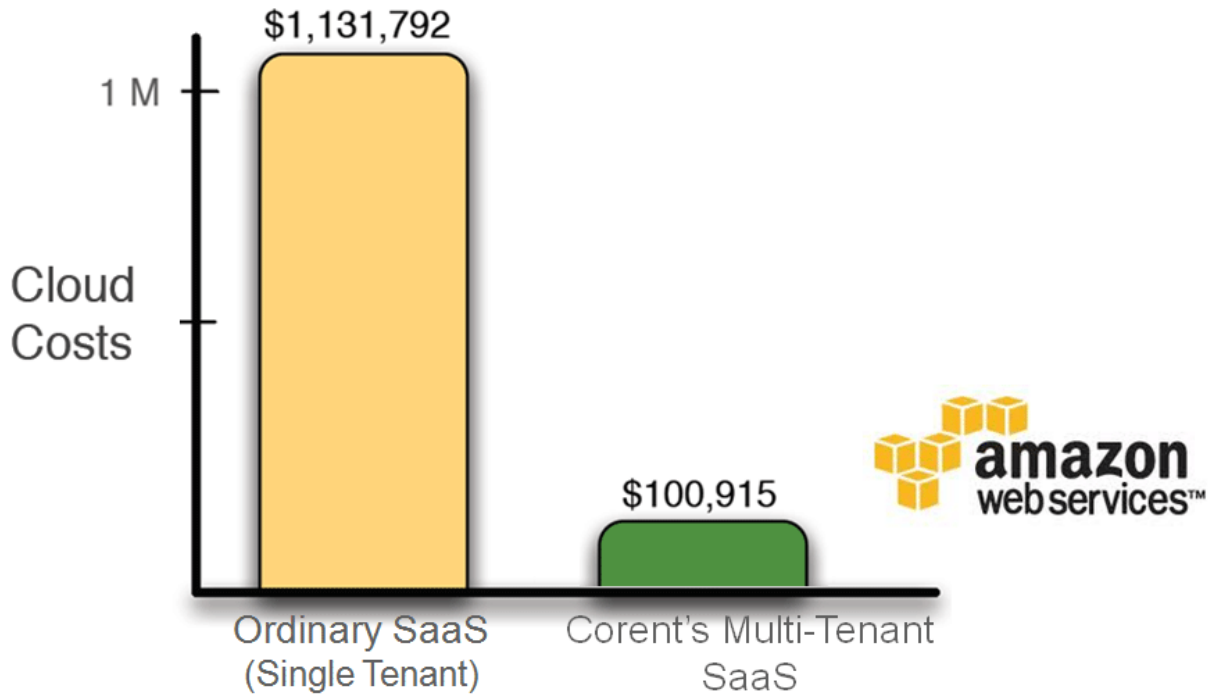


Multi-Tenant vs. Single-Tenant “Hosted” SaaS: 10X Cost Difference!



* A study of direct costs for 100 tenants.

Amazon Web Services Pricing April 9, 2009

Amazon Services	Instance Type	US Region		EU Region
		Linux	Windows	Linux
Standard AMI		per hour	per hour	per hour
	Standard small	\$ 0.10	\$ 0.12	\$ 0.11
	Large	\$ 0.40	\$ 0.48	\$ 0.44
	Extra Large	\$ 0.80	\$ 0.96	\$ 0.88
	High CPU Medium	\$ 0.20	\$ 0.29	\$ 0.22
	High CPU X-Large	\$ 0.80	\$ 1.16	\$ 0.88
	Hgh_Mem X-Large		\$ 0.62	
	High-mem 2X-Large		\$ 1.44	
	High-Mem 4X-Large		\$ 2.88	
	Large plus SQL Server		\$ 1.08	
	High_mem 4X SQL Server		\$ 4.08	



Amazon and IBM AMI's (Linux)

IBM DB2 Express Edition

Standard small	\$	0.38	\$	0.39
High CPU Medium	\$	0.65	\$	0.67

IBM DB2 Workgroup Edition

Standard small	\$	1.31	\$	1.35
High CPU Medium	\$	2.50	\$	2.58
High CPU X-Large	\$	3.30	\$	3.38

WebSphere sMASH

Standard small	\$	0.50	\$	0.51
High CPU Medium	\$	0.60	\$	0.62

IBM Lotus Notes Web Content Management Server

Standard small	\$	2.48	\$	2.52
High CPU Medium	\$	4.82	\$	4.90
High CPU X-Large	\$	8.71	\$	8.79

IBM WebSphere Portal Server and Web Content Mgmt Server Standard Edition

Standard small	\$	6.39	\$	6.43
High CPU Medium	\$	12.64	\$	12.72
High CPU X-Large	\$	24.35	\$	24.43

Scenario planning

Average days per month		30.44		
		Per year	Per Month	
Amazon standard small	\$	876	\$	73
Amazon High CPU Medium	\$	1,752	\$	146
Amazon High CPU Extra Large	\$	7,008	\$	584
IBM sMASH standard small	\$	4,380	\$	365
IBM DB2 Express Edition High CPU Medium	\$	5,694	\$	475
	\$			
IBM DB2 Workgroup Edition High CPU Med.		21,900	\$	1,825

Typical application Cloud based SaaS Provisioning vs. Multi-Tenant

Scenario:				App. Svr
50	Number of small tenants	users in tenant	50	1
30	Number of medium tenants	users in tenant	100	1
20	Number of medium large tenants	users in tenant	500	2
		Total users :	15500	

Model assumptions:

Windows application server 250 users serviced by one sm.
 Windows Database server running MS SQL Server
 Ordinary Cloud provisioning requires minimum 1 app server and 1 DB server
 No significant difference in network, storage, backup or other costs.
 Compare A and B implementations, with A being ordinary, B being the multi-tenant approach.
 Subscription fee per month per user (avg) \$ 15



Ordinary	Multi-Tenant
----------	--------------

	Per year/ea	Instances cost	Instances cost
Amazon standard small with Windows	\$ 1,051	\$ 185,712	\$ 65,174
Amazon High CPU Medium with Windows	\$ 2,540		
Amazon High CPU Extra Large with Windows	\$ 10,162		
Amazon std. Large plus SQL Server	\$ 9,461	\$ 946,080	
Amazon High-Mem X-Lg with SQL Server	\$ 35,741		\$ 35,741
TOTAL ANNUAL COST		\$ 1,131,792	\$ 100,915

Difference **\$1,030,877** **Savings**

Revenue:

Users	Average Fee per month	Monthly	Yearly
15500	\$ 15	\$ 232,500	\$ 2,790,000

Gross Profit:

Profit difference	\$ 1,030,877	\$ 1,658,208	\$2,689,085
Profit % difference	62.2		