

Technology Tutorials

UNIFIED COMMUNICATIONS-DEPLOYMENT TRANSCRIPT



Program and Presenter Opening

Kevin O'Healy: Hello and welcome to this "Cisco on Cisco" Tutorial on Cisco's unified communications Deployment. I'm Kevin O'Healy, and I'm a Member of Technical Staff in the Global Unified Communications Operations team.

The theme of our show today is an overview of how Cisco IT has deployed unified communications throughout the company.

It's my pleasure to introduce the guest of today's show: Ian Pudney, an IT Manager from the Unified Communications team. Ian, thanks for coming today.

Ian Pudney: Thank you, Kevin. It's a pleasure to be here to discuss Cisco's implementation of unified communications solutions.

Kevin O'Healy: Ian, I'm looking forward to it, take it away.

Consider this...

Ian Pudney: Let's start by setting some context for the business environment that Cisco IT provides communications services to. Cisco Account Managers spend an average of just one day a week in the office and Systems Engineers spend no more than a day and a half, two days in the office. How do they stay in touch? Cell phone bills for traveling employees can easily be over \$100 US a month; multiply that by the number of employees at Cisco and we've got some substantial costs

that we need to address.

Cisco Network Fast Facts

What is Cisco's solution? Unified Communications. Let's look at some details around the network environment that we support here at Cisco. We've got a large and varied scale network supporting different functions within the business. We've got a growing number of users and mixture of users by remote users, office space users, partners, vendors, contractors and a growing number of extranet sites.

Cisco in Context

Let's set some context around where we are in our migration to unified communications. Back in 2000, Cisco started migrating their existing PBX environment from a TDM to a converged voice and data network. In 2002 we completed the project and we're now operating over 100,000 IP phones worldwide. Today, IP telephony is an integral part of our robust scalable converged network that delivers better quality and services to employees through worldwide voice mobility, by productivity, a lower cost to the business and a platform, the new unified communications and productivity offerings.

- Kevin O'Healy:* Ian, let's take just a moment to talk about what the telephony infrastructure looked like prior to the deployment of IP telephony. What did we have in place in order to support Cisco globally?
- Ian Pudney:* So we had approximately 250 plus offices throughout Cisco and we had wholly 100% TDM environment. Each office had their own PBX and voicemail structure so a complete distributed TDM environment.
- Kevin O'Healy:* So very different than where we are today.
- Ian Pudney:* Totally different. Totally different.
- Kevin O'Healy:* Thanks, Ian.

Cisco IT Global IPT Deployment

- Ian Pudney:* We'll find out some more information as we step through the IP telephony section of this presentation. So let's get on to that. We'll now go through a bit more detail around the migration to IP telephony from our PBX environment.

The Global IPT Deployment

- So. 256 locations covered and that's a large number of IP phones, so over 100,000 now if you combine physical end points with our soft end points. We've got 218 unique extensions so this covers not only the users' prime numbers but also the different application that require numbers as well.
- We've got just 25 Call Manager clusters to support this whole environment which has come down from the 256 PBX's that we used to support.
- Kevin O'Healy:* Ian, only 25 Call Manager clusters today down from 256 PBX's. How did that work? What was the migration like?
- Ian Pudney:* So we've done this in two stages. Initially, the migration was pretty much a one for one replacement. In the early days of IP telephony, we didn't have the technology available to centralize as heavily. So we replaced 256 PBX's with somewhere in the region of 200 or 250 Call Managers.

Since then and as the technologies improved, we've been able to leverage SRST and centralize clusters to consolidate down from that 250 number down to just 25.

Kevin O'Healy: That's a great number.

Ian Pudney: Yeah, it works. Significantly reduces the complexity of designing and supporting the environment.

The Global IPT Deployment (Contd...)

So some more facts around our deployment. Also, from a Unity Mailbox perspective comes 53,000 voice mailboxes. It's pretty much a one for one with every regular employee within Cisco that was converted within a year from our Octel systems.

We also have a very high number and growing of video telephony Advantage cameras deployed last year. We had some 30,000 plus VTA cameras and in the contacts interspaced, we have 17 contacts in our locations and these are served by four centralized IPCC clusters and a single ICM.

Kevin O'Healy: So if you're going to the Cisco Unified Video Advantage, a video client for video to the desktop, how does that work? Do we have video to every field sales office today? Or only the primary locations?

Ian Pudney: So we offer video in every location but we don't always offer it across the WAN. Bandwidth requirements the video were stipulated a minimum of 394 kilobytes per call. And in some of our smaller, remote locations, we just simply don't have the bandwidth to make it a usable service. So people can use the service within the LAN environment, but it won't be available across the WAN.

Kevin O'Healy: That makes sense.

Global Map

Ian Pudney: Let's look at globally where our infrastructure is placed. This gives you an idea for considering the 256 locations that we support; we do that from just these smaller number of centralized locations. So infrastructure is centralized within our class A data center environments and one thing to point out on this slide, we've got the London, Amsterdam and Brussels cluster in one cluster using clustering over the WAN technology to support the whole of Europe.

Kevin O'Healy: See, I know that that cluster is a large cluster. We have users that are spread throughout a large portion of the world. So what exactly is the coverage area of that particular cluster?

Ian Pudney: So that cluster supports all the European countries, some of the Eastern European countries; Russia and down to some of the North African countries. We have a separate cluster in the Middle East and that's predominately due to the regulatory restraints there that's placed some restrictions doing VOIP over the WAN. We're seeing a lot of movement in this area as far as regulations and we expect that to change.

We also have some areas that are challenged by network latency, like Johannesburg. And it's forced us to have a separate cluster down there to service the office down there.

Kevin O'Healy: Okay. So it's a combination of latency as well as political and legal reasons. But in regards to our primary cluster in Europe, the real advantage is a sales employee, for example, who was normally based out of Africa can travel anywhere throughout Europe for instance, and can log into a phone using extension mobility regardless of which Cisco

office they're visiting within that region.

Ian Pudney: Exactly. It provides a very good environment for the mobile employee, allowing them to travel and make the benefit of taking their phone calls with them at a low cost and being able to make calls back throughout their home country at a low cost.

Kevin O'Healy: So it supports mobility?

Ian Pudney: Yep. It's _____. So let's capture one of the main business benefits we're seeing from IP telephony. Kevin, I think you're probably as well placed as anyone to cover the operational benefits.

Operational Benefits

Kevin O'Healy: So in regards to the operational benefits, really what we've seen in the last five years is consolidation. Moving from 256 individual PBX's made by different manufacturers, different vendors; to in this case, a single platform, 25 Call Manager clusters globally located in our centralized data centers makes it very easy to support that model.

But also, centralized administration. We no longer having to support dial plan on 250 individual components. In this case, we have a centralized dial plan for making our changes on a reduced number of hosts. So from an operation perspective, our lives have gotten a lot easier in the last five years.

Ian Pudney: That's correct. That's great. Let's look at someone from the employee side as a user, have our benefit. We touched on mobility already being a great factor and we pointed out that the typical employee particularly in the sales environment is highly mobile. And so, IP Telephony allows them now basically take their corporate telephony service and use it at home, when they're traveling, using a soft line or when they move to different offices and have a seamless experience from a business telephony perspective.

Kevin O'Healy: Ian, I know that many times when I interact with other Cisco employees, I don't know if they're working from home. I don't know if they're working from an actual office or just on their phone. What I found within Cisco is that everyone is so mobile and yet so reachable, you may not know where they are or what time zone they're in, but they're always available online or by telephone communications. Sounds like a real advantage.

Ian Pudney: That's right. It can be a disadvantage as well.

(Laughter)

All right, let's talk about the productivity gains of not only ability and the application benefits from unified communications. We've been able to leverage the web based interfaces into the configuration of your telephony service or your voice mail service to give you a bit more personalization and flexibility to how you want to configure your voice service. We've been able to leverage the total integration with applications like Unity and Meeting Place to give us greater productivity over how we joined and audio composing sessions. And this has really extended to really improving how our employees work and interact with each other.

Kevin O'Healy: Very good. Thank you.

Cost Reductions from IP Telephony

Ian Pudney: So let's look at some of the costs associated with IP telephony and where we've managed to get some cost reductions in our environment

to build an ROI from the migration from PBX's to IP telephony.

So these come into three different areas. Firstly, the real estate costs as far as the physical environment required to host the infrastructure to provide our voice services has been significantly reduced. The centralization of our infrastructure means that our footprint for our infrastructure has reduced dramatically across the globe.

Additionally, the maintenance and the service costs associated with each of those PBX's has now gone away and that's contributed to significant savings.

If we look at the network, the use of the converged network; single cables to the desks, a reduction in patching requirements in the data center has again contributed to savings and particularly as we bring up new offices and implement unified communications.

And then if we look at the call costs, the age with which it's possible to implement tel bypass solutions is far greater in unified communications environment. So this has enabled us to put significantly more calls between our offices and over our network.

Key Focus Areas for Successful Migration to IP Telephony

So I just want to highlight some of the key focus areas that anyone taking a project to migrate to IP telephony needs to make sure that it's well planned out. So firstly, the network readiness should not be underestimated, the importance of this. This is the platform, the foundation for your voice network. Your voice availability, your voice service is only going to be as good as the network that it rides upon. So making sure that we address high availability in every facet of the design of this environment, doing everything possible to ensure high quality voice for the appropriate use; VLAN technology, QoS, the appropriate capacity planning and ultimately full emission control to ensure that you don't have contention for bandwidth between voice and the other applications that run on your network.

Make sure you have a very good understanding of your existing environment before you take on a migration. And this is something that we can certainly speak to from our experience. It's very important to have the appropriate traffic studies to really understand that is in use and what is happening within your PBX environment. Make sure you don't waste time migrating applications and features that aren't even used any more.

And you'll be able to get all the data here to correctly size your environment and make sure that you don't have any issues when we're on the unified communications platforms through having areas in the network that have bottlenecks for through-put.

On the softer side of the planning, making sure that you're speaking to the right business stakeholders across the environment. So representatives from both IT as well as key stakeholders in the business that rely on voice solutions for their function.

Make sure you have people in your environment, particularly executives that are going to be change champions because this will be a change that will affect all employees as far as how they use their telephony system day-to-day. It's very important to smooth this change for having the correct executive sponsorship.

And then for the IT environment, you need to consider how you're going to handle – how the technology's going to impact the teams and the skills and the organization required to service this unified communication solution. So there's going to be changed within the

team as far as the roles for the introduction of the converged technologies. This may require reorganizations of teams. Switching from dedicated voice and network teams and bringing those closer together as they're going to have to work together throughout the designing and operation of this environment.

And make sure you address the training requirements. What you don't want to do is lose any of your good employees because they don't have the necessary training to handle the new technologies. And so by training from the network side and from the voice side on Cisco IP Telephony Solutions will help bring the best of both of those into a single converged team.

Kevin O'Healy:

Ian, I mention every company is different insofar as their organizational structure. So this is something they would have to look at individually and see if it fits or not?

Ian Pudney:

Absolutely and get a very, depending on the size of the organization, a small business with a small IP team would be successful operating from one single team with a mixture of engineers. Whereas a very, very large environment supporting multiple sites will still have to have some separate teams in there but the goal is to have those teams having much tighter collaboration than they may have had in the past.

Current Planning for CUCM

So let's look at the current plan for our environment within Cisco. We've been in the process of upgrading our Communications Manager environment to 5.1 with a target completion of December of 2007. This has been a project that has a few different components. As well as changing the Communications Manager version, we've also moved to a complete new hardware platform, the latest available MCS platform which will allow us to leverage the increased scalability of the latest Communications Manager version.

This leads to the Appliance OS and this has been a really attractive benefit for IT because it provides a simpler upgrade process. The use of the Active and the Active petitions allows us to minimize the change window required for further upgrades of Communications Manager.

And we've also undertaken a significant standardization effort at this time to bring all of our Communications Managers globally into a single baseline set of standards. This will allow us to further reduce operational costs through allowing our teams globally to work more seamlessly on all of our environment globally.

We're also in the process of moving with the Call Manager 6.0 version. We partner heavily with the EFT teams within the business unit to get an early look and an early field trial for the new versions of Core Manager. So we currently have the Australian/New Zealand environment which runs about a thousand users; Richardson, Texas and soon Tokyo which supports the whole of Japan, about another thousand user environment running on the Call Manager 6. And soon to go to 6.1. So we've got a lot of activity planned in this area in the near future.

Kevin O'Healy:

Ian, what's the benefit for Cisco IT to participate in EFTs?

Ian Pudney:

So for Cisco IT, we get the benefit from getting an early look at the technology, getting it into actually a real production environment with very close support from the business unit with often the teams that develop the product. There's additional benefits to both the Cisco business units as far as feedback from the experiences in the production environment as well as there's been a benefit to the sales environment, the users in those sites that had the field trials that have

been able to get it immediately, put those technologies in front of the customers that they deal with. So it's really, it's very beneficial program and ultimately leads to a better product for Cisco.

Unified Communications Applications

Okay. Let's move on to look at unified communications applications. Having discussed IP telephony, migration as a foundation for unified communications, we're now going to look at some of the applications that we've got in place at Cisco or in the process of deploying.

Unity Voice Messaging Cisco in Context

Start with Unity Voice Messaging. Voice mail is one of the most heavily used applications within Cisco in the voice environment. Prior to our migration to Unity Voice Mail, we had a 100% TDM Octel solution which was integrated with our PBX environment.

Moving to Unity, sorry, has seen us get a substantial cost savings as far as reduction of those maintenance costs and the service costs per hour and for Octel environment and in-house in support of that with our converged IP telephony teams. It also brings some significant benefits to the user of voice mail. And Kevin, as a user of voice mail yourself, what have you seen as the main benefits of Unity?

Kevin:

Well, there a couple things that come to mind. Number one is global access numbers. No matter where we travel in the world, the Cisco employee has a local number they can dial to access their voice mail so it makes it very easy in order for them to stay in touch with their customers.

And then number two is web access. We now have the ability through a single URL to access our voice mail through a Web site, have a graphical look at our voice mail, prioritize our message playback and also set user-specific preferences, things that may only apply to me versus you, for example.

Ian Pudney:

Right. Yeah, that flexibility and personalization and preference again is a thing that kind of runs through all of our unified communications applications. That's good.

Global Voice Messaging-Post Deployment

This slide again, similar to with IP telephony, shows now a footprint for our Unity Voice Messaging infrastructure. And if you'll recall, this footprint is very closely aligned to our Call Manager deployment. It's again, heavily centralized deployment and located in our key data centers throughout the globe and co-located with the appropriate Call Manager cluster and to provide centralized infrastructure to provide a global service.

Current Planning: Unity 5.0 in 1HCY08

If you look at what's in store for Unity Voice Messaging in the coming year, really see Unity 5 as being the next logical step towards full unified communications experience for voice mail. The introduction of speech recognition within the menuing for Unity will allow a more natural and seamless experience for navigating through the menu when listening to voice mails and sending voice mails for a user. We'll also see the introduction of integrated messaging within the Outlet Client so you'll have the ability to check your voice mail from a single client on the desktop.

We're also looking at another benefit of Unity 5 and with an associated hardware platform, increased scalability which allow further

consolidation of the infrastructure required to provide a global Unity service.

Unified Communication Client Applications

We've discussed the fact that mobility has been such a key business requirement within Cisco. And the IP Communicator deployment has been extremely successful. 30,000 plus and that number is growing on a monthly basis to provide your corporate telephony service on a desktop client for use whether you are roaming between offices, whether you're at home. It can be used over VPN access from a hotel. It can be used with wireless access when you're visiting different offices. It's been a key application to driving down the costs of business telephony from when you're outside of your home office.

Unified Communication Client Applications (Contd...)

To compliment IP Communicator, we have a very high adoption of extension mobility and again, this adoption is growing globally. Europe has been the historically been the location where we've seen biggest embracement of extension mobility. Everyone in Europe gets and extension mobility device profile and no one has a fixed desk. This gives us the ability to travel between offices and for your extension to follow you. We're seeing great adoption in both America and in Asia/PAC this year as we look to really leverage the benefit of extension mobility to reduce our real estate costs to accommodate our employees.

And then the Video Advantage users. We've referred to this already as being a key application to enable improved collaboration between our employees. We've currently got some 30,000 plus and growing cameras deployed and we're starting to see multipoint camera compassing services in the US and Canada.

Cisco Unified MeetingPlace

Then one of the – another very heavily used application within Cisco to support collaboration and to support our virtual teams and our remote workers is Cisco Unified Meeting Place. So we now have nearly all of our employees, actually, migrated to using Cisco Unified Meeting Place. And a very high number of voice and web minutes on a weekly basis.

Cisco Unified MeetingPlace Benefits

If we look at some of the benefits spelled out, so we're in the process of migrating from our Meeting Place 5.3 environment up to Meeting Place 6.0 with a plan to introduce video capabilities within Meeting Place within the next six months. This is globally deployed but again, centrally hosted. So this time only four infrastructure locations globally to support our global Meeting Place service.

This is provided a substantial benefit to users in how they can schedule and attend meetings. In the previous versions, with our disparate audio conferencing solutions, users had to go to separate interfaces to schedule and attend a meeting. That's now all centralized through the Meeting Place Outlook Client to allow people to very simply schedule a Meeting Place and attend from their desktop.

So that translates to a productivity saving and an additional benefit has been the increased use of our IP network to carry those calls into audio conferencing. So whereas we had a large percentage of that going to our audio conferencing provider pilot PSTN, that is now brought across our IP network to produce this significant savings.

Kevin O'Healy:

Ian, what are the cost savings associated with our internal deployment of Meeting Place?

Ian Pudney: Okay, so predominately we've seen the savings through moving from an externally hosted conferencing service to bringing it into an in-house enterprise internally supported _____ infrastructure. So we used to pay to play for our audio conferencing service and pay by the minute and all those calls were going via PSTN to the external conferencing service provider.

So by bringing that in-house onto our network, we remove the voice calls associated as well as reducing that call per minute charge for every call into an audio conference.

Kevin O'Healy: And that's significant based on the number of minutes we generate.

Ian Pudney: Yeah, so we're seeing something in the region of \$200K per month and that's a number that's growing as we move more and more users onto Meeting Place.

Kevin O'Healy: That's great.

Cisco TelePresence

Ian Pudney: Yeah. Now if we move on to TelePresence, this has been a very high impact technology both to the business as well as IT. And there's some deployment statistics here from early, early on in this year when we completed the first phase of the deployment of TelePresence.

So very rapidly, we deployed over a hundred units throughout our Cisco network globally. And we've seen very high adoption of this, a very high take-up and I know for a fact that the conference rooms are booked solid and that shows that it's been a really highly embraced technology.

So one of the main benefits we're seeing to the business is travel avoidance. We've got people that are no longer traveling long distances to attend short made meetings in person as previously were done face to face. That process saves money and it could – it's a payback to the employee in terms of their time and they have more time to spend with their families. So it's a really great story.

Kevin O'Healy: And TelePresence has now expanded beyond just Cisco. We now have the ability to do a business to business connection as well. So the ability for one of our executives, for example, to not travel, to stay in their home location, their home office, and use a TelePresence session to one of our customers.

Ian Pudney: Absolutely. So this is again an even more compelling story. It's one thing to be able to have a high definition video experience and having to make customers travel to a Cisco site. If executives can do this without even leaving their office and customers not having to leave their office, then we'll see high adoption and a greater benefit again to the impact that our sales executives can have to the business of Cisco.

Example Client Funded UC Business Applications

And now if we look at some of the what I call the vertical UC applications; these are applications that are specific to certain functions within Cisco that have a specific need within their communications toolsets that enables them to achieve some either productivity or optimization of their processes.

The Security Operations Center, the team that are responsible for our physical security within Cisco and that also incorporates coordinating emergency response teams globally. Now, they've adopted the Cisco iPIX solution to integrate their handheld –

Kevin O'Healy: Handheld global radios?

(Crosstalk)

Ian Pudney: Yeah, into our IP telephony environment which is now – we've had the ability to remove what was previously a dedicated network connecting those radio systems onto a – moving the communication between those systems onto our IP network. And also we'll be providing the ability to talk from the handheld radio to an IP phone. So it dramatically increases the reach and flexibility of that whole infrastructure.

Then you see the inside sales teams have taken a great bit of initiative working with the Salesforce.com team to develop an integration between the Salesforce.com application and IP telephony environment. This enables some features as screen pop using the caller ID of calls to pop-up information for incoming calls as well as the ability to use a click-to-dial capability from within the Salesforce.com application and to initiate calls to customers.

And the Global Technical Response Center, our internal IP help desk, is currently working through a pilot for speech recognition on the IVR to simply the access for our users through to help for IT support. So in addition to IVR speech recognition, we're also creating improved menu systems on the IP phone so that when a user calls into the GTRC, their IP phone menu is synchronized with available options on the IVR; so again, just simplifying the process of an employee trying to get support from Cisco IT.

Example Client Funded UC Business Applications (Contd...)

If we look at our facilities organization, they've been trialing the use of room control software using the IP phone, LCD screen. So this removes the requirement for previously separate, non-integrated dedicated appliance which LC has an associated cost for controlling the room to putting on this room control on the IP phone.

Kevin O'Healy: Ian, I've seen this in action, this is typically on a Cisco 7971 color phone, with a touch screen, to be able to control from the phone: the lights in the room, the blinds, the overhead projector, works really well.

Ian Pudney: Yeah. That's a great application.

Unified Communications IT Strategy 2007/2008

Alright, let's move on now for the, what I want to do is capture the IT plans around further adoption for unified communications solutions as we move through the next 12 months.

Cisco IT Unified Communications Strategy

This slide presents our vision statement, for our IT program, for unified communications. What we're really looking to do is pull together tighter integration of the unified communications solutions we have out there today, to really provide maximum optimization of a user's experience when communicating at Cisco. This means more capabilities around mobility, a richer experience through an improved use of video, more preference and flexibility to configure your unified communications toolsets to what your own personal needs are, and what we will see is the introduction of presence technologies throughout our unified communications tools to enable a user to know real-time what the status is, and what the preference for communications of the people they are trying to communicate with. And, what we'll see, is, what we're hoping to see is improved productivity and improved collaboration throughout Cisco.

Cisco IT UC Program Goals

If we drill down into goals, this is how we see that Cisco's solutions are going to help us achieve that. So we really wanna transform the real-time interactions at Cisco. So we want to make it simpler to communicate, simpler for how you initiate an audio conference, or a phone call, or a video conference.

We wanna improve the quality, and that's the quality of the experience, as well as the actual perceived quality of the audio quality, or the video quality during communications sessions.

Increase the accessibility, so make these technologies available to everyone, everywhere, and increase the mode of access available to access these technologies, so whether I'm at home, whether I'm roaming, whether I'm in a hotel, whether I'm in a different office, I wanna have a very seamless environment for my communication tools.

We've mentioned around the preference and flexibility that we want to give to the users for how they choose to communicate, so we now appreciate that every user has different communications needs and the unified communications toolsets has the ability for you to customize your own preference to what your needs are.

And of course, we are an IT department; we need to look at how we reduce the cost of providing all these services. So this is how we really aim to create business value with unified communications. We want to drive our top line by really demonstrating to Cisco and to our customers how unified communications solutions can improve your business, through improving the way that your business collaborates, and we also want to reduce the cost of providing all these solutions so driving down that bottom line.

Kevin O'Healy:

Ian, it sounds like Cisco Unified Communications Manager is going to be used as a platform to provide new features and services for our clients hopefully to make them more productive.

Ian Pudney:

Exactly. And all at a lower cost.

Unified Communications Deployment Takeaways

So let's summarize some of the key take-aways from this session today. We've talked a number of times around the importance of centralizing your infrastructure and benefiting from the converged network and benefiting from being able to centralize at key data center locations to host these infrastructures and also centralize your IP teams at those locations, providing a reduced cost of ownership for your infrastructure.

Cisco Unified Communications Manager is the foundation that's central to unified communications applications, providing support for both those horizontal applications like voice mail and all that encompassing as well as more vertical applications, the different functions for within your business.

We see presence and mobility is key new technologies that are going to be able to provide us a communications tool that will lead to business competitive advantage for Cisco. And finally, IT is very much in the middle of both expanding our deployment of unified communications solutions and introducing new services to really provide some key benefits to our business; better quality and service to all employees. We want to really provide that true, worldwide voice mobility. We want to be able to provide higher productivity and as well as driving down the cost of the business and of course, providing this new communications platform that will enable an innovation within the business and provide greater productivity throughout our environment.

And that brings me to the end of the slides today.

Q&A

Kevin O'Healy:

Thanks for that discussion, Ian. I do have a couple of questions. First, if we could go back and do our unified communications deployment over again, what would we do differently?

Ian Pudney:

Okay, I'll pick two points that I think are the key take-aways for me. I think the first is how we actually went about the migration. And I think we would probably look to be a bit more aggressive through the migration from the TDM environment to the IP platform. And try to reduce that time spent managing integration between the two environments.

Although the technologies are there to provide the integration, often the complexity involved in designing that integration and then the operational overheads from supporting that period of integration can be significant. And so if you can find the way to find a solution for those applications on the IP platform before you did a migration, I think the benefits would be significant as far as the cost of ownership throughout the migration and the day two support.

And secondly, certainly in a global organization for us, the standardization requirements cannot be understated. We've had teams in different regions supporting our infrastructure and initially, each of them kind of coming up with their own set of standards for a very similar business problem or business requirements which has led to again, a slightly higher cost of ownership when it comes to as our environment has converged and now all of our clusters globally and all of our applications like Unity and Meeting Place that had such tight integration and need to coordinate and communicate throughout the regions, really all benefit from having a standardized baseline on Communications Manager underlying that.

So planning out and getting global agreement if you've got teams in different regions on those standards before you start the migration.

Kevin O'Healy:

And looking forward, what are the key applications and services that we're going to be deploying within Cisco?

Ian Pudney:

So again, I think there are two things that have a real potential to transform how we use our communication tools at Cisco. Presence, which we mentioned already. We know presence today in the form of instant messaging clients that have very rudimentary presence ability as far as unavailable and not available. Having that integrated into our communication tools, the ability to call people and see which number they're at and see when or when not they'd like to be contacted and on which numbers. The ability to start a conference session or a collaboration session from that single client I think will really transform how our employees work.

And secondly, I think the speech recognition applications as we see them integrated through the different applications like IVR, Meeting Place, voice mail. We'll see significant benefits. Again, it's simplifying how a user accesses the information or finds their way to the people that they're trying to communicate with.

Further Resources

Kevin O'Healy:

Thanks, Ian, I'm afraid that's about all the time we have for questions today.

And for more information about technologies and solutions deployed at

Cisco, you can go to the Cisco on Cisco site where you can find Case Studies with information about: what we deploy, what benefits we've gained, what lessons we've learned, and some operational practices and presentations to help you learn more.

Below that, you'll see a toll-free number you can call for more information or to place an order; and you can order Cisco resources on the web from the URL at the bottom of this page.

I'd like to thank those of you watching for spending this time with us, and for being interested in what the Cisco on Cisco Technology Tutorials are all about. We hope that you've enjoyed this seminar and that it has helped answer some of your questions about best practices for deploying, managing, and supporting unified communications solutions.

And thank you, Ian, for coming and sharing your expertise and enthusiasm for unified communications.

Ian Pudney:

Thanks Kevin, it's been a pleasure. Thanks for joining and see you soon!



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