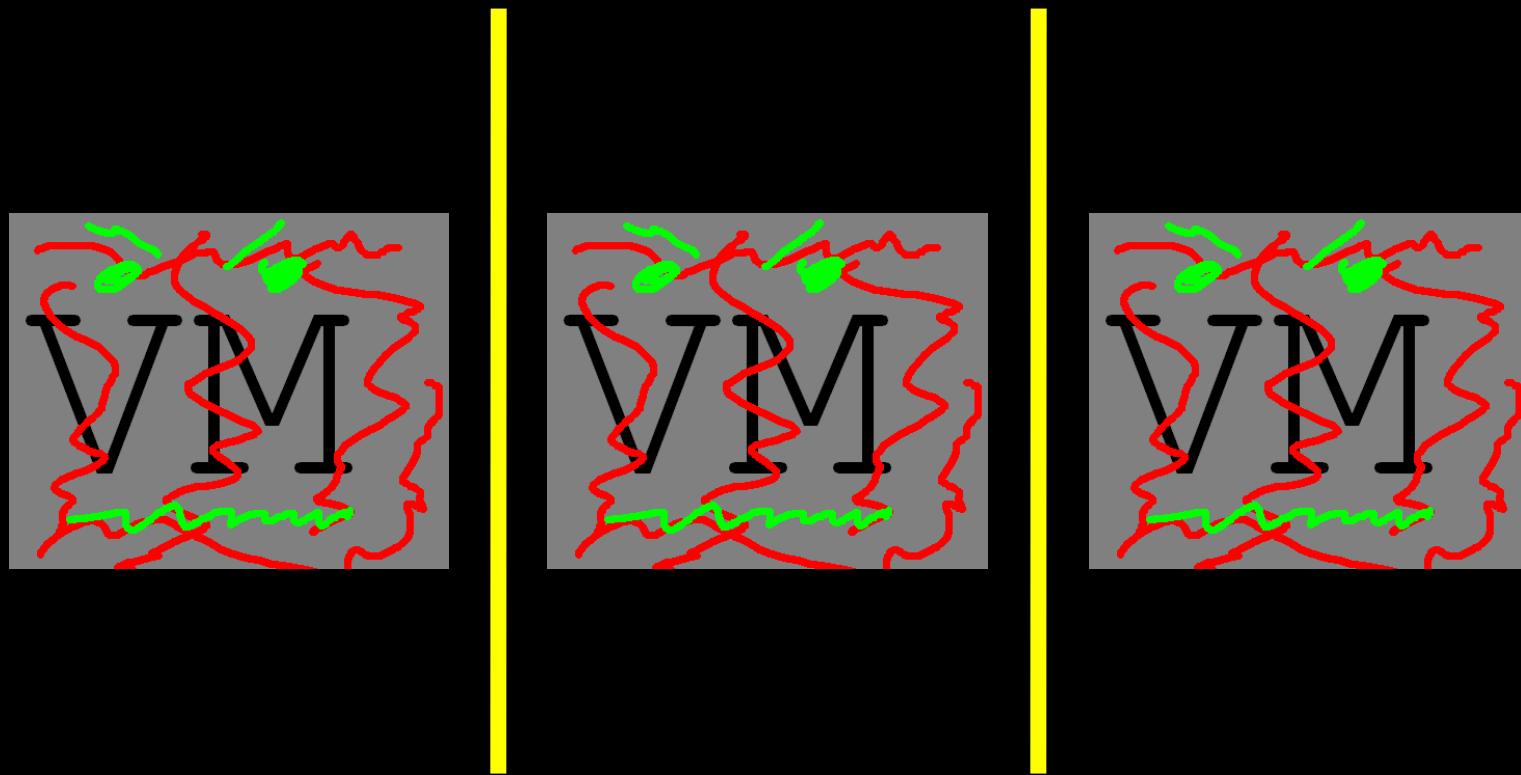
Co zrobić jak pojawia się problem z VM?



Lipa



Separacja VM



jail() / chroot()



Zones



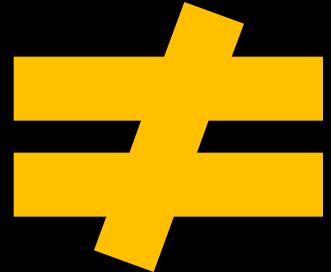
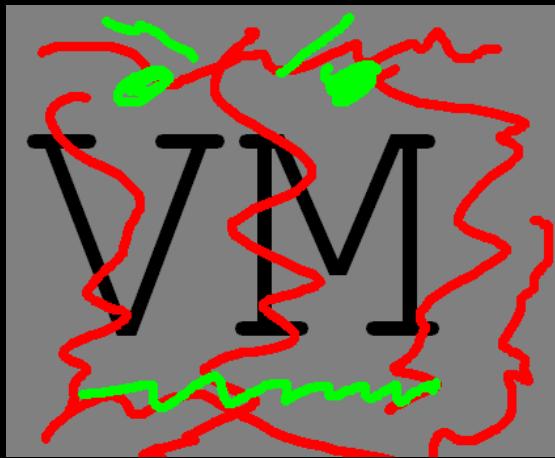
To nie do końca
wirtualizacja...



Korzyści?



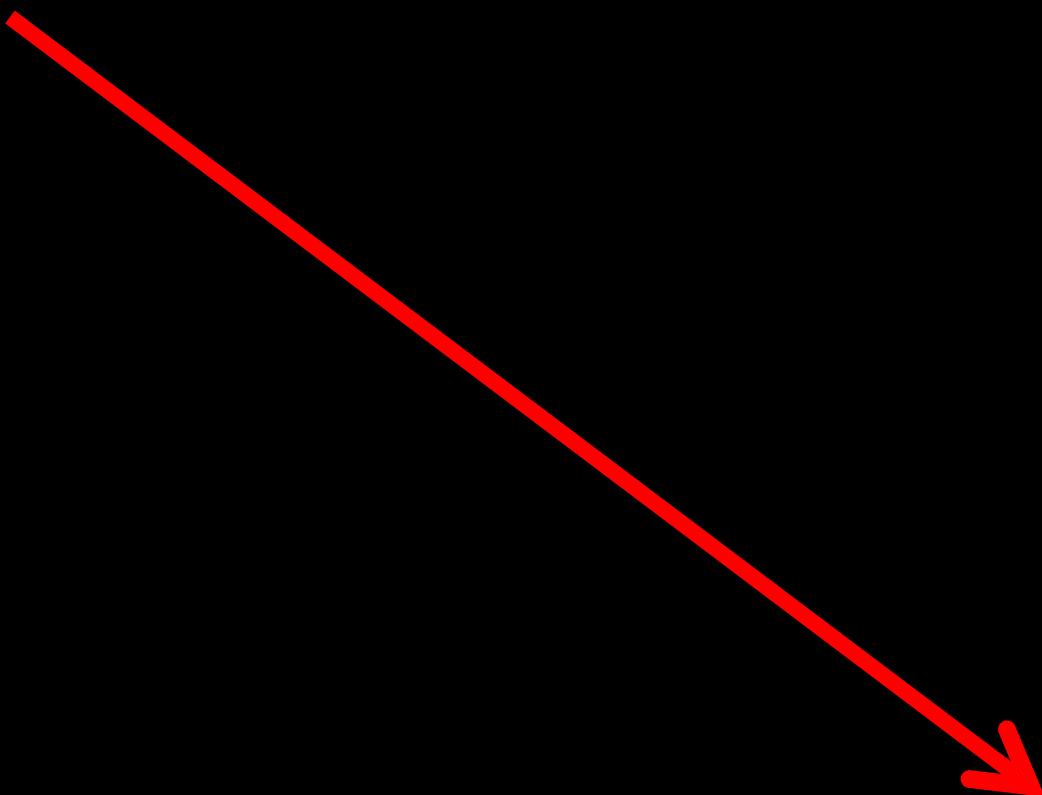
Śmierć VM nie skutkuje w śmierci systemu



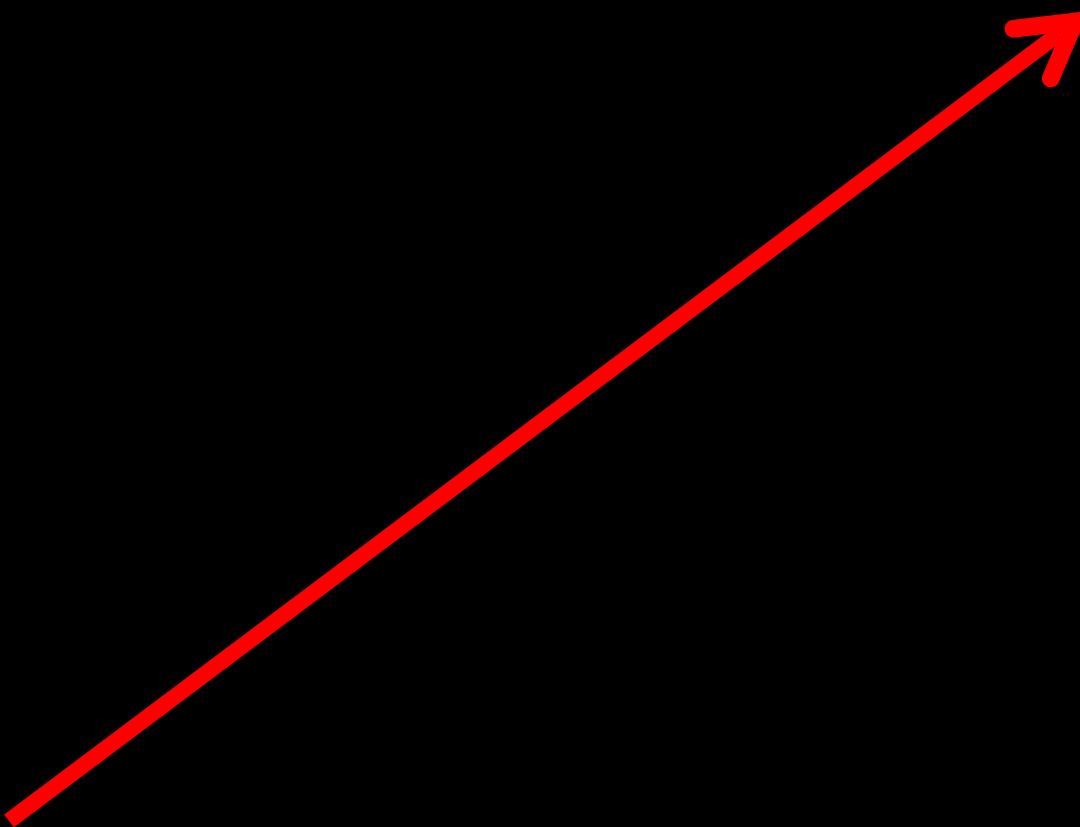
Problemy?



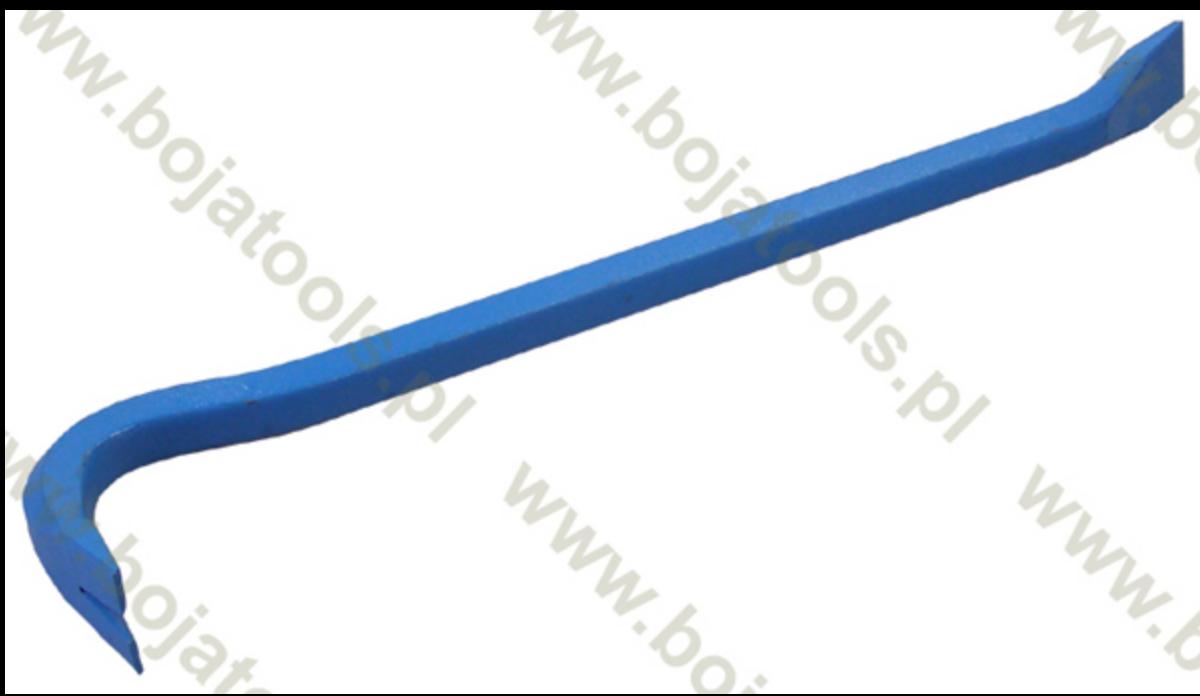
Mniejsza wydajność



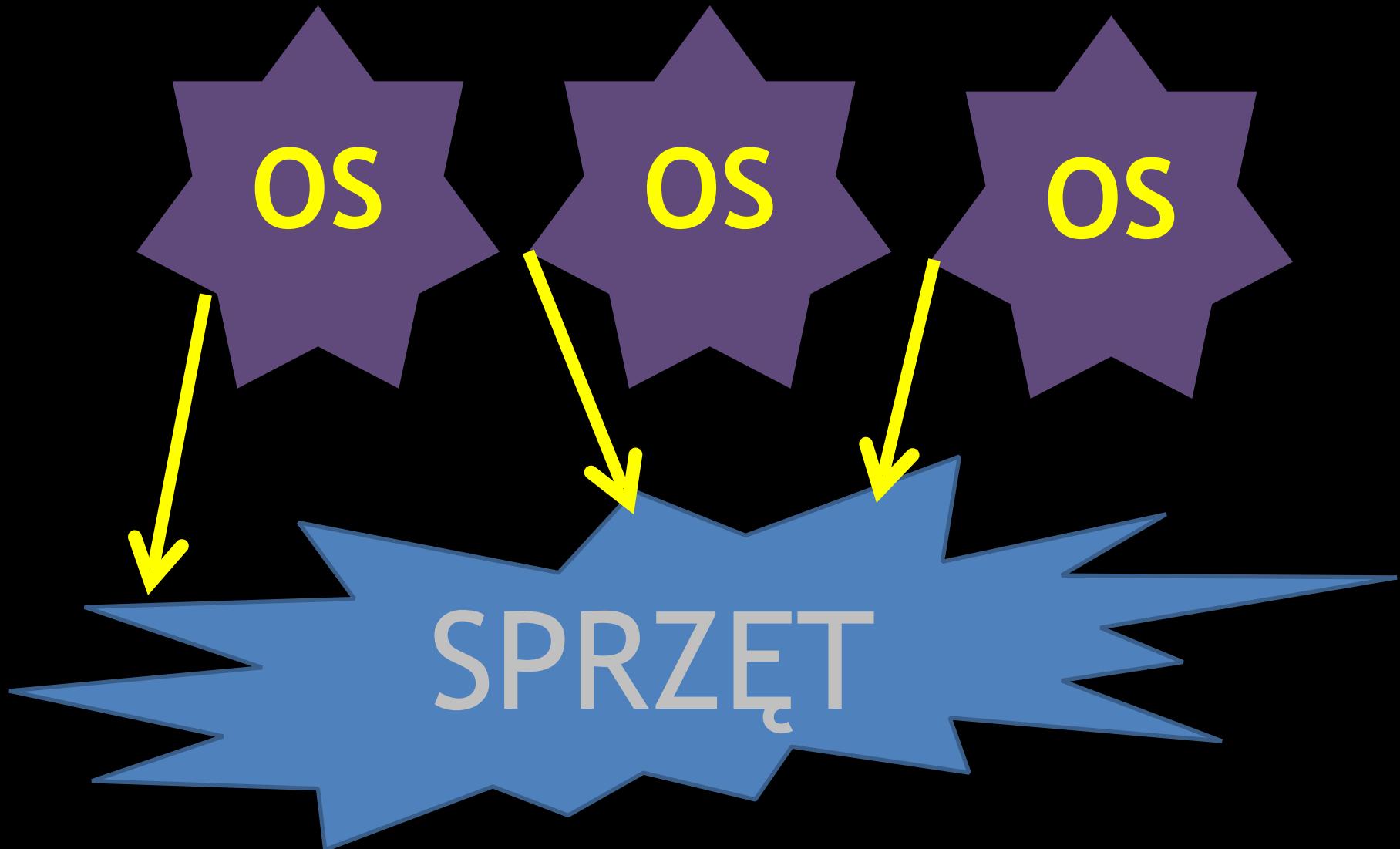
Większa komplikacja w konfiguracji



Poważniejsze zastosowania



Wirtualizacja systemu



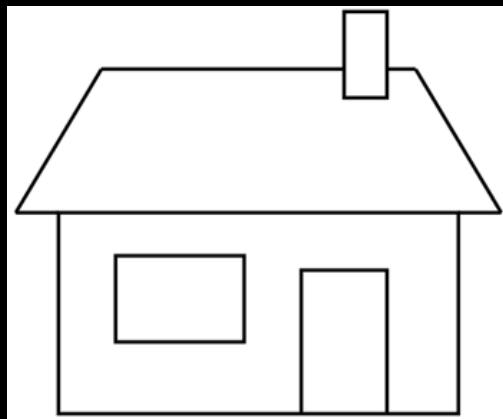
Xen



Dom0



DomX



VirtualPC



Click & Go



Click & Go 2

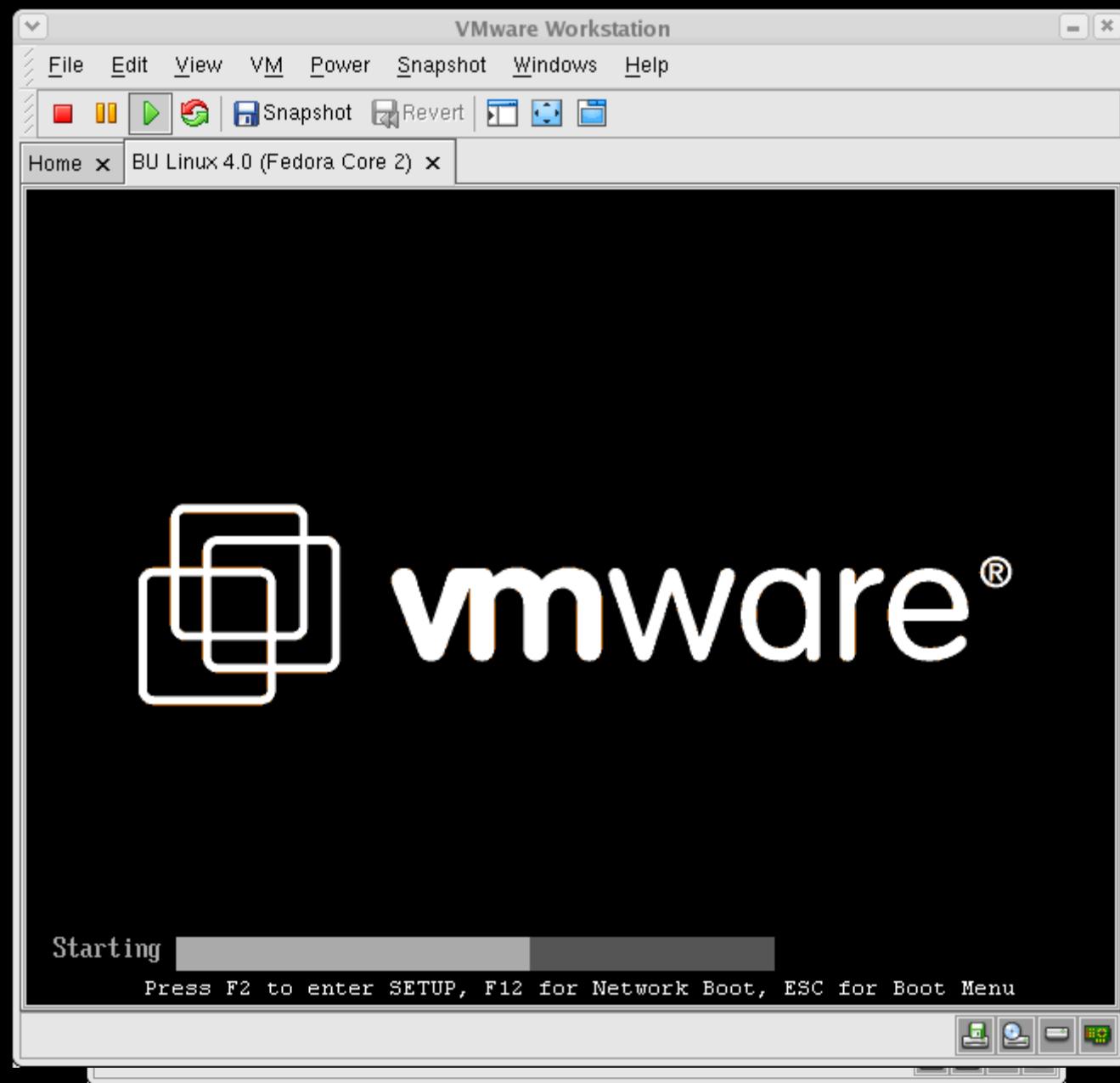


Click & Go 3



Click & Go 4





VMWare Server

: VMware Management Interface - Mozilla Firefox

File Edit View Go Bookmarks Tools Help Sub with Bloglines

https:// /vmware/en/

VMware Server 1.0.1 build-29996 | administrator@

Status Monitor Options Refresh | Help | Log Out

Last updated Sun Jan 14 2007 20:54:05 GMT+0100

System Summary 5 Minute Average

Processors (2)		Memory (4.0 G)	
Virtual Machines	0 %	Virtual Machines	152.0 M
Other	2 %	Other	1.9 G
System Total	2 %	System Total	2.0 G

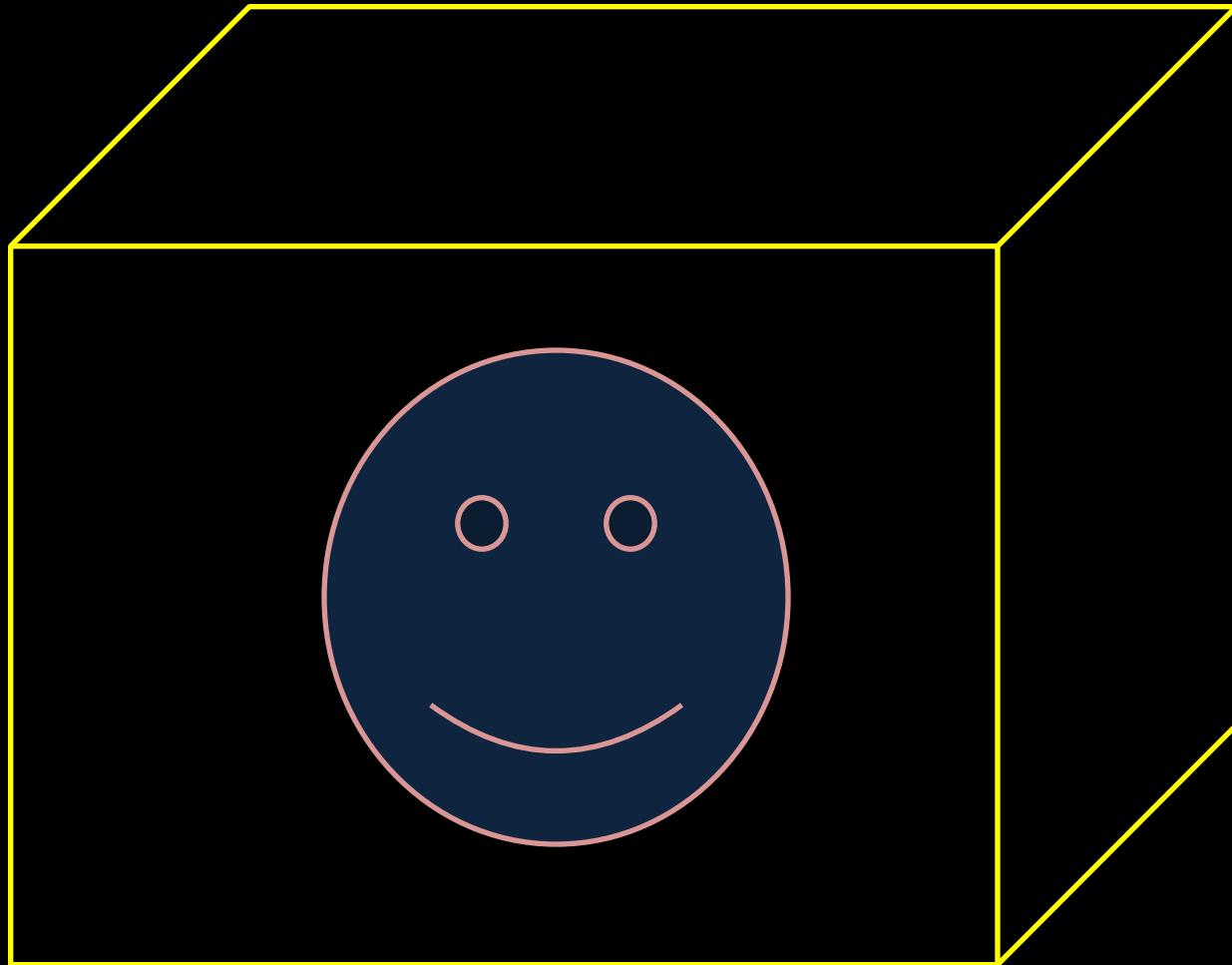
Virtual Machines (4)

HB	Display Name	Up	% CPU	RAM
	Linux Application Server Powered on PID 2320	7 hours	0	2.0 M
	Windows Build Machine Powered on PID 2220	7 hours	0	84.0 M
	Windows Application Server Powered on PID 3936	7 hours	0	61.0 M
	Linux Communication Server Powered on PID 2628	7 hours	0	5.0 M

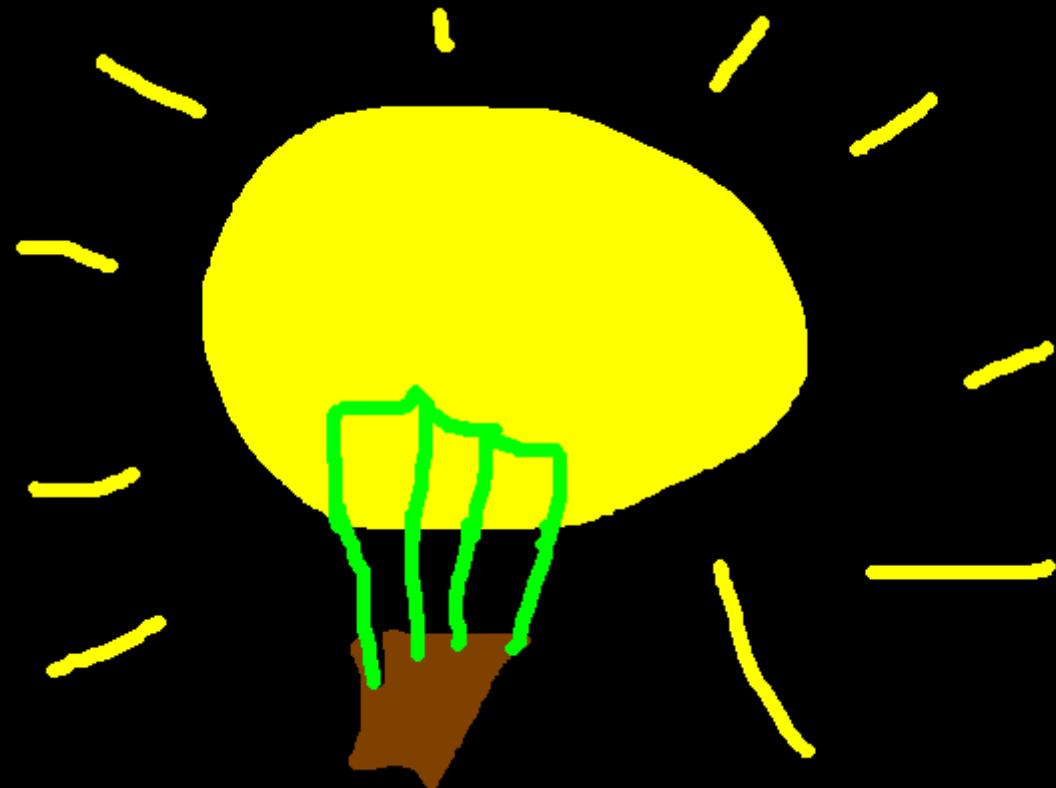
Done

This screenshot shows the VMware Management Interface running in Mozilla Firefox. The interface displays system monitoring data for two processors and 4.0 GB of memory, followed by a list of four virtual machines (VMs) running on the host. The VMs include a Linux Application Server, a Windows Build Machine, a Windows Application Server, and a Linux Communication Server. All VMs are currently powered on and have been up for 7 hours. The interface uses green progress bars to represent resource usage.

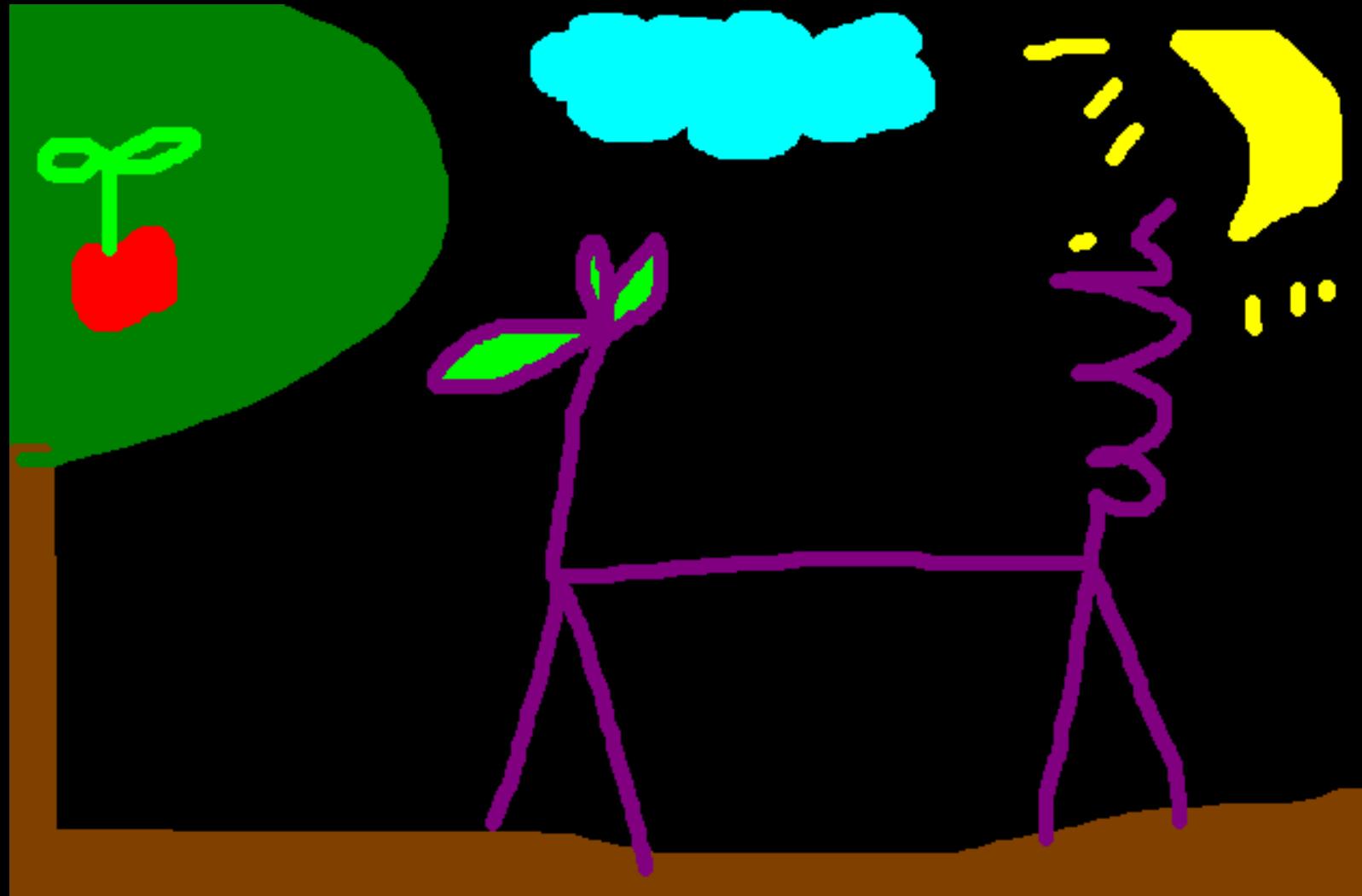
VirtualBOX



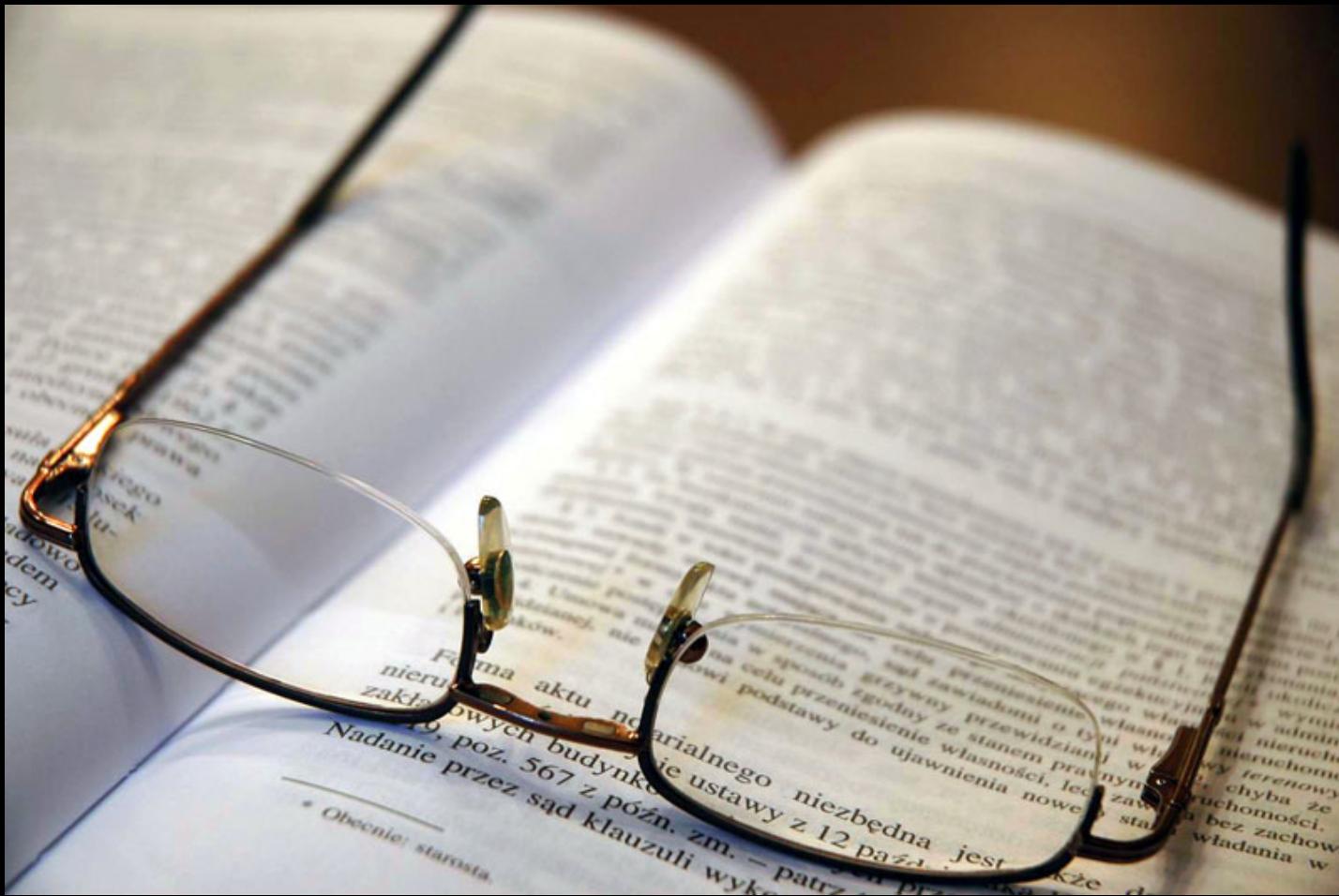
Bochs



Qemu



Podsumowanie

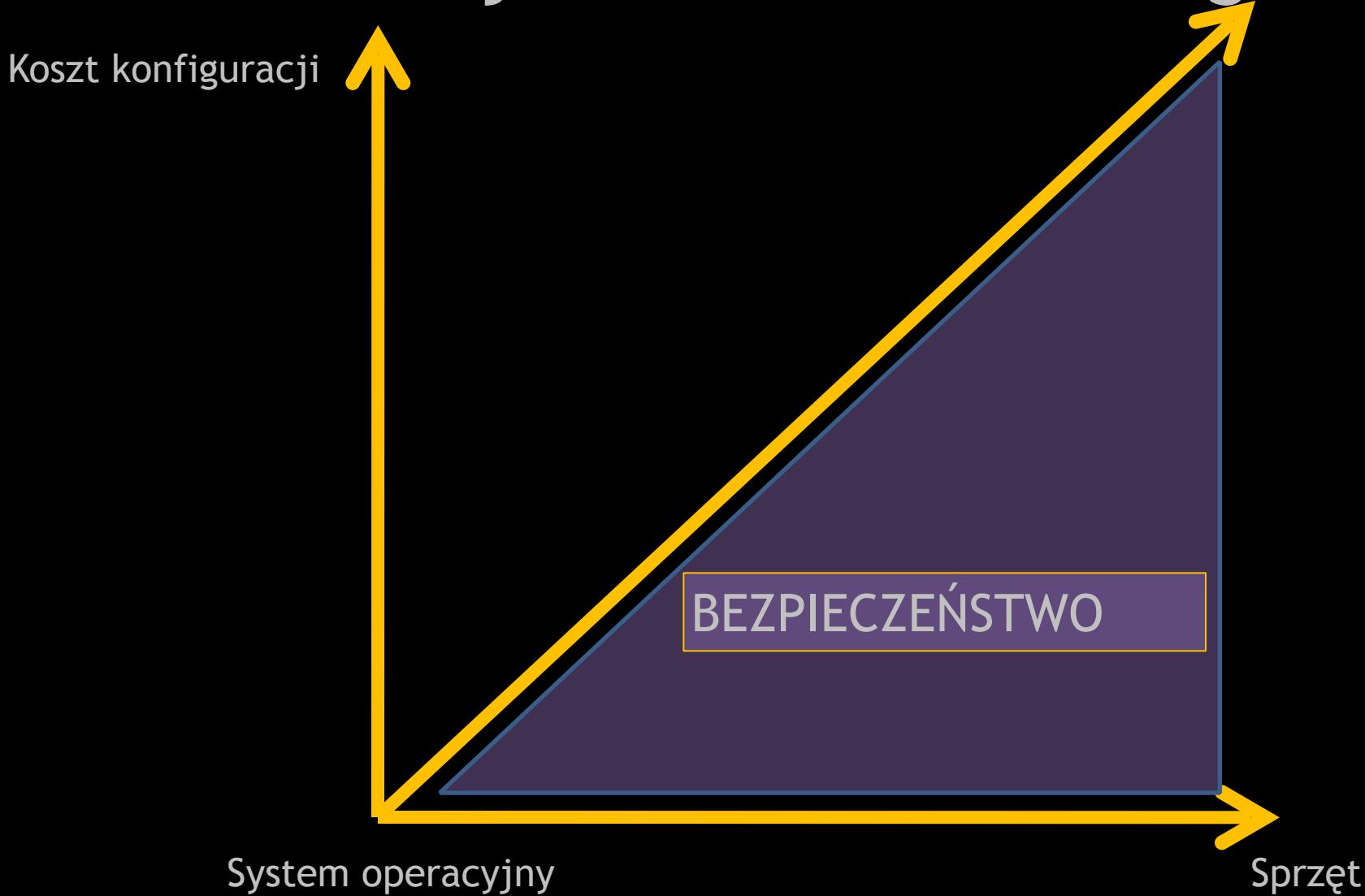


Wirtualizacja jest ciekawa

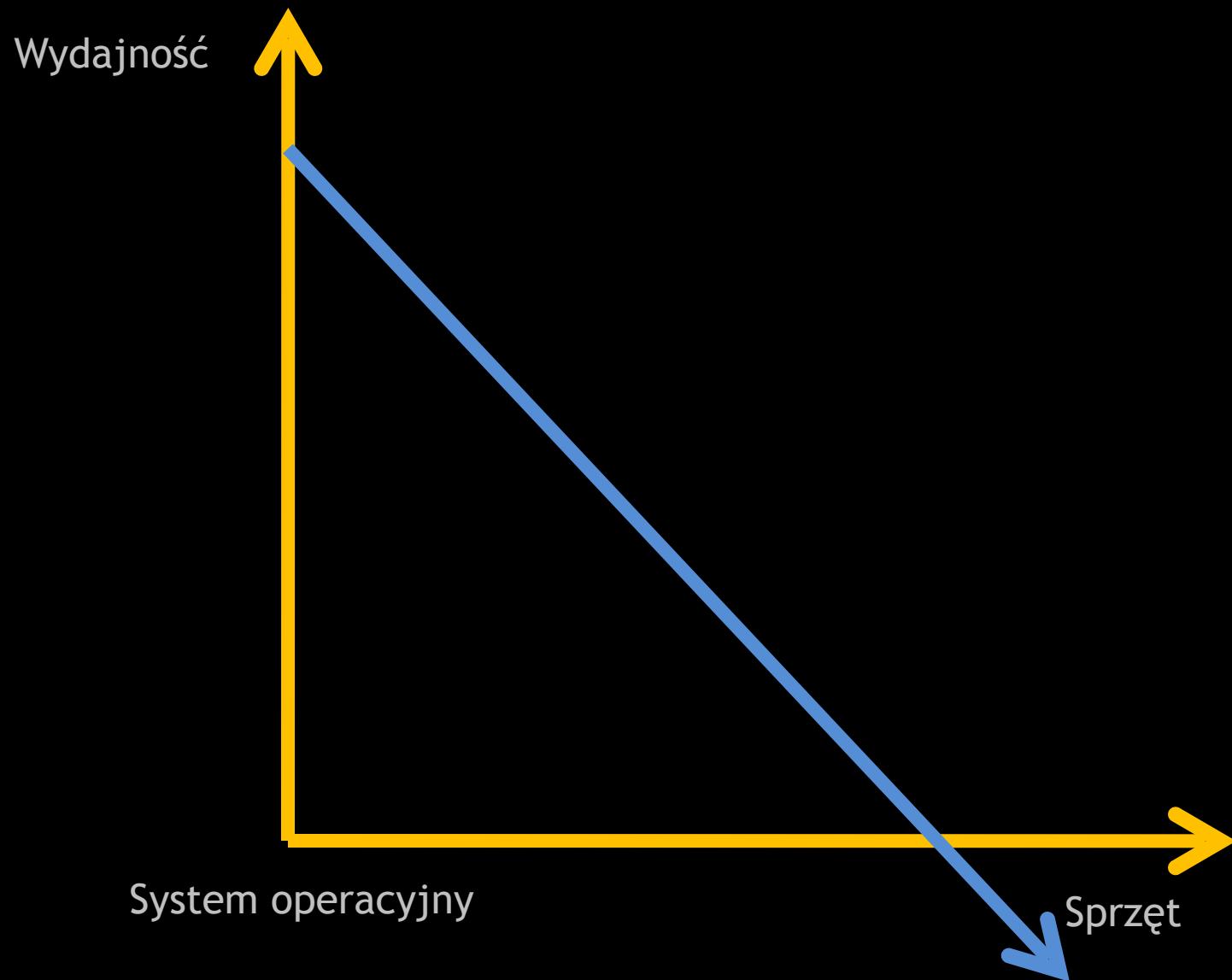


© randka.o2.pl

Kosztowna jeżeli chodzi o konfigurację



Kosztowna jeżeli chodzi o wydajność



Warto zwrócić uwagę...



the oscars

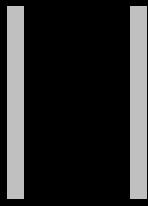
february 25 2007

5pt/8et



oscar.com

QA () ?



go away !