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# Talking vPro: Transcript



June 26, 2008

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**Mike Pastore:** My name is Mike Pastore. I'm the Executive Editor of Special Projects for Internet.com, and I'm speaking today with Josh Hilliker, who's the Intel Architect and Community Manager for the vPro Expert Center.

Today, we're going to talk about Intel's vPro's technology, what it is, how you get it, how to get started... kind of a basic overview. So Josh, why don't we start at the very top. What is vPro?

**Josh Hilliker:** Absolutely and thank you, Michael, for the time today.

So what is vPro? VPro, and it's really Intel vPro technology, it's three things. It's about proactive security, built-in manageability, and energy-efficient performance.

And those are kind of three big themes of this new technology. It's been out for about a little over two years now.

**Mike Pastore:** When the first vPro platform came out in 2006, according to some of the analyst firms it got kind of a lukewarm reception. There weren't a lot of people buying it, and some of the people who were buying the chips weren't implementing the technology that they had essentially paid for. And then, in the middle of 2007, kind of the next wave came out and extended the capability to notebooks. And I know analyst firms like Gartner really started to take a good look at it then.

So what else has happened as the product has evolved since 2006?

**Josh Hilliker:** What a great question. It's been a journey, right? It's been the journey of vPro. And really, in the beginning times, it was new technology. We were moving capability deeper into the hardware, deeper into the silicon. And over the last I'd say year, year and a half, the ecosystem, the partnerships, the tools, the technology around it have really matured.

Over the last year, we've seen that the tools to enable the technology have gotten easier to use, more Wizard-based, more about how to quickly start up versus having to learn a new programming language or learn a new part of the firmware, we've made it a lot easier.

And actually, when I say we, I'm talking about the ecosystem has made it easier. So in the beginning time, we talked about the first desktop that came out, right? And this is back in '06, when we had the white badge to give a system that says vPro on it, it was a first-generation desktop we had. And we didn't have all the tools and technology ready to go as it is today.

So if you turned it on, you may have had a mixed experience that you talked about – the lukewarm experience. The technology was there, but all the ecosystem stuff around it and the ability to rapidly start wasn't there. Today, it's a completely different story. You've got more Wizards for setup, more quick-start guides that know what you need to do to your infrastructure as well as a lot of those add-on tools that test out use cases like, "How do I really use it?" How do I leverage it? How do I go after this whole Green IT effort with power management?" All of those use cases are now documented and discussed and publicly available for people to download, look at, and really understand how does it impact their business.

**Mike Pastore:** To roll out a technology like vPro, you mentioned the ecosystem a couple of times already. You need the PC manufacturers, probably some software partners, did those people see a need for something like this? Was there a lot of convincing? Like you said, it was a new technology and people sometimes get a little hesitant about making an investment in something that's unproven. So was there a lot of work that had to be done?

**Josh Hilliker:** Absolutely. I mean, this is a change in the game. vPro has done that. So to get the ecosystem on board and part of the mix, it was supercritical, a lot of talking about what can it do, what percentages that fix?

One of the things that I think I've seen that's very true with the technology is it's about that last 10 percent, right? So you know, with the past software manageability vendors, you can manage the box, but if you lose control of the box, you've got to send someone out. You've got to go out and make a physical touch and re-engage that machine back onto your network, a new part of that management console.

With vPro, we've hit that 10 percent. You know, you have that last mile of touch. So after we started to get everybody on that page and kind of have that shared mind meld of "How do we fix that last 10 percent? How can we work together?" It became more of an easier discussion and now we're seeing it with the ISV consoles that are coming out today and continue to role out as their vision is embracing us.

**Mike Pastore:** Now vPro, according to the estimates that Intel has put out, it lowers your management costs on a notebook with Centrino, for example, 10 percent after one year, 28 percent after two years, 49 percent after three, 60 percent after four, and anyone can see where we're going with this.

Now, I think you're a former IT guy, so that must speak pretty heavily to you when you're trying to make the case.

**Josh Hilliker:** It does. It does. I spent a number of years in our IT shop working on the client and manageability side of it and building the OS to the applications stack and how to go back and control. So when you hear a comment about the savings year-on-year-end, that it gets better, absolutely.

In my past IT life, I had a lot of questions on "how?" And now, being on the other side within the digital enterprise group, I've seen the technology do what I only envisioned and dreamed of five, six years ago. It's phenomenal. Being able to do that wakeup and that patch and that shutdown – being able to do that isolation. So it's kind of – and I'm not trying to get too deep into the technology – but being able to do practical uses that you run into day after day is very important.

**Mike Pastore:** So how does one get vPro technology if they're out shopping for a computer for their organization or they're looking for notebooks for their sales staff, what are they looking for?

**Josh Hilliker:** Great question. Well, first, I would start with, "Do you already have it?" You may already have gotten it and you didn't know you had it, and so there are four specific – we call them badges but they're really the stickers that go on the laptops and the desktops. So if you have one of those four stickers and they all say vPro or Pro, the first Centrino was a Centrino Pro. It says that right on the sticker.

The next generation says Centrino vPro. On the desktop, it says vPro, and then the new desktop there's Core 2 vPro on the sticker.

Now, you may already have it. If you already have it, you're one step ahead. If you want to go purchase it today, if you go to any of the big OEM shops, you can go online and basically do a search or get into the Core 2 family, or even some of the OEMs have Quad-Cores out now where you can actually search for vPro and as an added ingredient, you can put into the shopping basket.

I was out buying a Quad-Core this last week, and the search engine found the technology, was able to add it to the platform, and it just arrived.

**Mike Pastore:** You sort of touched on this earlier, but as far as activating a technology, how much work, how much time is going to go into getting it ready so that you can roll it out and be ready to go and get those management savings that we talked about before?

**Josh Hilliker:** Yes, so the first question is, should you activate? Before I get into the time spent on activation. When you buy the technology, and you don't turn it on, I equate that it's buying that heavy-duty SUV and never driving it off road, right?

**Mike Pastore:** And no one does that...

**Josh Hilliker:** I think I saw a couple Hummers on the highway on my way to work today, so I saw a number of SUVs out there. But you've got to turn it on.

Now, let's talk about the time. The time is dependent on the complexity of your infrastructure. So if you've written a lot of your own IT code for let's say, DHCP, DNS, you know, your credential system, your certificate system. If you've written your own codes, it's going to take a little bit more time.

If you're using stuff like ISVs and platforms that are already out there that you can purchase, it's going to take a lot less time, because we've already written the right scripts or the right quick-start guides, or the right automation for it. So it becomes more of that plug-and-play type of environment.

But it's going to take some time. Planning time. Awareness time. And I absolutely encourage anybody that's starting to activate now is to test it in a lab environment, bring up the five to 10, or three to five systems, and really test it with the console, see the capability, know the hooks that you need to put into place like the DHCP, the DNS, or the certificates, and Active Directory, know what those are in the lab, and then start to plan your enterprise rollout.

**Mike Pastore:** It seems to a casual observer like myself that when you look at vPro, it seems like it's part of a larger trend that we're seeing with processors where it's not just about the speed of the processor and how powerful it is anymore, because now, technologies like virtualization are getting rolled into the processor and security and manageability, energy efficiency has always been sort of a processor thing. Basically, our processors seem to be doing a lot more now than they used to.

**Josh Hilliker:** Absolutely. One of the key trends inside Intel, and I see a lot of this when I talked to IT shops, is that we're listening. We're listening now more than ever in user feedback. And the feedback we're getting is, can you take some of these features and put them into the silicon? Can you move some of the transistors to more of the IT challenges and help us?

So whether it's the manageability part and the security part, you already talked about the energy, whether it's the virtualization part, can you move it deeper into the silicon, into the stack of that platform? So we get better reliability, better efficiency, better security of that platform.

And I think that's going to be a trend that continues. What's next? Can't really talk about that, but I'll say that's a great trend when you see capability in the hardware.

**Mike Pastore:** You talked about speaking to customers and getting their feedback and listening to them, when you talk to

customers about vPro, is it the tech support people, the help desk people that show the most interest in it? Or is it higher up in the organization? Who's the target here when you talk to a customer?

**Josh Hilliker:** It is a great question. It's a broad, kind of a broad answer. Everybody has their passion for this discussion. So you know, to the help desk agent – and I worked the help desk for a number of years, both inside and outside of Intel doing tech support for hardware, right? And for the help desk person, it's "How do I assist that end user of their IT infrastructure, making them more productive, being able to fix something down the wire at their desk versus having them come to a cage?"

And so I get a lot of the help desk supervisors and help desk managers, engineers in that group, that really get fired up. "Boy, we could do more, more than we've ever been able to do in the past."

To the client architect, really the IT architectural roles, there's this discussion about how does this new management security usage fit into their reference architecture? So how does it change? How does it make their job as an architect easier when they try to architect new platforms and new solutions in? They've got these new hooks that they can leverage. And that becomes a real exciting dialogue.

And then, when it's that CIO, CFO, financial type, of course, it's the ROI, right? It's OK, if the organization and IT shop has got to move their resources from KTBR to innovation, how are they going to do it? And we talk about vPro, we say, here are the savings, ROI savings year on year. Here's what your KTBR folks can be doing. And when I say KTBR I mean "keep the business running."

So how do you move those operational folks further up the stream so they can provide additional value with all of the intellectual assets they're aware of that they would train on, they witness day in and day out. How do you move them further up the stream?

And so usually we get into that dialogue, the CIO and CFO get pretty excited about it. " Boy, you can help us transform our IT shop and help our business units by us delivering more competitive capability."

**Mike Pastore:** We are going to talk more in the future about the proactive security and manageability improvements, and the energy efficiency, but for now, I think that's a wrap.

So I want to thank you, Josh, for your time, and we are going to, as I said, talk about some of the details in future conversations.

**Josh Hilliker:** Great. Thank you.

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