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PRESENTATION

Kim Watkins - *Citigroup - Analyst*

So thank you all for joining us. We are here for the Juniper Networks presentation. My name is Kim Watkins. I am on the communication equipment and data networking team here at Citi and it is my pleasure today to welcome to my right Kevin Johnson, CEO; and to my left, Kathleen Nemeth, VP of Investor Relations. And also Lisa Hartman from Investor Relations is here with the Company today, too. So, the format of today's session is going to be Kevin will give some overview with slides for the first 10, 15 minutes or so and then we'll launch into Q&A.

Kevin Johnson - *Juniper Networks, Inc. - CEO*

Thank you, Kim. Good morning. I've just got about four slides to provide a bit of an overview and before we do that I'll just remind you of the Safe Harbor comments related to forward-looking statements.

A couple points I want to make about the focus that we have a Juniper is, number one, we are a pure play in high-performance networking. And there's two dimensions of the differentiation that we're focused on delivering in the marketplace. The first one is around performance and scale, and this is sort of the heritage of the Company. In many ways, that comes from the investments we make in our custom silicon, the way we package it in our systems and the Junos operating system that allows us to build systems that can handle massive volumes of traffic and provide customers the lowest cost per bit when you look at the capital expenditures of building out these large networks. It has to do with performance, reliability, and scale.

The second dimension I would frame as agility. When we talk to Chief Technology Officers in the service provider side of our business or we speak with CIOs on the enterprise side of the business, there's some common threads of feedback they provide. Number one, they're looking for ways to reduce the cycle time on either delivering new services, implementing new capabilities, supporting new business needs. And they're looking for ways to do it and lower their operating expenses. And we frame this kind of as agility. For service providers, it's the ability to launch services quickly that drives revenue for their customers. Agility in the data center for a CIO means having software that can keep the physical network in sync with the virtual network of these virtual data centers. And what's delivering on that agility are really the investments that we are making around software defined networking and network function virtualization.

So we really look and say the differentiation has got to come both through a combination of systems and software and how those systems and that software works together in a collaborative way to enable our customers to continue to solve problems of massively-scaled networks that have significant demands of performance, reliability and scale. And to do it efficiently and do it in a way that allows them to reduce cycle time on deploying these services.

We continue to focus on two customers sectors -- our service provider business and our enterprise business. In Q2 of this year, our service provider business grew about 7% year on year. Our enterprise business good about 8% year on year. So both businesses are growing, certainly across those customer sectors that we focus on. We are really focused on the three businesses of routing, switching, security. We continue to see demand strengthening in the routing business. We had a significant year-on-year growth in our routing business last quarter, Q2, of about 14% year on year. Our switching business grew at about 15% year on year. And our security business is in a situation where we are making the transition from the ScreenOS product set that to our SRX product set that, and I think we've seen year-on-year declines in that business, but I think that business is beginning to stabilize and we're focused on what we need to do to recover and get that back on a path to growth in 2014.

Within those businesses of routing, switching, security, there are seven domains of the network that we look at. Some of those domains are specific to service providers, such as the core of the Internet, the core of the network, or the edge. Some of those domains are common to both enterprise and service providers; examples would be data center. In each of those domains, we focus on architecturally how should these networks be structured and then what systems and software can Juniper innovate and deliver on to help enable those scenarios across those seven domains using products from the categories of routing, switching, security.

Now, certainly, we've had four consecutive quarters of year-on-year growth. Our service provider business continues to show good strength both in revenue and bookings. In Q2 of 2013, we certainly saw both wireline and wireless with good demand. Much of that strength was in the Americas; beginning to see the signs of some positive cycles beginning to emerge in Europe; and Asia continues to be a geography that we have more opportunity to drive better results in.

We did see good results from our cable and content service providers. So the cable companies and content service providers, the Web 2.0 types of companies that you would expect building out massive networks, and much of the demand on routing has been on the edge of the network and we expect investment in core to continue to pick up. In Q2, we did see sequential growth in the bookings of core and we'll see how that unfolds as the year goes forward.

Our enterprise business -- switching and data center performed well. In our switching business, we prioritized the set of technologies that we can deliver in data center. We introduced a new switch family, the EX9200, which is a programmable core switch in the data center. And it, in the first quarter of introduction, was very well received by customers. Much of that is driven by the programmable nature of that switch and how, through programmability in that switch, we can start to enable the protocols and the things necessary for a software-defined network.

QFabric delivered a record quarter in Q2 and we continue to see the demand growing for QFabric. Customer by customer, as we engage and continue to secure wins and deployments and proof points for other customers to take advantage of the QFabric offering. And we saw some positive activity in our enterprise bookings related to security. Certainly, that's got a translate into revenues we go through the year and, I just mentioned, this will be several quarters. But Q2 we had strong results and I think good execution. If I look into the current quarter, thus far in the current quarter, linearity of our bookings is tracking ahead of historical patterns. So I think the trends that we discussed on the Q2 earnings call are continuing here into the second half of the year.

Now, certainly, our SDN and software business is a key part of the strategy to deliver on this concept of agility. We made an acquisition in Q4 of last year of a company called Contrail, who built an SDN controller. And we entered the beta for that JunosV Contrail controller in May of this year, and we've pulled the ship date into the second half of 2013. You'll be hearing more about that shortly.

We ran betas where we had over 30 customers that represented both large enterprise and service provider customers, across all three geographies. Very good feedback and very good learnings coming out of that beta that I think prepares us to release that product to market. I think that positions us to benefit as we look forward into 2014 around the trends of SDN and network function virtualization.

Last week we also announced at VMworld enhancements that we've made to our systems to allow our systems to participate in virtual data centers that are powered by VMware. And there's a number of protocols and new capabilities that we announced as part of that as well. So we're strengthening our software-defined network strategy both in our systems and the software we are delivering. Certainly, our software business is small but we are growing bookings for a broader software business around things related to network function virtualization and software-defined networking. And we are starting to shift our software licensing to the Juniper Software Advantage that we announced in January.

So that's a bit of an overview. Certainly, the routing cycle is beginning to strengthen. We've seen signs of stabilization in the enterprise, specifically in federal, going from Q1 to Q2 and we'll see how that unfolds throughout the rest of the year. The new products offer a wide range of innovative solutions across the seven domains in the areas of routing, switching, security, and we are on a path to establish a thought leadership position and deliver on that in areas of software-defined networking and network function virtualization.

So with that, Kim, happy to take questions.

QUESTIONS AND ANSWERS

Kim Watkins - *Citigroup - Analyst*

Thanks so much. I wanted to start off by clarifying a point that you just made, that you mentioned that your bookings are tracking ahead of normal linearity so far at this point in the quarter. Is there any additional color that you can give us where you're seeing the strengths in?

Kevin Johnson - *Juniper Networks, Inc. - CEO*

Well, I think it's very consistent to what we said in the Q2 earnings call. We, about three quarters ago, saw the indication of the beginning of a CapEx cycle of routing in the service provider sector and we are continuing to see that unfold. The routing (technical difficulty) continues to look in a very positive light. Likewise, switching. As we introduce EX9200, that has given us a significant boost in Q2; QFabric momentum. And so I think the trends are very consistent with what we communicated in Q2 and they are playing out well in Q3 thus far.

Kim Watkins - *Citigroup - Analyst*

Okay, great, we'll probe on a lot of those areas you mentioned later. But first I wanted to ask you, you recently announced plans to leave your CEO post at Juniper. Why now? And how did you come to this decision? And when could we expect -- how is the search for your successor progressing and when could we expect to hear an update on that?

Kevin Johnson - *Juniper Networks, Inc. - CEO*

Yes, I'd say -- this is a personal decision that I took and is based on the fact that a variety of family and personal circumstances prompted me to decide I needed to allocate my time differently and allocate it towards some personal priorities. Unfortunately, allocating it to some personal priorities was inconsistent with the demands of the CEO job at Juniper. And so I decided it was time for me to retire from this particular role. So, therefore, we announced that. We've got a very thoughtful approach in place. And I'm staying as CEO while the Board conducts a CEO search. That search has started and is underway.

There's no specific timeline on it, other than the Board is working diligently against that goal. And look, I'm committed to be here for as long as it takes the Board to complete that search and then a bit longer to help ensure a smooth transition to the next CEO of the Company.

Kim Watkins - *Citigroup - Analyst*

Okay. So, let's talk about the demand environment. Start there and then we'll drill into the product areas. Service provider spending has been very strong, as you highlighted in the US so far this year, with another quarter of double-digit growth last quarter as discussed in your earnings call. What's driving the demand? You highlighted a few things, but if you can just go into a little bit more depth there. And how sustainable do you believe it is? Is this -- we've seen two quarters now and it tails off slightly or how does the trajectory play out?

Kevin Johnson - *Juniper Networks, Inc. - CEO*

Well, I think there's two things that are driving the demand, or three things actually. Number one, traffic has continue to grow, doubling every couple of years. And if you just look at the CapEx cycles for routing over the last couple of years, 2012 -- the addressable market for routing declined by 3 percentage points. So that tells you if traffic was growing in the addressable markets for routing declined, that means networks are running hotter. And we track that, and we have a view of -- are networks running hotter? Are they running colder? What's the investment path?

So it was clear that at some point a routing -- an investment cycle in routing ne to begin. So, number one is traffic is growing and networks are running hotter. Number two, though I think many customers look and say there is an opportunity for them to modernize networks -- and some of this is just upgraded infrastructure that was put in six, seven, eight years ago -- and by modernizing that, that helps them take advantage of a much lower cost per bit and helps them also enable new services.

I think much of what's driving this is the ability for some of the newer technology to enable new services. Those services in the service provider sector often are delivered at the edge of the network, and that's why I think we're seeing a strong demand cycle in edge right now. And certainly if we look at the core of the network, the core -- if you look at the growth of traffic and what's happening in the investment cycle, the core is -- continues to run hotter and hotter. But the view is there will be a cycle that will kick in on core. Right now, we're in a very good cycle for investment in edge routing.

Kim Watkins - *Citigroup - Analyst*

Now, if we look at Europe and Asia, what are your customers telling you in those regions? And how does the recent announcements that we heard this weekend play into your expectations specifically in Europe? And do you expect the same acceleration to occur in those two regions that you've seen so far in the US? Specifically, how far away, how many quarters away?

Kevin Johnson - *Juniper Networks, Inc. - CEO*

Well, the trend of growing traffic is a global trend, so that particular trend is consistent. It's difficult to answer the question in Asia as a regional answer because every country is very different. For example, in Australia they are leading up to elections. There's a pause in CapEx expenditures waiting to see what the outcome of those elections may be. In India, the way that they allocated spectrum, the government policy to allocate spectrum created a number of service providers on the wireless side that are struggling to drive profitability. There needs to be some consolidation for that to kick in. And until that kicks in, there's going to be a tighter CapEx cycle there. So, I think country by country in Asia, it's a variety of different things that are probably more unique to that country than they are to the region in total.

Europe, on the other hand, we're seeing some signs of investment in CapEx similar to what we started to see in the Americas a year ago. And some of these are projects that we won three quarters ago and have now developed and are in the certification, getting ready for deployments with these customers. And so we see how those cycles have kicked in. And those are projects that will unfold over the next, say, 6 to 10 quarters of deployment. And so I expect Europe will continue to see some improvements and I think Asia will continue to be mixed.

Kim Watkins - *Citigroup - Analyst*

Okay. Sounds like visibility is little bit better in Europe than Asia.

Kevin Johnson - *Juniper Networks, Inc. - CEO*

Well, you can have visibility but not like the results. In Europe certainly we've got visibility and we feel like we've got a good view there. In certain countries in Asia we've got visibility -- but take India, for example. Unless the government policy changes around spectrum allocation or the ability for these companies to combine and combine spectrum, it's going to become -- it's a barrier to CapEx. So we've got visibility but the dynamics for the investment in CapEx are not as good as they are in other countries.

Kim Watkins - *Citigroup - Analyst*

Okay. Now, we were talking about the service providers of the business but on the enterprise side you saw some early signs of stabilization in demand in the US. I think you called out financials in even Europe on your earnings call. How sustainable do you believe the enterprise growth is in North America, specifically? And taking those comments about service provider, expanding that to enterprise, when do you see Europe recovery taking shape on that?

Kevin Johnson - *Juniper Networks, Inc. - CEO*

Yes, I think the enterprise business -- certainly in the enterprise business, the switching addressable market, we have a lot of room to grow market share and grow even if the addressable market doesn't grow. But the fact is when the addressable market is growing, when customers are launching new data centers or new projects, that's the inflection point for us to have a chance to compete for a new design win versus a customer who is just adding capacity to an existing network that they decided on five, six years ago. So the key is, as we see customers invest in things like data center consolidation to implement private clouds, that creates opportunities for us in data center.

And I think in Q2 we did see some sequential improvements in our federal business; we saw some good results in financial services. I think the fact that QFabric is now -- the software features in QFabric we have developed based on the early customer feedback of those that have deployed it and QFabric is getting some traction. The EX9200 and what we are doing around the programmable core switch in data centers and how we are embracing software-defined networking and all the protocols and all the capabilities that are required in the systems to be able to interoperate with that -- all of those things I think are being well received by customers.

Now, so I think we have -- we have plenty of opportunity to continue to drive growth in the enterprise. The fact that our security business is underperforming obviously is one that we've got to continue to stay focused on. And our security business is made up of three different sub-businesses, if you will. There's security for service providers in their networks, and this is mobile Internet, so LTE deployments. Having a high-end firewall or high-end SRX that can handle the scale and the performance required for the amount of traffic volume that flows on these LTE networks. We feel like we're in a very strong position there.

We have had some very large deployments with some of our largest customers in the Americas and we're making sure that -- and we still have got a strong position, but we're making sure we are engaged in LTE deployments with customers around the world so that we can provide the security offerings. The second piece is securing data centers, and we introduced new technology at RSA this year in February, something called WebApp Secure, which allows us to actually fingerprint bad actors' devices.

We then store those fingerprints in a product called Spotlight, and Spotlight then can share that data with all of our other security assets. Where we go beyond just blocking devices based on IP addresses. We can actually fingerprint the end device of a bad actor and then factor that in. So, in data center we're making some progress there, and the place that we've got some work going on that we think will help us going into 2014 is when it comes to campus security. And we'll hear more about that as time goes by.

Kim Watkins - *Citigroup - Analyst*

Okay. Is security -- the security business has been a very difficult one, and you kind of alluded to the fact that it's recovering, implying that it had been a bit of a tough market. Is that a core business for Juniper? Or could it be a candidate for divestiture at some point?

Kevin Johnson - *Juniper Networks, Inc. - CEO*

Well, first of all, the security business is a significant business, and much of what we are going through is the transition from ScreenOS to our SRX products. And the ScreenOS products were a result of the NetScreen acquisition back in 2004. And so, going through that, I think now roughly 20% or less of our total security business is ScreenOS. So we are 80% plus through the transition from that. Now, our SRX business is growing. Whenever you go through a product transition like that, you run the risk of not being able to grow new product faster than the shift away from the older product, and that's been the case for us. But I think we've been very focused on what we need to do to stabilize it and get it back on a growth path.

Now, certainly, the enterprise -- when we sell to enterprise customers, certainly a big part of what we sell is security, and we think there's synergies across what we do in routing, switching, and security as it relates to these high-end systems. There are aspects of the security offerings that you could say are features and innovation and capability that's not related to performance and scale. But we do think the synergy that we get with the performance and scale in our systems business is what's made the SRX so successful with service providers and data centers.

Kim Watkins - *Citigroup - Analyst*

Okay. So it sounds like it's a core piece of the business then.

Kevin Johnson - *Juniper Networks, Inc. - CEO*

Well, it's a core piece of business, and yet it's one that we acknowledge that through that transition it hasn't been performing up to our expectations, and it's one that we've been very focused on what we need to do to stabilize it and get it back on a growth path.

Kim Watkins - *Citigroup - Analyst*

Let's stick with enterprise theme and talk about switching a little bit. You talked about the EX9200 programmable switch. The second quarter was a very big quarter for Juniper -- switching revenue grew over 20% sequentially in large part, I believe, to the strength of the 9200. How does the --

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Kevin Johnson - *Juniper Networks, Inc. - CEO*

And QFabric.

Kim Watkins - *Citigroup - Analyst*

And QFabric. 9200 -- how does the 9200 fit into Juniper's switching product portfolio with QFabric and the EX campus switches? And does it replace either the QFabric or the EX?

Kevin Johnson - *Juniper Networks, Inc. - CEO*

Yes, what we have in our strategy is what we call the path to flat, where typically customers architect their data center networks in three tiers. They basically have a top-of-rack switch that connects to some aggregation switches that connects to a core data center switch. With the EX9200, what we've done is we've collapsed that to two layers. And so there are many customers that want to run a two-layer network, and the reason we do that is the EX9200 has something called virtual chassis. So the EX9200, you can basically connect multiple of them together and they look like one switch.

And so it's basically a two-tier implementation. Now the top-of-rack switch can connect to either the EX9200 or any ethernet switch and the QFX top-of-rack switch can also connect to QFabric. So, customers putting in the QFX top-of-rack switch has a -- they have a choice. Some can say, hey, I want to go to a two-tier and use the EX9200 and the programmability of what it has. Or they could say, no, I want to go to a full single fabric. So we see it as a natural evolution or natural migration path. So, the EX9200 will not replace QFabric. We have a common top-of-rack that will connect either one, and what -- we're providing customers choice to evolve their networks and the data center based on their specific requirements.

Kim Watkins - *Citigroup - Analyst*

Okay. And then the QFabric got off to a pretty slow start. That last quarter -- I think you mentioned on the earnings call that revenue for this product family hit a record after what had been a very slow start. What's responsible for the turnaround?

Kevin Johnson - *Juniper Networks, Inc. - CEO*

Well, first of all, I'd say the sales cycle of getting design wins in new data centers is a long sales cycle. So there's one attribute, that it just takes time to go and win these new data centers. There are some things, though, in QFabric that when we first released the product there were some software features that customers wanted before they deployed, and it took us a while to deliver on those features. So, one thing that's changed is I think we've done a lot of work, a lot of good work on software features and software capabilities that customers gave us as requirements in QFabric, and that's helped.

The second thing was the first introduction of QFabric had the interconnect -- the core piece that connects all of it together -- the interconnect was a very large system, and we introduced a smaller version of that that allowed customers to deploy a data center where they might have multiple fabrics instead of just a single fabric. So I think the combination of software features and the lower end -- or the smaller version of the microfabric were two of the catalysts that I think have driven more deployments, more adoption.

Kim Watkins - *Citigroup - Analyst*

That's interesting. So, another piece in your switching business is the Wi-Fi piece of it. How committed is Juniper to the Wi-Fi market? And can you successfully compete in the ethernet switching market against a competitor like Cisco that seems to be in the process of combining its fixed and wireless switching offerings?

Kevin Johnson - *Juniper Networks, Inc. - CEO*

This is in the campus sector and certainly in the campus domain the trend and the focus is on how those wireless connections get made. And I think, as you point out, the wireless network has been an overlay to the wired network. And you know clearly there's opportunities to take the technology and start to integrate that into the campus switches; at least the controller software for these access points, and integrate that into the campus switches. We've been on a path to do that. I think we've made some announcements with what we have done in our wireless LAN, starting to move in that particular direction.

So I think we'll certainly have a competitive offering and an opportunity there. I think when we prioritize the investments and the focus, we make sure that we are prioritizing the data center pieces, but it's clear that the investments we make in switching, whether it's for data center, those investments propagate to campus. Once you have the switching code and you have the switching silicon in systems, it's pretty easy to solve some of the campus needs and to do that in a thoughtful way. So I think in campus is one of the other things that we see, is there some large campuses where they've deployed the EX9200 as a core switch in the campus as well.

Especially customers that have their data center co-located in a building with their campus, they find the EX9200 can be the core switch for the campus as well as the data center. And that's relevant because of the programmability that comes with the 9200. It starts to create a nice footprint for them -- things like the controller, wireless controller capability being integrated into switching.

Kim Watkins - *Citigroup - Analyst*

Okay, that's interesting. Wanted to transition to talk about the routing business a little bit, and then I'm going to open up for questions. So a couple more questions on routing. Alcatel-Lucent began shipping a core router last year, and they claim that they have been getting traction at the expense of their competitors, which is a little bit of a concern given their track record in gaining share in the edge. What is the risk that Juniper's sluggish core growth could actually be an indication of share loss to Alcatel-Lucent? And how would you gauge your competitive differentiation relative to Alcatel-Lucent in the core?

Kevin Johnson - *Juniper Networks, Inc. - CEO*

First of all, if you look at Q2 results, and if you just look at the Infonetics numbers that they published. I think Alcatel-Lucent showed roughly $20 million of what was reported as core revenue. The big a-ha in that data in Q2 was Huawei. If you look at Huawei's core business, it grew -- it close to doubled I think, if you just look at that number. And that was all -- or fundamentally mostly Asia and within Asia, probably mostly China. I don't have the specific country breakout.

But I think, in core routing, I think the addressable market for core routing grew in the low-single-digits and Juniper's core routing business in Q2 grew in the low-single-digits. Now, certainly, in China there's some unique attributes of competing and winning business in China and certainly I think that's part of it. But, look, Alcatel-Lucent has moved in and has an offering that they have focused on the core, and the thing that we think differentiates us is the fact that we have a range of solutions depending on what the customer is trying to do in the core.

The PTX provides a solution for packet transport and the integration of the optical capabilities with the PTX. The T4000 is the easiest, most cost-effective way for existing T customers to upgrade the capacity in their networks. And we're starting to see -- we just introduce the MX2020, which is the very high end of our MX product family. We're starting to see customers that look in that particular solution as a very good solution for some core -- what you would characterize as core needs.

So I think things will get blurred a little bit as maybe high-end MX systems start to address needs in core; the PTX; the T4000. But what we believe is that having the range of solution of PTX for the packet transport stuff integrated with optical, the T4000 for an upgrade from existing T-networks, and the MX 2020 to have high programmability and capabilities in the core allow us to compete very well against ALU and others.

Kim Watkins - *Citigroup - Analyst*

Before I go on, are there any questions in the audience? Anyone? Okay. The routing market had been a double-digit grower for years and the past couple of years I think growth has been plus or minus 2%, so very low single digits. Can the routing market ever be a double-digit grower again with core and edge growing simultaneously? Right now we're seeing much faster growth in core and weakness in EDGE. Or when the core routing growth resumes, will edge subsides? Meaning that we are just a single-digit-growth market. What is your view on that?

Kevin Johnson - *Juniper Networks, Inc. - CEO*

Well, the key drivers are traffic continues to grow significantly. And if traffic is doubling every two years, then you have to have routing capabilities to deliver on that traffic. The things that offset that are certainly innovation -- means that for the CapEx cost per bit of traffic, that's been going down just due to innovation, more efficient silicon, more efficient systems. And then you have some of the macroeconomics. I think it was more macroeconomic that caused the slow down in CapEx spend in late 2011 and 2012, and now we're seeing that pick up again.

Can it get to 20% growth? I believe it can, but I don't think that's -- I think near-term. If you think in -- it's going to get to 20% quickly, I don't see that happening. I do think what this last quarter, the addressable market for routing, I think grew 12% year on year. Okay, so there's a 12% growth year on year in Q2, and Q3 is shaping up to be a positive routing cycle as well. And I think that trend will continue, but it's not at the 20% and I don't foresee that happening in the next couple of years anyway.

Kim Watkins - *Citigroup - Analyst*

Do you think we can get into a steady-state where core and edge can grow simultaneously or are they competing for CapEx dollars?

Kevin Johnson - *Juniper Networks, Inc. - CEO*

Well, I think it has more to do with how customers prioritize where they have the need than it is --. We've got a -- the MX is a phenomenal product family, and I think we've got good strength in what we are doing in the edge and we've got good strength in what were doing in core. So, for us

-- and now with the ACX, we have a product now for the access layer and for the backhaul layer. So, in terms of our engagement with customers, what we think is important is to make sure we understand what their goals and what their priorities are and then make sure that they've got the solutions to help them.

Right now it's building out the edge, it's modernizing the edge, it's enabling new service delivery. We think network function virtualization combined with the MX and what were doing with our Contrail controller is going to have very good applicability on the edge of the network as well as in data centers.

Kim Watkins - *Citigroup - Analyst*

Interesting. Any questions in the audience before I go on?

Unidentified Audience Member

Are you seeing any impact right now from SDN? And just give us a better sense of how you think SDN is going to evolve vis-a-vis your own business?

Kevin Johnson - *Juniper Networks, Inc. - CEO*

Well, impact as a result of SDN. I think customers are all evaluating SDN to understand, A, what does it mean? And there are a lot of different definitions out there in the industry. Whenever you get some trend like this, there's a lot of buzz and a lot of hype and I think in a lot of ways customers are trying to separate the hype from the substance. And there's two domains that we've been very focused on with SDN. One is the data center and the other is the edge of service provider networks. In the data center, the problem that it is being solved is, in a virtualized data center we have virtual switches and virtual routers, and you also have the physical switches and physical routers. How do you keep those in sync when virtual LANs are being created and workloads are being moved?

And so software, having some capability in a central way to keep the physical network in sync with the virtual network, is the problem that many customers and virtualized data centers are working to solve. So, certainly, in the data center, VMware has a very high market share of virtual machines and with what they are doing in those virtual data centers. For us to really participate in those VMware data centers we enabled all the VMware protocols and all the capabilities in a partnership with them that we announced at VMworld last week. So that's one action that we took in our systems to make sure that we can participate in a virtualized data center.

Now, for non-VMware environments, we think that what we're doing with Contrail and our virtual router and the technology there, will be a very good solution. And then certainly Contrail and what it can do to help in a software-defined networking world, control the routing infrastructure of how data centers contact, campus -- it's going to expand into other areas. For us, since 60% plus of our businesses is service providers, certainly focusing on how we can enable new value for customers on the edge of the network is also a very interesting play.

And on that particular part of the business, it's more about helping service providers reduce the cycle time for deploying new services. Today, a lot of those services are represented in the form of software that runs in the router. And any time they update software in the routers in their core networks they've got to go through a very extensive testing process. Sometimes the certification is 9 or 12 months, which means if they want to change a few lines of code for some new service and it's part of a larger body of code that goes in that router, the cycle time to do that is very significant and very expensive.

So what we are doing with Contrail and network function virtualization is enabling customers the ability to take -- we're going to take some of those network functions and software, be able to run them in a cloud environment, and then with Contrail we do what is called service chaining. Where we can, through software automation, flow the traffic through the appropriate set of services. And it allows customers to have more agility on these new services and network functions and deliver them at a lower OpEx.

So the net is we haven't seen negative impact on our business or positive impact on our businesses as it relates to SDN because it's just too early. It's still too early. But it's clear that customers are looking for some specific problems to be solved in this area of agility and I think the response that we've gotten to our strategy around SDN and the work that we are doing has been very positive. And now we've got to release product and make it real. And as we do, I think that will allow us to continue to build the business around systems and software in some unique ways that add value to customers.

Unidentified Audience Member

(Inaudible - mic inaccessible)

Kevin Johnson - *Juniper Networks, Inc. - CEO*

I expect it to be a net positive for us, over time, clearly. And why do I say that? Well, number one, I think there are very few companies that can drive the innovation in the domain of networking both in the systems and in the software, and do it in a way that leverages intellectual property and assets that have been built over the last two decades, and do it in a way that things can operate a very seamless way. And so I think the strategy that we are on around SDN and network function virtualization is very complementary to our system strategy. In some ways, it should be a key driver for more MX deployments on the edge of the network, and in data centers it will be a driver of more switching and QFabric deployments in the data center.

Kim Watkins - *Citigroup - Analyst*

Are there any other questions? Up here in the front.

Unidentified Audience Member

I think you said networks are running pretty hot right now. Is there anyway you can quantify that especially in a historical context? And how long the current CapEx cycle will go on for you?

Kevin Johnson - *Juniper Networks, Inc. - CEO*

Yes, what I said is networks are running -- well, core networks have been running hotter. We are now in an edge cycle, and I think the last quarter, in Q2 of this year, if you look at that cycle, it means they are starting to reduce the utilization on the edge of the network, which was under -- was running very hot.

Here's how we quantify it. We look at estimates of what we think Internet traffic is growing on a quarterly basis. We look at the addressable market spend for routing in core and edge. And if you look at -- if you just assume a replacement rate of about every seven years, they will modernize. So, anything, any spending in the addressable market above that replacement rate basically says that they are adding capacity to carry the network. And you have to determine did they add enough capacity to carry the increase in traffic or did they add more capacity, or did they not add capacity?

So, the numbers we use are just internal numbers but it's an algorithm that we can look at that uses industry data to give us a gauge of is the core, on a global basis, running hotter? Is the edge running hotter? And what we saw last quarter was the investment cycle in edge is now adding capacity to those networks, so they are starting to run them less hot, and core is still running hotter.

How long will these cycles go? If you look over the last decade, typically these cycles go in -- I'd say an 8 to 10 quarter cycle. And so they are kind of two-year cycles, as you look at just the wave of deployments and the work that these customers do. So I think that we're going to continue to see this unfold at least over the next 6 quarters or so, and perhaps beyond.

Unidentified Audience Member

If I could just ask a follow-on --

Kim Watkins - *Citigroup - Analyst*

Unfortunately, I think we're out of time. But thank you very much, Kevin, for being with us here today, Kathleen, thank you.

Kevin Johnson - *Juniper Networks, Inc. - CEO*

Thank you.