

**Wells Fargo Technology Transformation Summit**  
**Brad Anderson, Dell President, Enterprise Solutions**  
**April 3, 2012**

**JASON MAYNARD, Wells Fargo:** We are very excited today to be continuing some of the threads here, if you will, on some of the interesting things happening in the networking and hardware business with Brad Anderson from Dell. So, Brad, thanks for joining us.

**BRAD ANDERSON, Dell:** Thank you very much, Jason. And thank you, Wells Fargo.

**JASON MAYNARD:** We appreciate you coming. So, what I thought we would do is talk a little bit about what's going on at Dell. You run the enterprise products group, and when I was prepping for this event, I was doing some work on the web, and I was looking around at some of the stuff, and I actually found a quote. You're in trouble now. You made this quote to the press, but it was a great quote, and I'll read it.

You said, "Dell is no longer a PC company, Dell is changing very quickly. It's no longer about shiny boxes, it's about IT solutions." I thought that was a pretty good quote to sort of summarize what you're up to. So, maybe to kick this off a little bit, tell us a little bit about what you do, your responsibility and your vision, if you will, for where this enterprise product business goes.

**BRAD ANDERSON:** Thank you, Jason.

So, I run our Enterprise Solutions Group. That includes our server line-up, our storage line-up, and our networking products, and many of our partnerships globally. And so, clearly in that responsibility, we are to become more of a solution provider we are significantly investing across that entire spectrum. And we're at kind of a different state in storage than we are in servers and networking, but we're building across that. And so we're clearly investing very specifically, both organically and inorganically, because we really think that much of the value proposition that Dell drove when we were more of a box provider around value, open, industry standards, very flexible, the same thing applies in the solution space. And we have a huge right to play in that space.

And then when we look at that compared to many of the other providers out there, they seem to be doing exactly the opposite thing, where they are very much focused at tightly vertically integrating, driving more monolithic architectures, kind of moving away from what we think are principles that are hugely important to not only get after customers' capital cost, but increasingly their bigger problem, which is their operating expense, and the complexity of running these environments. And so, we think there's a better way.

And so now, as we kind of continue down our transformation, where as we add additional product capabilities, we're increasingly adding what we call our better together solution capabilities, where we no longer want to just sell servers, or sell storage. So, much more complete solutions bundled around real key customer pain points, and built around key applications, and so we're continuing to build out that capability going forward.

**JASON MAYNARD:** I think maybe one of the misperceptions I think a lot of investors have is when they think about the hardware business, or servers and storage, we all sort of automatically gravitate towards the high end of the market. And I think one of the unique aspects of Dell is, you have, if I can call it maybe a mid-market design focus. And I would love

to get you maybe to drill down more on that, because I think it's important in terms of who your customer is, how you bring them solutions, and what it means to actually do better together, if you will?

**BRAD ANDERSON:** Yes. So, we have a mid-market design point, and that doesn't mean we're only focused at mid-market customers, because we find that the mid-market design point really resonates with customers of all sizes. And so by a mid-market design point, we're really focused on products, solutions, services that are really flexible and scalable. We find it's much more cost-effective, and you can serve a much larger part of the market having solutions that allow you to scale out and scale up rather than, if you will, over design for the very, tippy top, and literally either dumb it down, or try to cost reduce it to be able to serve a large market base.

Secondly, we're finding those customers are really looking for much less complexity in their offerings, because they're finding they're probably spending more of their budget now managing that complexity, not just the technology, but increasingly across very kind of siloed organizations. And so, if we can simplify that, that not only makes the user experience completely different, it really kind of simplifies the whole kind of operating model of their environment.

And then, lastly, other thing of the mid-market design is they're looking for a provider that is willing to take kind of complete responsibility on that. Not that we're going to do every piece in that, because their environments are typically heterogeneous, but that we are increasingly kind of giving them that attention end-to-end, and so while that resonates hugely with the mid-market, the more time we spend with larger customers, that pretty much resonates where their biggest pain points are as well. And if we think about our industry, pretty much everything disruptive has cannibalized from below rather than from above.

**JASON MAYNARD:** Yes. What I think is interesting, if we look at it from a numbers perspective, server storage and networking grew a couple percent, but if you back out sort of the non-Dell storage, and look at -- I guess we can define it as your own IP -- you're seeing growth rates closer to the double digits. And I think it's a big shift going on at Dell, and I'm curious just to get perspective to maybe help us understand normal environment what type of growth rate should people expect from sort of Dell-owned IP?

**BRAD ANDERSON:** Well, I think you're referring to, in the quarter just completed, we grew Dell IP storage 33 percent year over year. Our networking business also grew, I think, close to 58 percent year over year. And our server business, in what was a pretty competitive, tough market, grew significantly, grew 4 percent, where many of the competitors were in negative digits.

As we look in our Fiscal '13, calendar year '12, we clearly think and plan that we're going to grow significantly above market on the storage. Our historical trend, particularly on the Dell IP side, we are working through the last bit of non-Dell IP, which is basically our EMC storage revenue. We should be through the majority of that in the first half, but we expect storage to be growing better than the market.

Clearly networking, because we're in a very small position, growing. There's no reason why that's not going to grow significantly faster than the market. And then the server, it's always our plan to grow faster than the market. The question is just how fast is the market growing, and there is some wide divergence out there around based on estimates of the economy on how fast servers will grow or not. There are some positive estimates, and there are actually some out there among some of the industry analysts that even suspect negative.

**JASON MAYNARD:** Yes. Let's talk a little about what's in your control, which is maybe some of the new products on the server side.

**BRAD ANDERSON:** Sure.

**JASON MAYNARD:** So, you've got 12th Generation PowerEdge Servers recently coming to market. Maybe just give people an update, what's in there, what are the killer features that people are looking at?

**BRAD ANDERSON:** Sure. So, we announced on February 28th, Intel announced on March 6th, we were shipping on March 6th. And so we were absolutely time to market on our 12th generation of servers. This by far is the best line of server products we've ever. Time to market, many of the competitors are still not yet shipping. This is obviously the highest performing products that we've ever put on the marketplace. We are hosting as many as three times the number of VMs on like product. And it's not just the Romley chipset, by the way. This is a very balanced design, particularly around memory, and around the I/O subsystems, even though competitors are not yet shipping, most of their specifications are out in the public domain.

We're finding that our systems have been designed, particularly around I/O, memory, the addition of Flash, where we have in many cases up to 50 percent more I/O in our like design products compared to the competition. We have as much as 25 to 50 percent more in internal storage, and that we are finding we have a significantly larger memory footprint on many of the most core designs. And so, why is that important? That's why you can host up to three times the number of VMs, because it's a very balanced system.

Beyond that, it's the most manageable system, where the 12th generation has almost a third generation of our embedded management capabilities, which we have literally automated about 86 percent of all the functionalities. And that's kind of this example of trying to drive the simplicity, reduce complexity, where it just takes all that labor and effort out for the customer. In fact, it's driving about three times faster deployment than competitive products when you roll it out.

And then, lastly, we have invested very much around green, because the power densities are just continuing to go up, and with the 12th generation, it's as much as about 25 percent more power efficient than the predecessor. And if you just want to take that to dollars and cents, it's about \$170 lower power cost per system than the predecessor. So, it's kind of impacting customers in that it's addressing the major pain points across the board.

It also brings some of the latest technologies, 10 gig of it through, so now we've got 10-gig on Force10 is leading 10-gig top of rack, all the Dell storage products are 10-gig. And now 10-gig is pretty much pervasive in 12th generation. So, now you have the bandwidth end-to-end to really drive application performance, and then we've been very aggressive on the use of Flash. We're finding particularly in big data and BI type applications, coupled with the large memory footprints, increasingly more and more of those applications can be run in memory, or if not in Flash. And that's going to, particularly transaction processing type applications, that's really driving in some cases we're seeing 20X faster query times with this technology.

But it's also allowing us to kind of break the threshold where applications previously weren't virtualized, not necessarily because of CPU capabilities, because either I/O, it's kind of breaking down that threshold, so we think it will accelerate even the virtualization trend.

**JASON MAYNARD:** We're about halfway through the presentation here, so we're going to open it up to questions in a couple of minutes. I just want to let you guys know, and there will be a mike going around to grab your question. But, before we do that, we'll segue on that virtualization trend, because I think that's probably one of the -- if you will, one of the catalysts, or drivers that's going to help both the networking side clearly benefit on the storage, and then obviously with some of the new server line up.

So, where do you think we're at in terms of workloads being penetrated, and maybe the caveat is, what type of workloads do you think are common, and how do you fit into that next leg of virtualization?

**BRAD ANDERSON:** Well, I think we're seeing what's widely reported, where the majority of servers deployed today are virtual, rather than physical. And I think many of the analysts suggest that we're probably around 50 percentage, across that threshold, easily going to 80-some in the next two to three years. I see that. I think now we're seeing more and more some of the mission critical applications that either people felt that finally the X-86 technologies are getting where it has the BHA and stuff, but also the memory bottlenecks, the I/O bottlenecks are addressed.

So, now you're seeing increasingly you're seeing decision support and ERP, and other applications that people had not yet kind of really crossed that threshold. Now, considering virtualization for the first time. And that will help kind of push that next tranche to virtualization and so that's probably where it's at.

Now to us it's been a very healthy trend. I know there's a lot of speculation and it's been rumored here for years that with virtualization, server volumes will go down. We haven't seen that at all. In fact, we've seen quite the opposite with virtualization in the past generation and we're fairly optimistic in the current generation that we're seeing much larger memory footprints, much larger storage footprints, and we in the last three years, as many of you have recognized that you've seen increasing ASPs. And you're seeing improved margins, because the X86 servers we are running are becoming much more richly configured, running much heavier workloads and workloads presumably coming off our risk-based systems and mid-range systems. And so we have benefited from it.

Secondly, with virtualization I think it's really, not only in compute, but in storage and increasingly in networking, it's really -- it's one of those big inflections, I think, really puts down a very good position, because we're not protecting the legacy way of kind of managing those physical environments, or even the technology. And when as customers virtualize their workloads and use centralized storage, it gives them the ability to have a whole lot more mobility around their applications and their workloads and that's going to dramatically change networking. And so we're really excited about it, because those inflections allow us to kind of skate to where the puck is going, rather than continuing to invest where the puck has been historically.

**JASON MAYNARD:** It makes sense. Do you see within -- let's go back to that mid-market design focus. Is there a swath of customers, would you say, in the mid-market, that maybe aren't as far along as some of the enterprise-class customers?

**BRAD ANDERSON:** No, we're seeing -- well, maybe in some technologies, but we're seeing the SMB, or the more mid-market customers leveraging virtualization as great, and maybe they were a little bit slower, but the pace is pretty significant there. And so they are taking advantage of the technology, as well.

**JASON MAYNARD:** Okay. Good. So, we've got a little bit around 10 minutes. So, I want to make sure we grab some questions from the audience here, since it's a treat to have Brad. So, if anybody has got any questions, throw your hand up and we'll get a mike over to you. We've got one up here in front. So, let's grab the mike.

**QUESTION:** Brad, my experience, at least in the past has been that SMB customers and divisions of large customers have very similar type requirements. Are you finding the same thing in the Dell world?

**BRAD ANDERSON:** Yes, we are. The simple answer is we are. I mean we were -- I was in New York last week meeting with approximately 15 CIOs of large financial institutions, and so none of them would have been mistaken as a mid market, or an SMB customer. And we were kind of having this very conversation about what their pain points were and they map incredibly the same. We had a couple of them came out and said, their biggest challenge is no longer performance, their biggest challenge in some ways is no longer technology, it's really addressing the complexity of their organizations and managing that technology across their organizations.

So their biggest ask of us was about three or four things, one is the more that you drive towards standards-based technologies, where we can just kind of simplify your environment, the better. The more that it's kind of modular and flexible where we don't have to buy monolithic and we can kind of buy what we need to go solve our problem, is hugely important.

Third, do not lock us in, because there's -- it may address something in the short term, but long-term there is no economic evidence by being locked in that that's a better long-term solution. And then lastly, what really resonated was that they could -- they're buying from all these other vendors, but they're very kind of -- we've got a real strong sense that what they really welcome is this notion of investing kind of where the market is going, where technology is going, and not necessarily kind of thrusting the past generation solution upon them. And so they're giving us a lot of time and it's all around going where the market is going, and it's around a much more simple, scalable, open-standard, flexible architectures than the monolithic.

**QUESTION:** Thank you.

**JASON MAYNARD:** I've got one in the back to the left.

**QUESTION:** Watching some of your acquisitions, first of all, watching what you guys have done in the storage space and then the acquisition of Force10, a lot of that started to make sense, then you see acquisitions like SecureWorks, AppAssure, SonicWALL, okay, that starts to make sense. I'm curious about the Wyse acquisition. Obviously Dell benefits a lot from virtualization, but starting to own some of the software that enables that, where is Dell going with that?

**BRAD ANDERSON:** Well, I think everyone knows we announced, I guess yesterday morning, the intent to acquire Wyse. While it will fit in our client organization, what's super-attractive to Wyse for me is the back end opportunity for data services. If you look at kind of the virtual desktop market, it's estimated to be about a \$3 billion business by Fiscal '15. It's growing pretty rapidly. It's growing somewhere close to 15 percent CAGR. But, what you're seeing is that for every dollar of kind of client node revenue there's about \$6 of servers, storage, networking, data center and services.

And so, Wyse has a marketing leading position on kind of -- on the thin client side, and we think it's going to be really excellent to really kind of align with where we're going in providing either backend data services, or backend even cloud capabilities to support those front-end virtual networks. And there's so much that we can go do in that technology to really optimize, because that's something they haven't been doing.

And the interesting thing I'll throw out to you guys, if you want to learn more about Wyse, we actually have the CEO of Wyse speaking at 10:00 here. So, go figure. So, Tarkan Maner who is the CEO of Wyse, actually on the consumerization IT panel. So, sometimes things work out well in terms of piecing together the company. So, we were actually going to introduce you guys, but it seems that you already met. So, what can you do?

You know, I don't know if we have any other questions out there before I start to steal the mike again. I'm up here all day, guys. So, you're going to get tired of hearing me. So, you'd better grab the mike. But, I wanted to ask one thing and kind of building off that question, you guys recently announced that you hired John Swainson to head your software group. And we'd be remiss not to talk to you about what are the potential synergies with John coming aboard? You made the SonicWALL position, which is in the security space, security appliance, to be clear. So, it seems as if you guys are going to be hip to hip going to battle here, I guess, in the next couple of years.

**BRAD ANDERSON:** We are. So, John is on board, we're delighted to have John. I think most of you probably obviously know John. John obviously has 26 years of IBM experience, and spent four years at CA, had a very difficult time and did a fantastic job. It's kind of a natural progression of our entire transformation. We kind of moved from the PC company where we invested heavily kind of on the enterprise side, around the enterprise products, around the enterprise services. And we clearly think much of the value-add, even what we're doing today on the enterprise side, is actually on the software side.

If you think about storage, most of the value-add around storage is software. When you think about networking most of the value add is around software. And when you think about how Dell is going to deliver end-to-end solutions even with kind of highly virtualized technology, it's going to be a lot of the software, and the management of that infrastructure in a holistic fashion.

And so, we're really excited to have John, because he brings a lot of capability, a lot of knowledge to kind of lead that. And so, John will lead our software efforts, but you should think about him helping us guide our software plans holistically. John is leading software on top of Dell rather than software separate, and so I think John is going to really help us kind of accelerate kind of this next step of our transformation.

**JASON MAYNARD:** We've got a couple of minutes left. So, I was going to sneak in the last one on SonicWALL and the security business, and just talk about the opportunity there, because that's a pretty wide open market segment. There's a lot of point products out there, but I think it's fair to say nobody does it extremely well across the entire spectrum of potential security issues.

**BRAD ANDERSON:** Yes. Security, you're right, Jason, security is very fragmented. But the thing that appealed to us about SonicWALL is that, first of all, as we talked to customers of all sizes, security is very high up on the CIO's agenda. And when we talk about network security, that's extremely high up on their agenda. And SonicWALL, and because it's been so fragmented, SonicWALL had a fantastic position in UTM, which brought together lots of those

security fragments, and they did it in a way that is a very complete product that's really recognized well in the industry.

And, secondly, it has a lot of the attributes that we saw, if you will, with Compellent, with EqualLogic, a fantastic product with unified threat management, great channels, great technology. They really had focused on the ease of use to kind of make security very effective without being complex. And so we think we can bring a lot of reach to them, just like we brought a lot of reach to Compellent and EqualLogic, we think it has a lot of the same characteristics. And then, probably the special topping on top was the fact that they were beginning to also invest in more enterprise like security technology. They have a product called SuperMassive. It's very early somewhat in its productization, but already its next generation firewall already, in a lot of kind of the industry performance tests, is out performing the existing established players out there. And so, while they're particularly kind of a little more mid-market oriented today, it is an example of taking kind of their core IP, and beginning to scale it up and out in a way that it has some promising enterprise applications as well.

**JASON MAYNARD:** Great. With that, we've unfortunately run out of time. But thanks so much, appreciate it. And glad to see you back here again this year.

**BRAD ANDERSON:** Thank you very much, Jason.

**JASON MAYNARD:** Thank you. Thanks, everybody.

**END**