



Virtualization The Licensing Lottery

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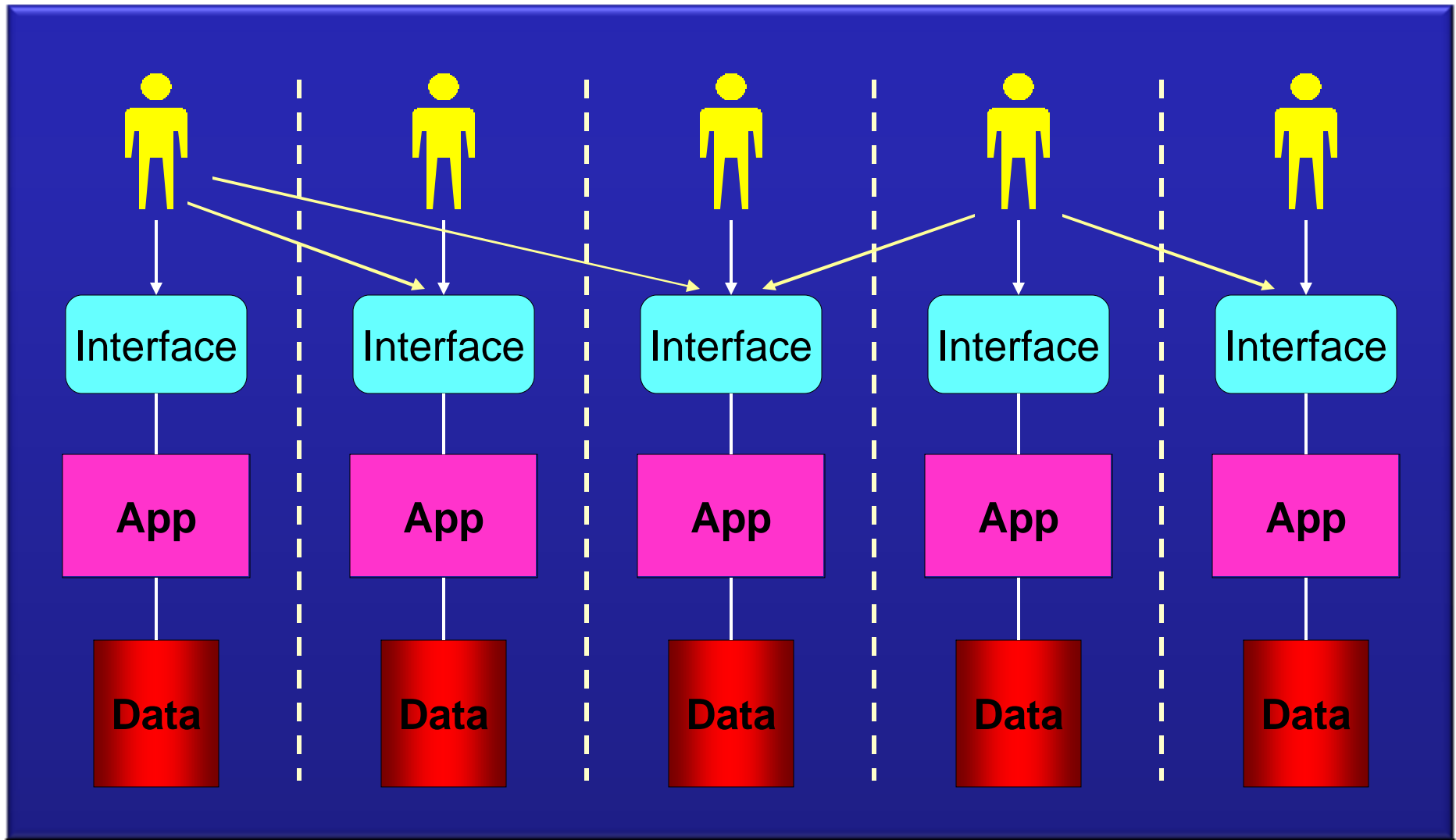




Topics

- Evolution of licensing models
- Virtualization related considerations
- A scenario based analysis of options
- Other licensing considerations
- Top line recommendations
- Comments and questions

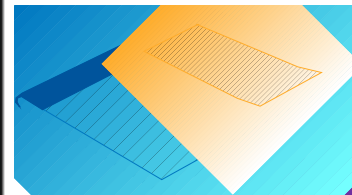
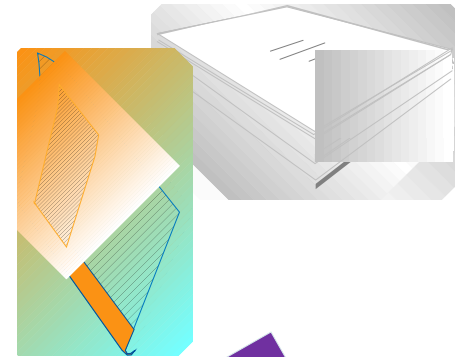
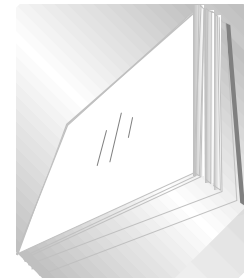
Roots of modern licensing planted firmly in the past



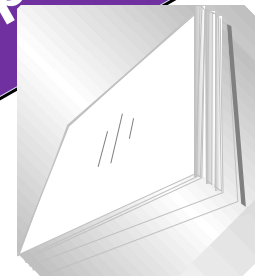
Traditional licensing options



- Per server
- Per cpu
- Per core
- Per named user
- Per concurrent user
- By number of employees
- Enterprise license
- Open source



Maintenance included?
Support included?
Use by third-parties?

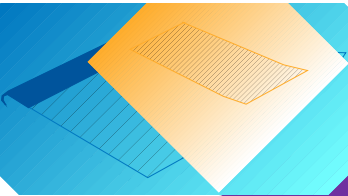
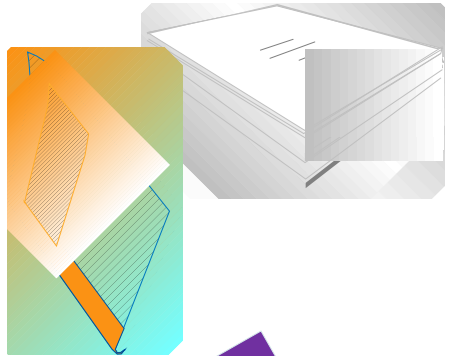


More choice, or confusion?



Per server
Per cpu
Per core
Per named user
Per concurrent user
By number of employees
Enterprise license
Open source

Per instance
Per virtual cpu
By allocated resource



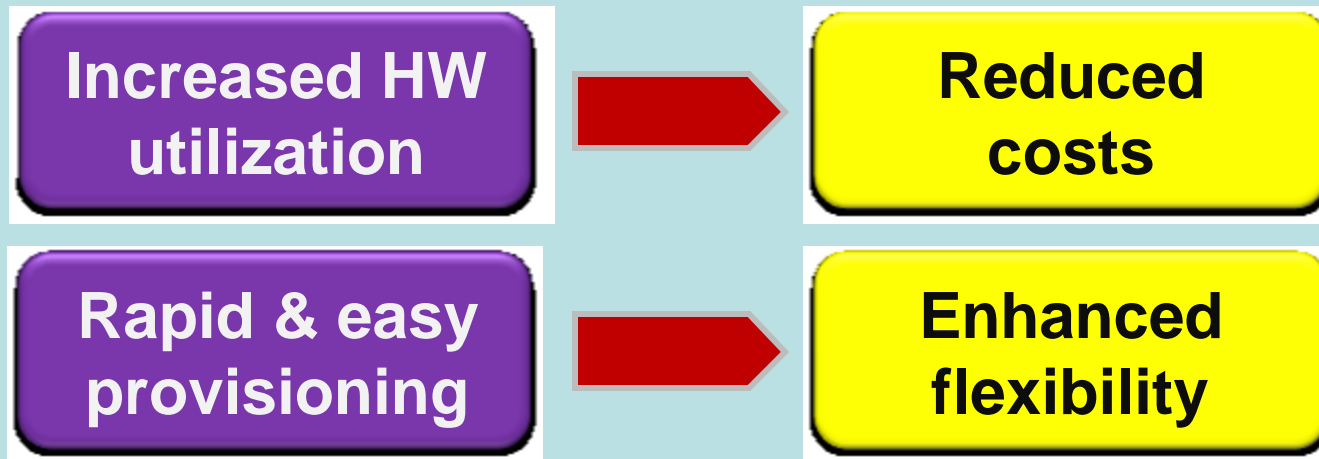
Maintenance included?
Support included?
Use by third-parties?



Context for discussion



TWO KEY VIRTUALIZATION BENEFITS

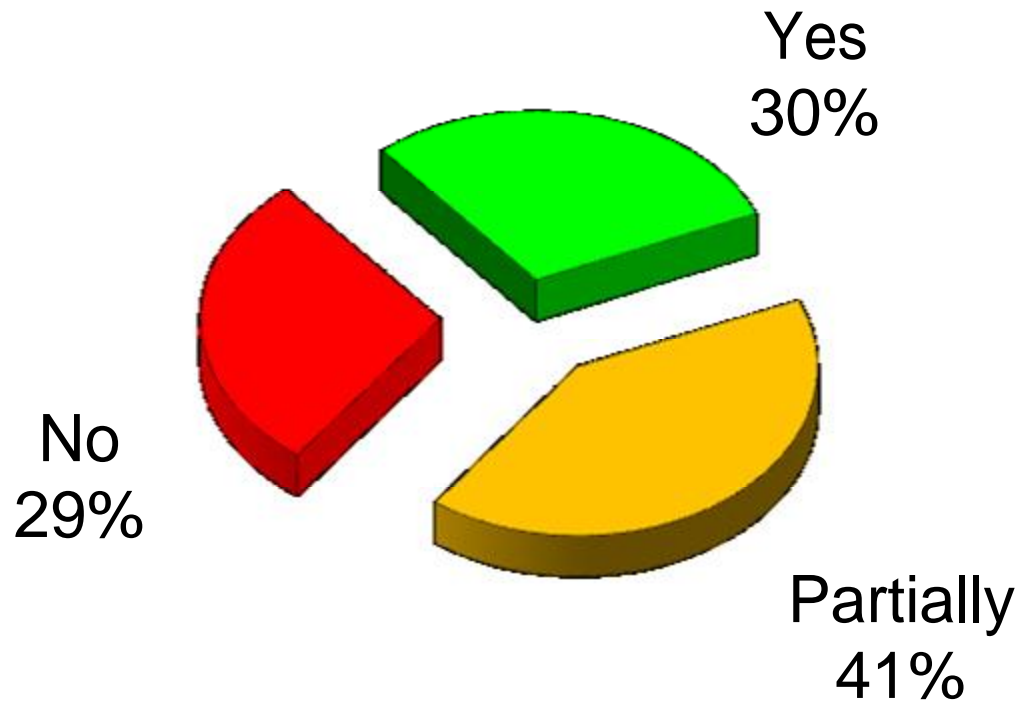
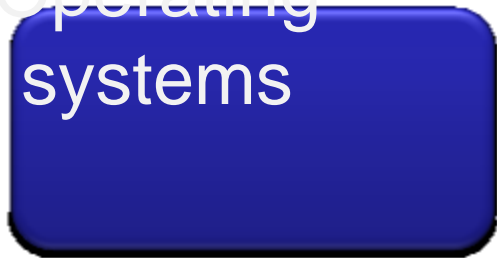


- Software licensing models should ideally reinforce these benefits

Are you happy with existing licensing models as applied to virtual systems?



Operating systems

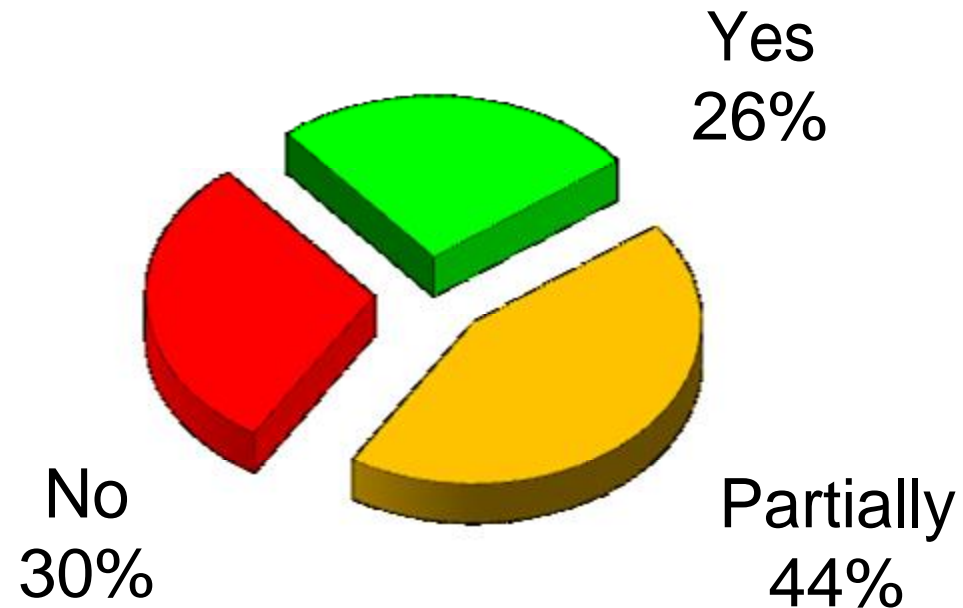


Source Freeform Dynamics and The Register, Oct 2007
Percentages relate to respondents offering an opinion

Are you happy with existing licensing models as applied to virtual systems?



Other
infrastructure
software
(middleware,
DBMS, etc)

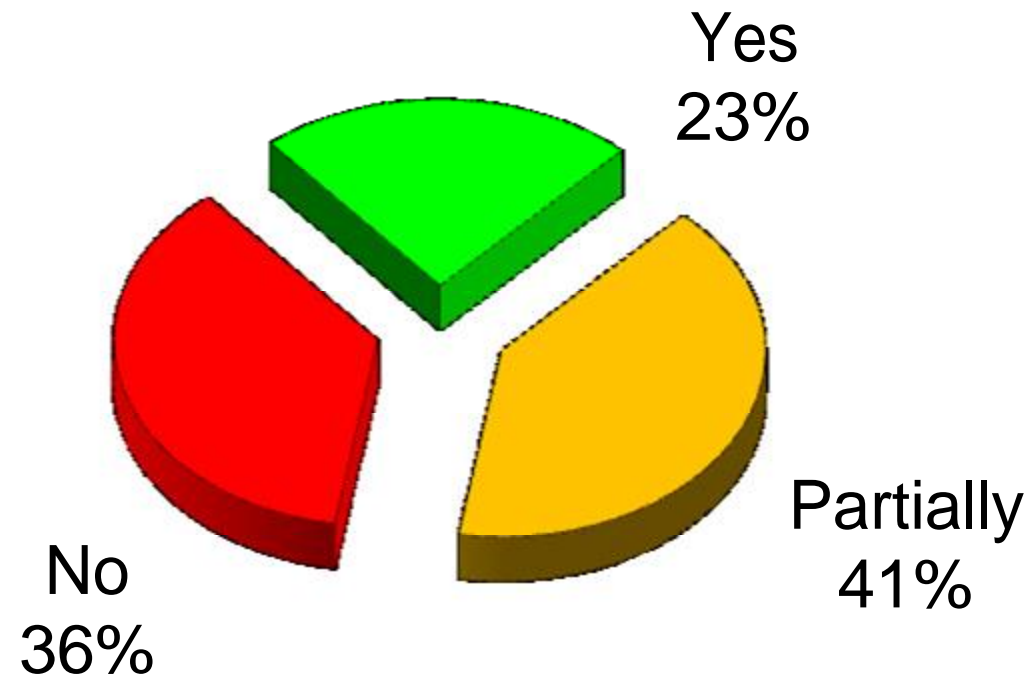


*Source Freeform Dynamics and The Register, Oct 2007
Percentages relate to respondents offering an opinion*

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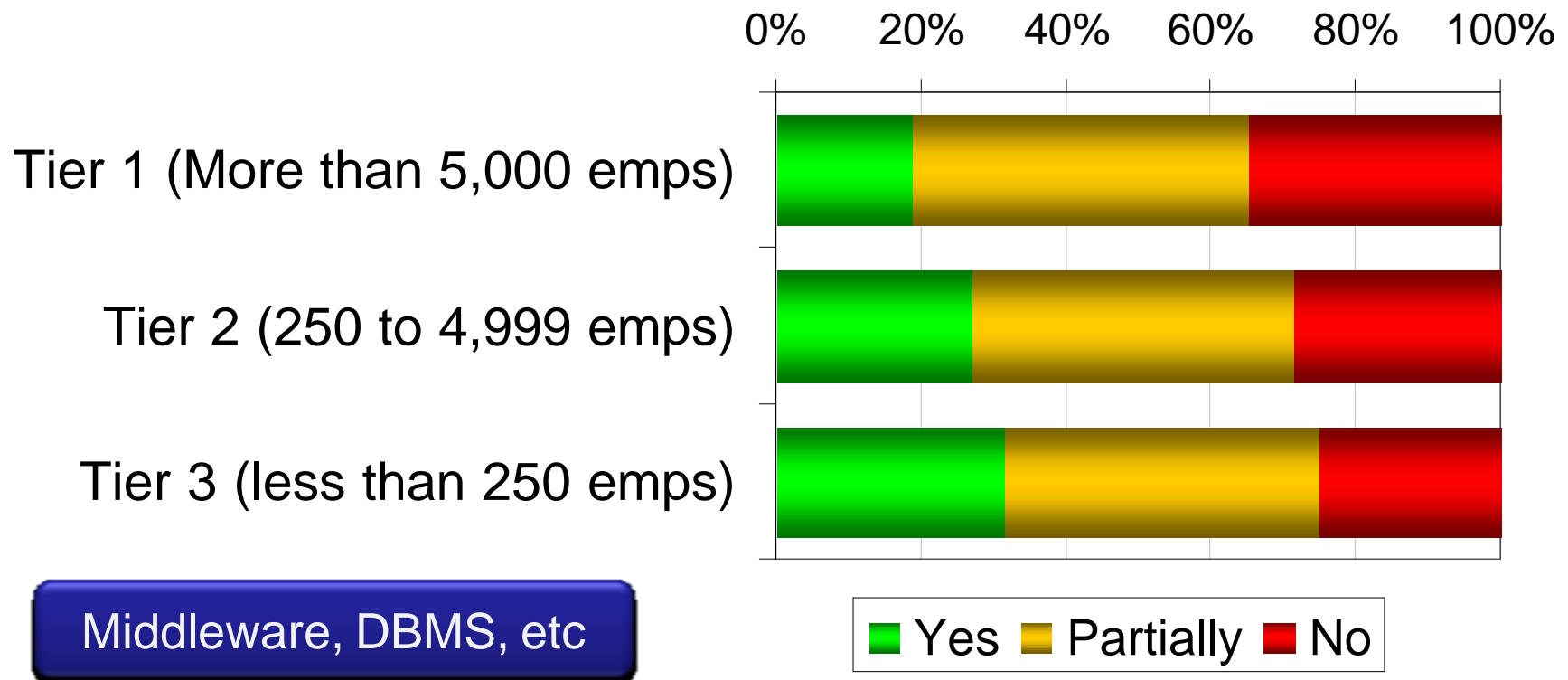


Application software
(ERP, CRM, etc)

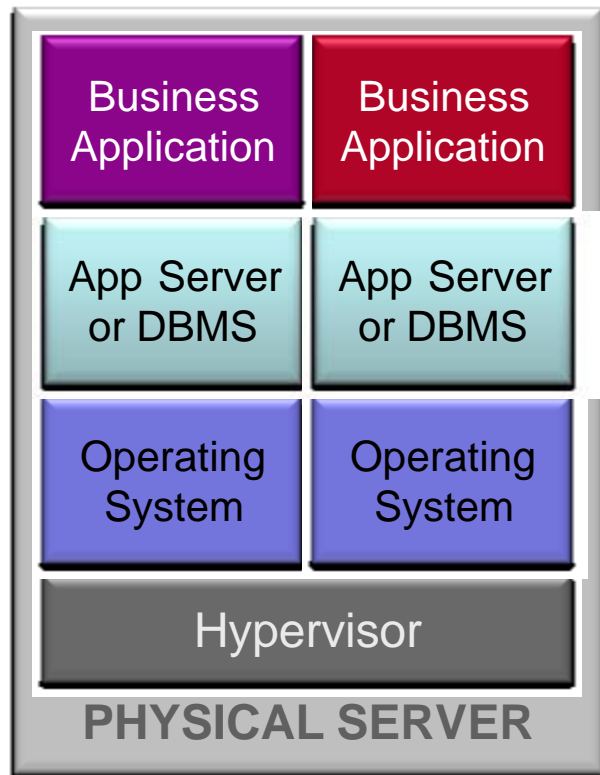


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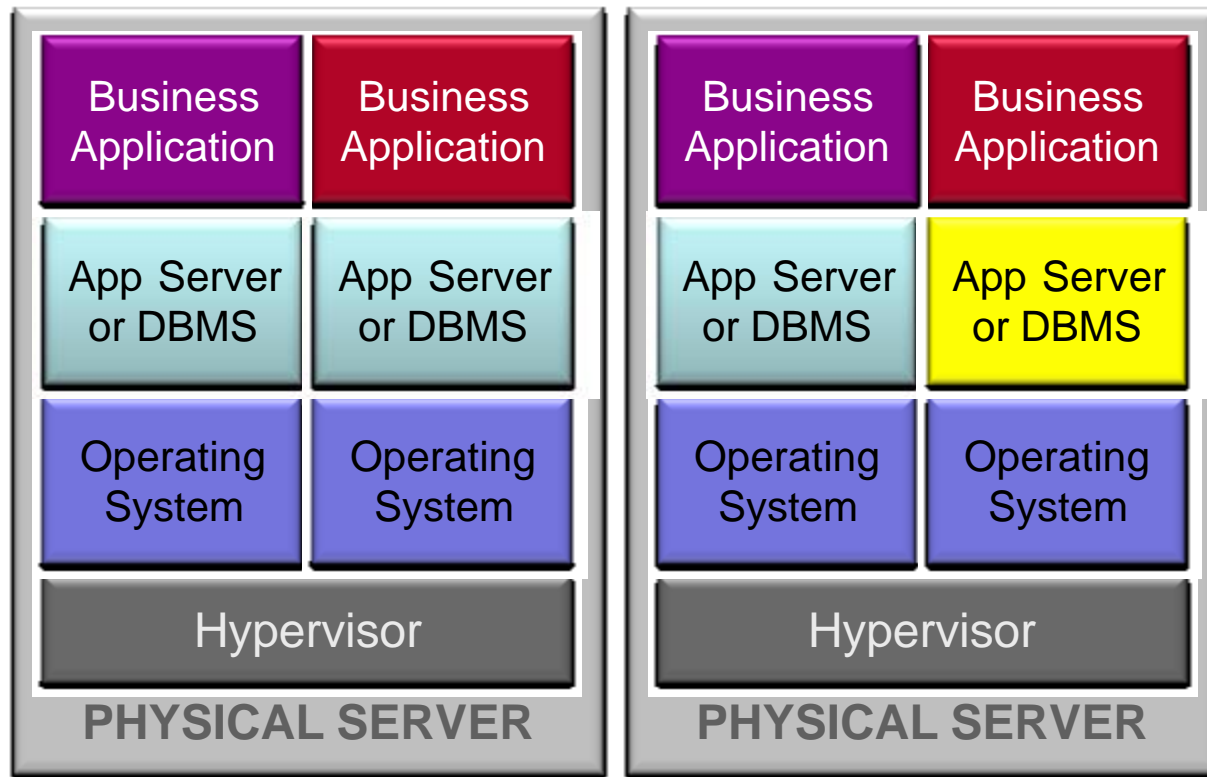


Some common scenarios



Replicated single platform stack

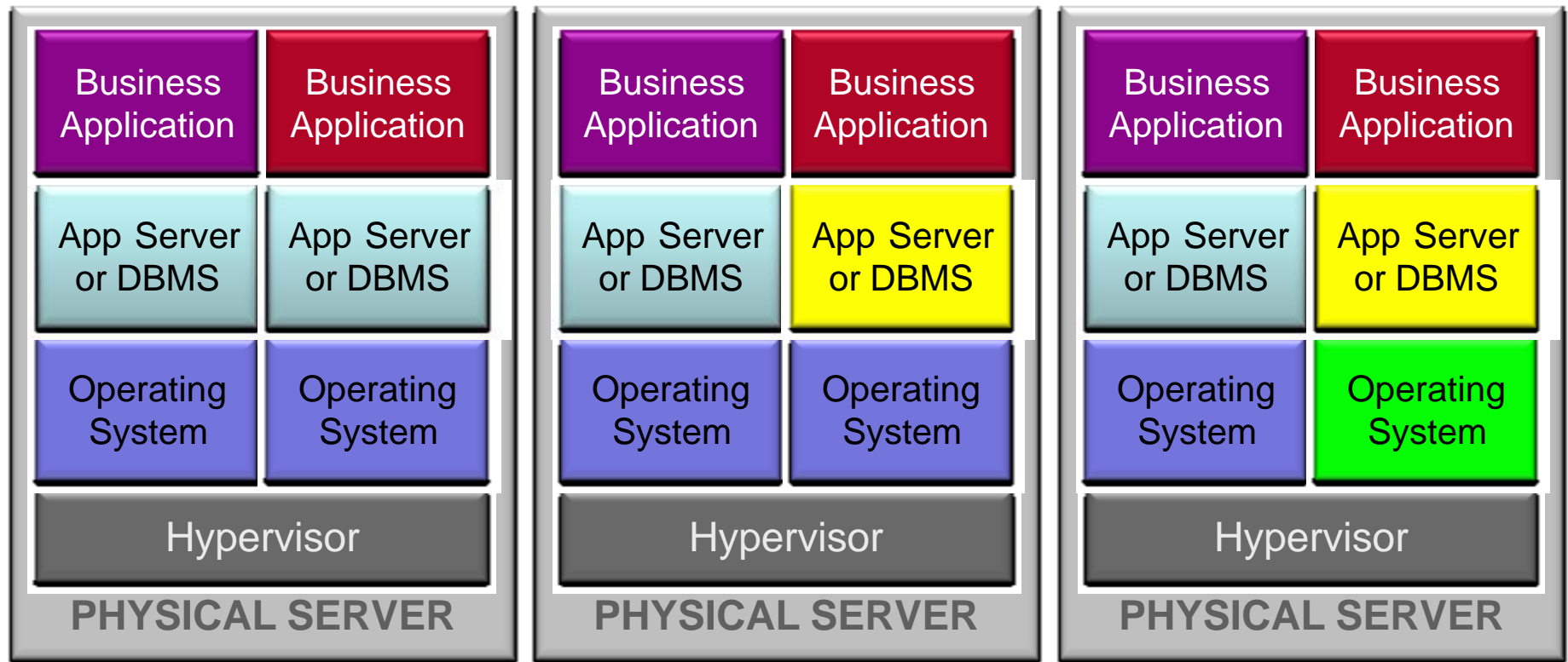
Some common scenarios



Replicated single platform stack

Replicated OS with mixed AS/DBMS

Some common scenarios

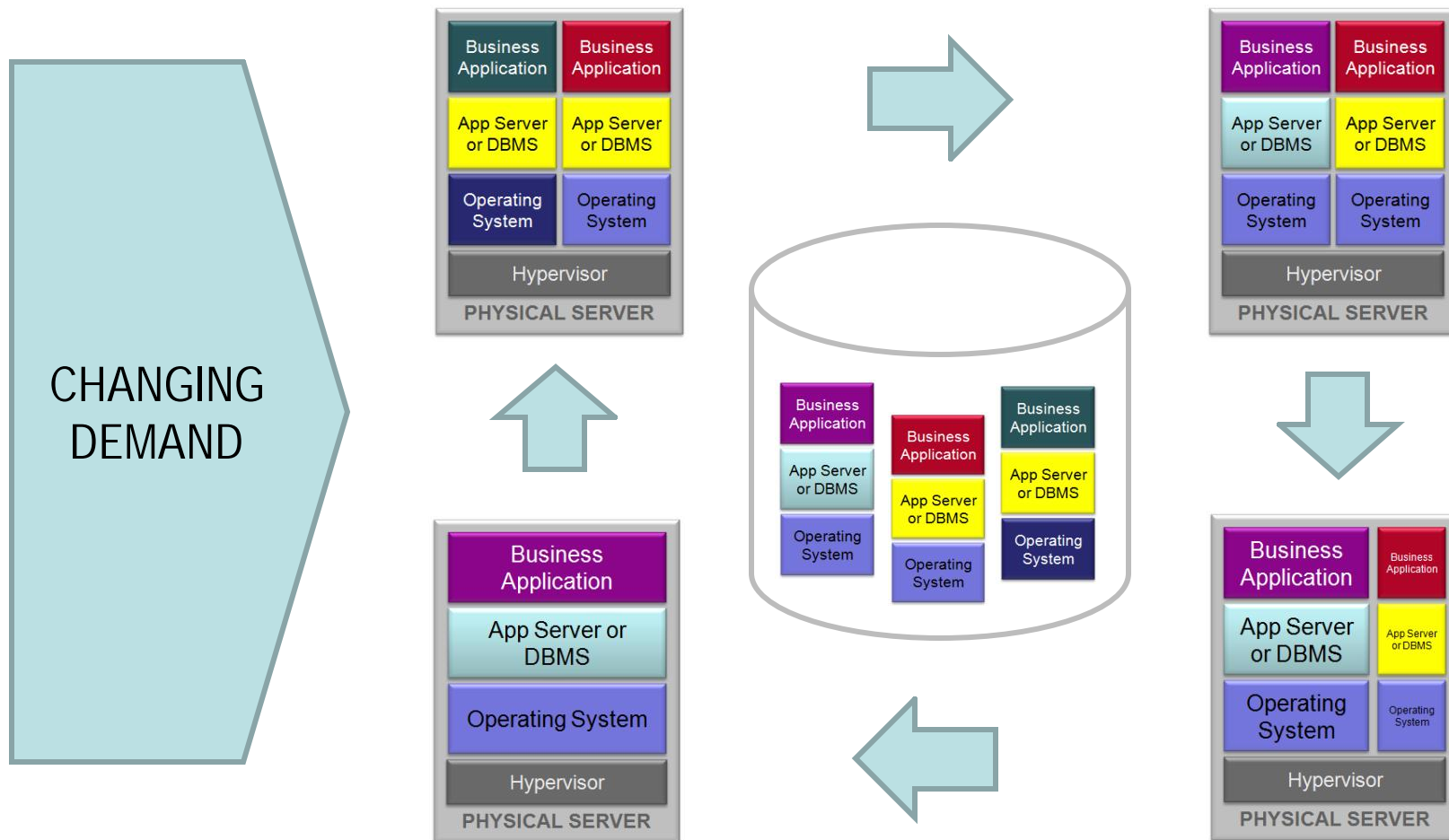


Replicated single platform stack

Replicated OS with mixed AS/DBMS

Mixed platform stack (OS/AS/DBMS)

Dynamic virtualization



Scenario & licensing matrix



<i>Licensed by</i>	<i>Replicated single platform stack</i>	<i>Applications and mixed platform stacks</i>	<i>Dynamic execution environment</i>
Physical server	OK	Check	Beware
Physical CPU or core	OK	OK	Check
Fractional CPU or core	OK	OK	Check
Installed instance	Beware	Check	Beware
Concurrent instance*	Beware	Check	Check
Named user	Check	Check	Check
Concurrent user	Check	Check	Check
Average utilisation*	OK	OK	OK
Metering approach*	OK	OK	OK

* Licensing models and tools to implement these approaches are currently rare or not available



Other considerations

- Cost of virtualization software itself
- Application container approach
 - Hypervisor higher in stack, e.g. Sun, SWsoft
- Transient and standby installations
 - Development, test, support, disaster recovery
 - The role of enterprise licensing
- License management and tracking
 - Generic versus specialist tools, metering, etc



Final thoughts

- Licensing models yet to mature
 - Confusion and inconsistency in meantime
- Important to look beyond your immediate need when making platform choices
 - Anticipate larger scale and more dynamic use
 - Think through the scenarios
- Discuss future requirements with vendors
- Don't forget the open source advantage



Questions?

Click on the questions tab on your screen, type in your question (and email if you wish) and hit send.

A screenshot of a web interface. At the top, there are five tabs: 'audio', 'questions', 'sponsors', 'links', and 'chatroom'. The 'questions' tab is selected. Below the tabs is a large text area with the placeholder text 'Please type your question here'. Below that is a smaller text input field with the placeholder text 'Please type your name here'. At the bottom right of the form is a 'send' button with a right-pointing arrow.