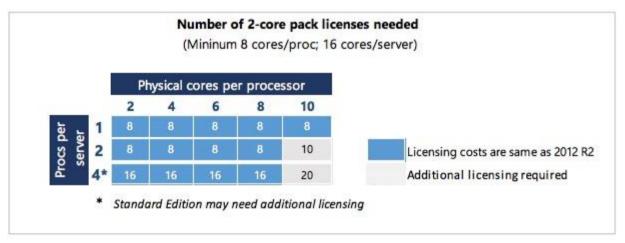**The Register®**
Biting the hand that feeds IT

Windows Server 2016 will cost more on big servers, but discounts can be found

Microsoft's helping you move to per-core pricing *and* making Azure more attractive too

27 Sep 2016 at 07:46, Simon Sharwood

Windows Server 2016 has finally been shoved out the door today, albeit only for evaluation purposes. Which is a very good thing because the software will cost a lot of users more than they paid for Windows Server 2012, especially if they're slow to talk to Microsoft about their upgrade.

Microsoft revealed its Windows Server 2016 licensing plan in December 2015, explaining that it wanted per-core licensing rather than the per-CPU licensing it had used in the past and revealing that costs would rise with the following table.

Don't say you weren't warned: Microsoft flagged Windows Server 2016 would cost more than Windows Server 2012 in December 2015

It's not hard to see why Microsoft wants to make the change: newer CPUs in more powerful servers can run more virtual machines than ever before. Moving to per-core licensing therefore gives Microsoft a way to charge for the amount of computing power you tap.

But moving to per-core licensing also means Microsoft benefits from the fact that new Xeons just have more cores these days. Take a look at Intel's list of fourth-gen Xeon E7s, for example, and you'll find just one model with fewer than eight cores. It's going to be hard to avoid extra costs when you buy new servers.

So while Microsoft shareholders will like this change, analyst firm Gartner's view of the new regime is titled *Changes to Microsoft Windows Server 2016 Licensing Will Increase Your Costs for Higher-Powered Servers.*. Which is a pretty self-explanatory title.

The document explains the situation with the following table.

Open License No-Level	Processors	Cores per Processor	License-Only Cost (ERP)	% Increase
Windows Server 2016 Datacenter Edition	2	8	$6,156.00	0%
	2	10	$7,695.00	25%
	2	12	$9,234.00	50%
	2	14	$10,773.00	75%
	2	16	$12,312.00	100%

What Windows Server 2016 will cost, based on core count inside your servers

The good news is there are still chances to avoid some of the extra costs.

Gartner advises that if you talk to Microsoft well ahead of renewing software assurance, you may be able to "remain under the current per-processor model for another three years, thereby delaying the change to per core."

If that's not possible, the firm recommends planning your next round of server purchases sooner rather than later, to give yourself more time for budgeting.

If you intend to roll over an existing agreement, you still have work to do because Microsoft is making "core grants" to help those on per-CPU licences move to the per-core world. But as the Windows Server 2016 licensing datasheet (PDF) explains, you need to conduct an inventory of your servers to get Microsoft's best offer when renewing licences. If you don't conduct that inventory, Microsoft will default to "8 core licenses per processor and 16 cores per server for each Standard and Enterprise edition license for servers they currently own."

Don't forget, too, that System Centre has also moved to per-core licensing. So there's another tab needed on your calculation spreadsheet.

Cloud-herding

A significant enterprise Windows Server user of *The Register*'s acquaintance, who asked to remain anonymous, said he doesn't feel the price rise is justified by the new features in Windows Server 2016.

"People are already paying software assurance, that's already the shiny new stuff tax," he said.

The user does have some sympathy for Microsoft, saying "I do understand it's tricky - but they should have just upped the Datacentre license as a whole, or put a mid tier license in that does something like allowing 16 VMs max per host to allow people to continue on if they wanted."

He's also concerned about the cost and complexity of the new regime, as more than one licence will be needed once you reach 16 cores on a machine.

One last thing: Microsoft is also running a deal called the "Azure Hybrid Use Benefit" that "lets those using Windows Server with Software Assurance bring their on-premises licenses to Azure." If you take up this offer, "Rather than paying the full price for new Windows Server virtual machines in Azure, you only pay for the base compute rate." Microsoft says that can save 41 per cent.

"For each Windows Server 2 processor license with Software Assurance, customers may run two virtual machines with up to 8 cores each, or one virtual machine with up to 16 cores, at the lower price."

Windows Server 2016's being billed as "Cloud-ready". It looks like its licensing regime may also be readying you for using more cloud. ®