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Carl Franklin

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Richard Campbell

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Rob Howard on ASP.NET
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(Music)

Geoff Maciolek: Hey Rocks Heads! Stop skinning your interface and listen up. It's time for another stellar episode of .NET Rocks! - “The Internet Audio Talk Show” for .NET Developers with Carl Franklin and Richard Campbell. This is Geoff Maciolek here to announce show # 119 with guest Rob Howard, recorded live Friday, June 24th, 2005. .NET Rocks! is brought to you by franklins.net - “Training Developers to Work Smarter” and now offering hands on VB.NET and ASP.NET classes remotely, online at



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And now the man who just got back from a business trip to Nigeria and his bank account is empty, Carl Franklin.

Carl Franklin: Thank you. Geoff, you have got to do, ‘and his bank account was EMPTY’ get that comic emphasis there.

Geoff Maciolek: Well I think an empty bank account is funny enough as it is.

Richard Campbell: As long as it is happening to somebody else.

Geoff Maciolek: Yes.

Carl Franklin: All right. And no offense to Nigeria as a country but come on man, control your spammers, they are getting out of hand. Come on, you are going to have to take it on the chin this time. How you are doing Richard? Richard Campbell out there in Vancouver, British Columbia my co-host, my partner in crime at least for fifty shows anyway that’s how the story goes. How are you?

Richard Campbell: Well nineteen shows in and I haven’t lost any enthusiasm yet.

Carl Franklin: Yes you have not.

Richard Campbell: I think we have been having a really good time, haven’t we?

Carl Franklin: We’ve had a great time. Nothing but compliments about your co-hostedness, it’s been great.

Richard Campbell: It’s been all-good.

Carl Franklin: It’s all-good.

Richard Campbell: I have got a downed water pumping and the funny thing part is, it’s my wife’s machine instead of mine this time. I cooked off a water pump so I got another one on emergency replacement order. I think I am going to keep a water pump in stock. As having a dead pump is bad.

Carl Franklin: So if it leaks and water gets into the electronics, are you talking about a fire or will it just go poof.

Richard Campbell: It will just cook the machine. I have cooked a couple of motherboards that way actually, but nothing dramatic. It’s just the water pump failures are the nasty ones because there are just odd things to replace, they are hard to get out of there. The centralized cooling solution would solve all this. Putting plumbing into my wall for my computers is the answer.

Carl Franklin: I think you ought to do that. That’s where we are heading here.

Richard Campbell: Oh absolutely. I have embraced the fact that this is going to happen. Now whether or not the wife has embraced the fact that it’s going to happen is another question entirely.

Carl Franklin: Right. So anything happening in Canada, in your neck of the woods this week or next week?

Richard Campbell: Nothing as weird as what’s happening in New London, what are you doing in evicting people?

Carl Franklin: It’s not me, man. I tell you, New London is in the news. It’s kind of funny because a while ago we were in the news as like being one of the best towns to live in which I thought was weird because the taxes are high.

Richard Campbell: Because everybody knows Vancouver is the best place to live in.

Carl Franklin: Well this is in America of course. Out of the towns in America, New London was ranked on the top of some lists as far as like economically a good place to live. And the problem in New London is there are so many schools and churches and not enough houses so there isn’t any property tax to speak of. And so the people, who do live here get squeezed big time and they are getting huge squeeze right now. I just read in the paper that next year’s school budget they are going to increase the size of elementary school classes by 50%. Not only that but we don’t have a garbage contract. The city has eliminated garbage pick up from the budget because they can’t afford it. And guess what they said to all these contractors, okay, who wants to do the garbage? Nobody said “me”, nobody. Nobody wants to do it. And so I walked down the street today, there was garbage piling up outside. It’s like freaking Victorian times here, man. And now, we’ve just got a Supreme Court decision -- apparently, the local governments now have the right to use eminent domain on



public property projects for business development if they feel that it would benefit the community and which is opening up a pretty big can of worms if you ask me.

Richard Campbell: No kidding. And this made my local paper, believe it or not.

Carl Franklin: It's huge.

Richard Campbell: I read it in the paper today and I am like, oh my God! I cannot believe you guys are doing this. This is out of control.

Carl Franklin: It's insane. Well, the city has no tax base except for Pfizer and they are the ones, who want to put in this big hotel and stuff so the city will get some taxes out of it. But man, do we have to go there?

Richard Campbell: Yeah taking people's homes over it is a little excessive.

Carl Franklin: And not only that but opening up a precedent to the Supreme Court so that Governments all across America can do this now, really sucks. Well enough about me and my stupid town, let's talk about, fortunately I don't live in New London, I live in Waterford, which is one town over but still it's a problem for every small town now. It's going to be. So, we got some email here, Richard.

Richard Campbell: Some great Email.

Carl Franklin: Great Email. Our friend at shrinkster.com, the guy who wrote that Kyle Tinsley, wrote us last week, he said, "Carl and Richard, I know you are both busy men so I'll keep this as short as possible. I'd like to thank you guys for using a website I wrote called shrinkster.com."

Richard Campbell: And we love it.

Carl Franklin: You have been very helpful in bringing traffic to this site and I would like you to know that I really appreciate your help. Hopefully it helps you by shaving about 30 seconds of each DNR and Mondays! show. Actually Kyle, it shaves a lot more than that because the time that we spend not reading DLLs in the time that everybody else doesn't spend emailing them to each other and typing the mail and getting word-wrap taking care of and all that problems, it's a great stuff. Anyway so he goes on, he says, "Well since before the last PDC a few partners and I have been working on a new site, wizbids.com. I even left my job a year ago to focus purely on getting this business running. The site took nearly 2 years to create and is written entirely in .NET 2.0. The site allows developers and other

freelance professionals to find freelance projects. It also enables businesses to outsource projects to freelance professionals. This site was prototyped in 1.1 and architected with the PDC bits of 2.0. With the release of 2.0 beta 1.0 we began development of the production version of the site. When .NET beta 2.0 was released we began to prep the code for production roll out. Our V1.0 release ended up with 120 web pages and about 700 source files for the entire system, Website Services and Smart Clients. We just launched the site about 3 weeks ago and are happy to report a very stable highly performing and very maintainable system. Generics are going to change our world. Thank you and let me know if you have any questions. Please keep up the great work and I am eagerly awaiting the daily commute." We'll talk about that in a minute but there you go, some props for our friend Kyle Tinsley at shrinkster.com obviously we have been using them to shrink our links for long time and there it is. Go check out wizbids.com.

I got another one from Nick Swan, the guy who wrote Pocket Blogger, a utility that I used to post to my blog from my pocket PC phone. And he wrote us this letter, "Hi Carl! I have been following .NET Rocks! and your blog for a long time and I love it. I am part of a team that has launched a new service." This is like community announcement day. "This is a team that has just launched a new service that connects people, who read the same or similar books." All right. So a book buddy service. "If you would like to give it a try and give me some feedback, I will be very thankful and it's called www.connectviabooks.com. Thanks, many thanks and keep up the great work." Nick Swan.

And I got nothing. That's all I got man. So a couple of community announcements and that's pretty much it.

Richard Campbell: That's not nothing. It's need to hear from some of the folks that have been around DNR for a long time. It really helped us out too...

Carl Franklin: Absolutely.

Richard Campbell: ...to see new things going on. I think it's really exciting times in development right now. And all the great people we know are doing amazing things moving towards new products. Studio 2005, I think is going to be huge.

Carl Franklin: This is going to be a great year, next year.

Richard Campbell: Huge year, not that this year hasn't been pretty big too.



Carl Franklin: That's true. But I think 2006 is going to be stellar. Anyhow I said I would mention the daily commute. This is an idea that I had to create a show in which we would read headlines everyday. Richard and I talk about this one should we or shouldn't we. We know that it will be a huge time sucker and that's the problem. We don't want to start something, we can't finish and there isn't anybody stepping up to pay for it. So that's where we sort of left it. I am going to build a plug-in to PWOP catcher, which will read blog posts and with the text to speech engine of your choice and some of them are pretty good out there and produce MP3's. So that's about as far as we are going to get with the daily commute I think unless somebody wants to step up to the plate and say, hey that's a great idea and I will fund you. And in which case we should talk. Anyhow that said, let's just go ahead Richard and introduce our guest, who I am very, very excited to have on the show, aren't you?

Richard Campbell: Absolutely.

Carl Franklin: None other than Mr. Rob Howard. Rob Howard is the founder of Telligentsystems – "The solutions company specializing in Microsoft Enterprise Technologies." Prior to founding Telligentsystems, Rob worked for the Microsoft Corporation, may be you have heard of them, where he helped to create the Microsoft .NET Framework 1.0, 1.1 and 2.0. He specifically contributed to ASP.NET, where he helped design web services, caching, session state, error handling, membership, roll management, personalization, the provider design pattern and many other features.

Richard Campbell: Are there any features left?

Carl Franklin: I don't think so.

Richard Campbell: No I think it's all of them.

Carl Franklin: He has presented at many software developer conferences including Microsoft's PDC and TechEd, Borland's DevCon, ASP.NET Connections and VSLive and is consistently rated as a top presenter. Rob is recognized as a Microsoft Regional Director now and is part of the INETA speaker's bureau to boot. He is the author of several books, most recently "A Preview of ASP.NET 2.0" by Addison-Wesley, "ASP.NET Coding Strategies for the ASP.NET Team" from Microsoft Press and is currently working on his 8th book. To learn more about Telligentsystems services and offerings or to chat with Rob, please e-mail him at rhoward@telligentsystems.com. Welcome Mr. Howard.

Rob Howard: Thanks a lot. I am glad to be here.

Carl Franklin: Gees, I feel I am just completely humbled in your presence man. You are a rock star of the highest order and I am really glad that you're finally on this show.

Rob Howard: Well I am glad to be here, I don't really consider myself as a rock star. (Laughing) but I appreciate that as a superlative I guess.

Carl Franklin: Let there be rock.

(Laugh)

Rob Howard: It's been a long time coming. I wanted to come on this show for a long time. And you know I talked about it countless number of times.

Richard Campbell: We talked about this literally a year ago.

Rob Howard: And I keep saying Carl I want to get on, I want to get on and you seem never to...

Carl Franklin: Oh come on man.

Rob Howard: You never write, you never call.

Carl Franklin: Why is it always my fault man? It's just I get no respect.

Richard Campbell: The three of us were all together a year ago at devteach, remember?

Rob Howard: Oh! Yeah.

Carl Franklin: Yeah.

Richard Campbell: Of course I wasn't a co-host then but you were talking about getting on the show then.

Rob Howard: Yeah I remember. I was hoping we wouldn't bring that up.

(Laughing)

Carl Franklin: Well we actually had you scheduled last year and something came up and then we tried to get you in and sort of last minute thing and it didn't work either. You are a busy guy.

Rob Howard: Right, I'm actually very busy these days.

Carl Franklin: Especially since you left Microsoft and now you started this new company Telligentsystems. I want to talk history but tell me about this new thing.

Rob Howard: Sure. I left Microsoft about a year ago it was actually June 1st of last year and started the new company called Telligentsystems and specifically with the goal of doing 3 things originally was the plan. One was going to be firsting training, which would help lead in the some services and project type work. And then the 3rd thing was to start to continually work on and find something that many of the folks intelligently really passionate about, which is community driven applications. So, for example the ASP.NET Forms, which I worked on at Microsoft nGallery, which again Jason Alexander worked on while he was at Match.com. And then of course, dot text, which has got a lot of magic worked on and which was used to run weblogs.asp.net and blogs.msdn.com for a long time. And things happened a lot faster than we expected. I think we did one training engagement and can just almost a merely fish over doing a lot of project-based work, working with customers and a variety of industries, variety of size applications. All we focused on ASP.NET and SQL server, which kind of our specialties. And also really having community server -- well, became community server took off a lot faster than we expected, which was taking the ASP.NET forums, .text and nGallerying, combining into one solution and really trying to make that perfect verses 3 very good applications, which they were before.

Carl Franklin: And I remember you contacted me last spring I think it was about Podcasting, you were wondering what's that all about? What have you guys done with that?

Rob Howard: That's a great question. So we have, the community server has been a very popular application for us obviously that's what we a lot of time doing. We used to run forums.asp.net, we used to run blogs.msdn.com and hundreds and hundreds of other uses as well. And one of the common questions we got especially from lot of the bloggers was gosh! it'd be really nice if there is a Podcasting features, which works with community server. And you and I talked about that. We had a pretty good idea, what would it mean to add Podcasting. We have been researching and looking out for a long time now and it's going to come in our next release, which is going to be towards, probably early fall end of summer. Our version 1.2 release will have Podcasting built-in.

Carl Franklin: Fabulous.

Richard Campbell: Nice.

Carl Franklin: Is weblogs.asp.net running community server now?

Rob Howard: Not yet, blogs.msdn.com is and blogs.technet.com is. And the reason that weblog.asp.net isn't running yet is not really because of any lack of desire in our part; it's always lack of time. We just haven't had the time to get around to it. We've been busy with so many other work items and so many projects. Well weblog.asp.net is definitely, definitely on our radar. I think with the plan right now we're either going to roll out community server there in late summer or early fall. We haven't really decided yet but we want to make sure that especially if we do that for those bloggers we have some other features I think to make it even more appealing for the folks around weblogs.asp.net.

Carl Franklin: And one more last question is .text pretty much dead?

Rob Howard: No I wouldn't say .text is dead.

Carl Franklin: Or is it going to be its own product.

Rob Howard: Yeah I think .text version 9.6. So if you ask Scott Watermasysk, he would say that he never called .text version 1.0 because he never really felt like it was of quality that he wanted to get it to. If your were on the phone right now we would ask him, one option sure what he would say is that community server 1.0 was like .text 1.0 for him. That's the vision he had for building a blogging solution and all the other associated problems that he had to follow along with that.

Carl Franklin: But I guess I am saying that we are not going to see a separate product.

Rob Howard: That's correct. We're putting all our eggs in that one basket.

Carl Franklin: All right. But he is not working on another .text, now is what I am asking?

Rob Howard: No, only community server now.

Carl Franklin: Great.

Richard Campbell: Community server is not a free product either, it's a per pay product.

Rob Howard: Well that's not exactly correct. We are trying to do something that a lot of people were very skeptical of to begin with, which was, have a product that is both free as well as the version of commercial. Back in mid July last year we started talking about that a lot of poeple said you can't do that, you won't do it for a long time and there is no way we are going to make this happen. And in fact that's exactly what we do we get about between 600 to 800 downloads a day



of our free version. We also have customers that worked with purchased the commercial version and we publish all the source code to it. So all the source code for the forms for web blogs, for the blogging solution as well as for the Gallery solution all is available. And what our business model really is for Community Server is one, our roots in the community, we want to build a great set of software that they can use and still download, look at, read the code do everything they did before, just as they did with forms and .text and whatever else. But also have other offerings that folks like what really be interested unless the running large commercial applications. So a great example what I would put out there is one of the commercial add-on's that we built an NNTP server. So for example you can read the forums.asp.net website in your web browser just fine. But you can also open Outlook express and connect to newforums.asp.net and read it in Outlook Express.

Carl Franklin: Or it might also add, you could use an NTP reading component like from Dart or one of those other guys or heck, you could write your own if you read my book.

Richard Campbell: Or even exchange, exchange has a feed into the public folder system so you could plug it right into there.

Rob Howard: It's actually a good segway because exchange is another problem we are trying to solve and we are also writing an email, an email component to it as well. So you can receive like a message discussions in your inbox, read it, reply to it in Outlook or whatever other mail reader you are using and that would show up in the forums, where you could then in turn read that same message in the news groups. So this all comes back to a problem that I saw with Microsoft, which was communities today are really separated out by technology, which is unfortunate. If you are looking at Microsoft technology and the communities that they build around those technologies, they have one set of communities that are in the news groups, one set of communities that are in email list and one set of communities that are in web based discussion systems. And that's unfortunate because there are lot of good information that is not shared between the three and it's really only a matter of protocols and IP addresses and Ports that prevent all those from talking to one another. So a part of our vision for Community Server was to bring all three of those together.

Carl Franklin: That's cool. All right so here's an obvious question that's probably on the listener's mind too. What's the relationship or the non-relationship between Community Server and say DotNetNuke?

Rob Howard: What's the relationship between community server and DotNetNuke?

Carl Franklin: Maybe in terms of how similar, how different, what's the difference, that kind of thing?

Rob Howard: Well DotNetNuke is a portal solution. So for individuals, who want to go out and find a technology that'll easily allow them to put together a portal, where they can do content management and other tasks such as that, that's where DotNetNuke really shines. I mean DotNetNuke is a fantastic application, I definitely recommend checking it out at dotnetnuke.com. It's another application that comes with full source code. You can download that source code, you can review it, you can use it for free just like you can with Community Server. It's 100% Visual Basic based whereas Community Server is 100% C# based. Another really the delta between the two is, I think you will find in Community Server feature that really we focused at several specific tasks. It's not meant to be a portal solution. I would actually say that Hosts such as DotNetNuke or SharePoint or other portal technologies are what you would host Community Server with them if you are not wanting it by itself.

Carl Franklin: I see. So is that indicative of the fact that you may actually write a plug-in interface for DotNetNuke for Community Server?

Rob Howard: That's a great point you brought up. A lot of people have asked us about the Community Server and DotNetNuke integration. Where is it? Why hasn't it been done yet? We actually hired someone to do that and spent a lot of money on getting something like that done and the end result was, it was completely non functional. We spent quite a bit of money on it. So now we just hired someone, we hired Dan Bartels who is probably pretty well know in the .test community as well as the DotNetNuke community and part of what he is going to be doing is working on a lot of our portal strategy, making so that we run within DotNetNuke. And maybe even more importantly making sure we run really well within SharePoint, which is really, where we see even more opportunity.

Carl Franklin: Let me clarify this and we will get to SharePoint in the second but just on that point of integration with DotNetNuke, do you think the problem was that you had the wrong guy or girl or wrong developer or did it just not work technologically?

Rob Howard: No, I think there were a couple of problems. I think the main problem is that there is



such a high degree of overlap between what DotNetNuke does and some of the administrative capabilities and what community server does and its administrative capabilities. That was one big problem. Another big problem was just purely from an infrastructure side, which was the way DotNetNuke works is it takes over basically all ASPX requests. So it virtualizes out the URLs, the URL requests comes in, it requests default .ASPX question, tab ID whatever and there is no physical page that represents that request. Whereas Community Server is made up of physical pages or server controls so every single component of Community Server is a server control. And so there is some disconnect there.

Richard Campbell: So there has been point being that Community Server works with ASPX normally and TNN kind of takes over the whole space.

Rob Howard: That's correct. And so I don't think there are any surprises. Once people dig into that they are like, oh! yeah I understand kind of what some of the challenges are now. But that's made it difficult from our side and it's something we're working on. We tried originally as Telligent we tried to contract that out and hire someone from the DotNetNuke community to help us do that. And that turned out to be a mistake so we regrouped, reassessed and hired a full time person within Telligent to make sure it happens now.

Richard Campbell: But imagine back then you were a little more sensible with those things. Business sounds like it's been booming for you.

Rob Howard: Business is going well yeah we had our one-year anniversary about two weeks ago and we had 30 people on our one-year anniversary, really exciting.

Richard Campbell: Wow! Great, in one year.

Carl Franklin: Fabulous.

Richard Campbell: Hey Rob, why don't we take a step back, tell us about leaving Microsoft, like when I met you a year ago that was just happening and I never really found out how you got to that point?

Rob Howard: Well it's actually a pretty simple story and one I would love to share. About a year or two before I joined Microsoft, I was part of another company that I had ownership in that is consulting work. And we did consulting work for a variety of clients because we were very small, this is while we were in college. And one day we had a meeting with a potentially large client and they said, look guys you know the technology,

you know obviously what you are doing, we'd really like to go with you but look we don't know your company, you guys are young, how in the world are we supposed to know whether or not you know technology or not? And that was kind of a kick in the chest because we are a bunch of hardcore hackers that really knew what we were doing and unless a company or business trusts that company to run with and user solutions just doesn't work out for the business. So we decided to disband and go our separate ways and my goal was, hey! I really wanted to get back into having a business again that was the services based business or software based business. So my plan was, I want to go to work for one of the best software companies in the world. Learn what they have done to be so successful and then do this again. So I had an opportunity to go to work for Microsoft as a developer originally. I did development for about 6 months and moved into another role, which were some of the best years of my life at the time, which was technically Evangelism. I was part of a group called The Developer Relations Group with Microsoft, I was there for about a year and a half or two years and that was really during the .com heyday. And I cannot tell you how much fun that was, there was about 4 or 5 of us and our role was to go out and basically convince these large gigantic eBay style shops. Hey you shouldn't be running Java or whatever else or writing your own CGI script, you need to be running Microsoft DNA solution. And so we were trying to convince them back then to run Microsoft ASP, Classic ASP, SQL server obviously as well as transaction server and a few other technologies. And that was tough but it was a lot of fun. And it was about that same time towards the end of that when Scott Guthrie approached me and said, hey, what would you think about being a program manager on this new team called XSP? And I was like, hmm, I don't know. So we went back and forth for a couple months on that and worked out, moved to the ASP.NET team, stayed there for about three years and then I came up with my 5 year mark, where I would have been in Microsoft for 5 years and I said you know what, it's a right time, ASP.NET 2.0 is coming out, it's eminent, it's going to be a great technology. Typically version 2.0 of Microsoft technology is where things really just get blown through the roof. I said now is the right time and I actually ended up giving about, originally it was about 6 months notice but we stretched it around for another year so it wound up being 18 months notice to Microsoft that I was in a part...

Richard Campbell: So you got your 5 pounds of M&Ms anyway.



Rob Howard: And I laughed, we departed on really great terms, they were incredibly supportive, they were fantastic company.

Richard Campbell: Microsoft is one of your customers now too.

Rob Howard: Microsoft is absolutely one of our customers.

Carl Franklin: And how is it being a Regional Director, what has that done for you?

Rob Howard: Being Regional Director is great, I think the best part for me at least speaking selfishly about being Regional Director is really just getting to Network with the other Regional Directors in my role at Microsoft, I had a kind of different relationship with a lot of those folks and now they have moved to the other side of the fence with a lot of them, it's fantastic.

Richard Campbell: We have more fun.

Rob Howard: It's going to have more fun.

Carl Franklin: The mailing list alone, people would die for.

Rob Howard: Yeah the mailing lists can be pretty entertaining at times.

Carl Franklin: Yes, it can.

(Laugh)

Rob Howard: Absolutely.

Carl Franklin: So, here is a blast from the past to the ASP.NET roadshow.

Rob Howard: Oh, yeah.

Carl Franklin: I think it was Boston where I saw you.

Rob Howard: Yep.

Carl Franklin: And you told a story about ASP.NET the website www.asp.net.

Rob Howard: I know what you're getting into.

Carl Franklin: It's a great story man. Will you tell it?

(Music)

Carl Franklin: Folks, do yourself a favor and check out our friend's data dynamics website datadynamics.com, makers of ActiveReports.NET – simple, powerful and cost-

effective reporting for Windows forms and ASP.NET, very nice stuff. You compile the reports right into your application, chip them with your assemblies, has all the great features you come to expect in a reporting engine. And you can use ActiveX controls right in the reports too. So, great stuff. Data Dynamics has been an excellent sponsor of .NET Rocks! for a long time. They deserve a little bit of your love and attention. So go check them out at www.datadynamics.com.

(Music)

Rob Howard: I'd love to tell that story. To give a little context about, I can't remember the exact time from now I think it was maybe four years ago from now. When we first rolled out the www.asp.net website which, hopefully, most people are aware of now I think a lot of people are.

Carl Franklin: We hope our listeners are aware of it.

Rob Howard: And when we originally rolled it out, there was one page and that page basically said, "Here's what ASP.NET is etc. whatever else, you can issue some download information, here are some screenshots of ASP.NET inside of Visual Studio or whatever else. And as we of course moved through time we added functionality to that application for that site. And the first piece of functionality we added was we add a control gallery. Of course in ASP.NET one of the greatest things about ASP.NET is this declarative programming model. And we wanted to enable away for people to share controls they built. So they create a control Gallery and allow people to upload controls, they could download controls, they could share them, they could read them, they could shrink them, all kinds of great stuff. That was a really popular feature of the site at the time.

Carl Franklin: Still is actually.

Rob Howard: The next thing that we did was we said you know what we are missing. We had got a gap in our community strategy. We had got news group and we really didn't like news groups that much because from a measurement standpoint they are really difficult to measure. There are lots and lots of repetitive same question over and over, over again. So there is not a lot of information reuse. There is no searching and then we had emailed list which suffered from lot of the same problems and we said, we are missing this gap, which is online web based discussions and so we wined up doing is we purchased a form solution from an individual and we used that pretty much as a



specification and pretty much rewrote the whole thing according to the need that we had for what eventually became the ASP.NET forums which is now at forums.asp.net. And this was also quite a big shift as far as the site was concerned because instead of being a pretty simple static application, now all of a sudden we had an application that introduced security concepts that had -- gosh! I don't know how many pages it had but it had a lot of moving parts, I mean it had a ton of moving parts to it. It was probably a hundred fold of row was already there. The control gallery was maybe four-five pages compared to the forms which most people would only see twenty to twenty-five pages and then on the admin side it'd be even more. And so we did is we are rolling this out and we said you know what we really look through this code and we think we know what we are doing. So let's just be safe, let's send an email to this group of individuals who is really familiar with ASP.NET. Just ask them, put on your black attacker guard and put those tick tyres a little bit. Go in there, look for bugs we would love to hear about bugs. Look for any security issues, you'd love them about those and by the way, whoever finds a best bug or the best security or wherever it may be we will give you an ASP.NET t-shirt. (Laughing) And we also had another offer on the tape. I think that was for the first place and I think second place was a find Web Matrix CD. Web Matrix is the free download but we are going to have Nakheel who wrote about matrix, signed that CD and deliver it to them.

Carl Franklin: Wow it's great.

Richard Campbell: Nice.

Rob Howard: We thought there was some pretty good carat that we are rolling out there. And I think we sent a mail out on a Friday morning and expectedly we knew of a few bugs, we knew of a few cross-site script injection attacks, we knew a few ways you could crash the application or crash pages. And overall we are fairly confident for security of the application. We've stored procedures we had done every thing like best practice as well as we could. There is another email to these individuals I forgot how many they were may be forty or fifty and we are sure enough start getting feedback trifling in. And the feedback could be anything from, "hey here is this cross-site injection attack and it will inject some script to you and make the site do this or I can change the HTML output. Variety of things that they could do to the layer of the application they find bugs or whatever else. And turn off, we go through Friday no big deal, no problems, everything is going really well. We get into Saturday, I am kind of monitoring my emails still no big issues, no big problems so I get to work on

Sunday morning or on Monday morning. Sunday wouldn't be too uncommon either I guess but I roll into work on Monday morning and first thing I do is open up Outlook and start scrolling through it and looking just what's going on, what happened this weekend. And I am scrolling up to my email and looking at the messages that are coming through and yet here a couple more bugs are being reported no big deal. And then I hit this one that made that hair in the back of my neck standup because it basically read something like, it was from a friend of ours over in Australia and it basically said something like, "hey good day, I was browsing your site mate or something campy be like that I am sure he wasn't actually saying that. And he managed to base new state very succinctly that, "I think I found a security issue, I am able to browse your database server. Here's the list of the entire table or here's the list of all the databases in your database server." He was able to browse the actual tables, within our forms database. Basically crawl through there, he was able to execute SQL and was able to even generate rows that were inserted into our SQL database. And so he told us all this information and at the end he just said, "is this good enough for the t-shirt or is this good enough for the Web Matrix CD?" I am sure he was very excited about the fact that he has found these bugs.

Richard Campbell: Didn't tell you how though.

Rob Howard: He forgot to tell us how in all of this excitement.

(Laugh)

Carl Franklin: Left that part out.

Rob Howard: He poked the hole but forgot to tell us how to fill in the gaps. And so I calmly read this and this was like six or seven in the morning and I sent him back a quick reply and I said dear so and so, we obviously appreciate this very much. This goes above and beyond. We respect it in fact I am so grateful for you finding this. We have got a copy of Visual Studio Enterprise that I would love to send you. In fact I might be able to get a couple of copies for you. PS: could you also just please tell us where the hole is so we can fix it." So of course, he was asleep for the next several hours and we were pouring through code like crazy looking for, where is this security issue that this guy found. We spent the better part of that day looking through this code and we could not find anything.

Richard Campbell: Well and of course you were thinking it's still something you did.

Carl Franklin: Looking at the database looking at the security.

Rob Howard: And we could not figure it out. I mean we could figure out what was going on. And so finally he emailed us back later that evening and what had happened was we had had a release of the control gallery that I mentioned earlier in the story that had been rolled out using SA account to login to the database and it had a cross-site SQL script injection attack in it and what happened is, on the search form for the control gallery rather than entering in 'text to search for' what would be entered in would be "(apostrophe) space union select, colon, colon, colon, colon from master..sys databases and when you would bind back the list of, what should have been controls when you get back instead it would be a list of databases or tables or other SQL script that you had injected. So that was a big eye opener for us. And since that day I have tried to never ever write dynamic SQL ever again.

Richard Campbell: This is a number of years ago, this is before people really understood what a SQL injection attack was about.

Rob Howard: Yeah. It's unfortunate because a lot of people really don't realize how dangerous it is and even if you aren't running under a privileged account so even if the app wasn't running as an SA level, SA level connects to the database. Even then, you could still do some pretty malicious things.

Richard Campbell: For sure.

Carl Franklin: It's interesting to note that when you generate dynamic SQL even in .Net using some of the wizards that are built-in in Visual Studio, the dynamic SQL still uses parameters, which is going to protect you against a SQL injection attack.

Rob Howard: That is correct.

Carl Franklin: So a lot of people think that you have to use stored procedures but in Visual Studio even if you are using dynamic SQL you can still poke parameters into that SQL and then use the parameters' collection to set the values and what not.

Rob Howard: That is absolutely correct. I personally would always advocate stored procedures. There are a lot of other benefits for stored procedures beyond just data protection.

Carl Franklin: Wow, what a great story man!

Richard Campbell: Classic.

Rob Howard: That was extreme. To the guy's credit that sounds that he wrote us back a very long, a long detailed e-mail taking us from how we are going to playing around, figuring out what he did to really attack the system and it was completely an eye-opener.

Carl Franklin: Is it still one of the biggest threats out there for websites today? SQL injection.

Rob Howard: I think there are two big types of threats out there, one is SQL scripts injection, which is incredibly dangerous and another one that a lot of people just don't know about or don't really give enough respect to is cross-site script injections. You can do some really-really malicious stuff with cross-site script injection. I mean something like if I can enter-in data into a form and a web application and you are storing that data somewhere and then redisplaying it to me and I can control the HTML output, there is a very good chance that I can also have that page execute Java script so that when I might do a cross-site script injection on a page and one of you might come to it and when you view that page I can grab your cookie, I can post that to another location or do all kinds of things. Those are probably then denial service attacks are probably the three biggest issues that a lot of web developers run into still.

Carl Franklin: There is this new scam. I don't know how new it is but I just heard about it a month ago which was that there are these people who are taking over spoofing the DNS systems on various networks. And so when you think you are going to amazon.com you are actually going to some pacific island somewhere. They actually attack the DNS so rather than phishing for one person at a time they get everybody.

Rob Howard: Yup.

Carl Franklin: Bad stuff. So, is there any solution to email? Email is a horrible problem. Is there any solution? Does anybody have any clue?

Rob Howard: What do you mean by a solution email?

Carl Franklin: A solution to spam, a solution to unwanted email.

Rob Howard: Oh man, that's a great question. Yeah, I have another story for you that isn't so great. I actually had a guy call my house and chew out my wife the other day because he got some spam from my company and we don't send spam. We don't send anything that's not solicited or that's not requested. And what I've noticed a lot lately, that a lot of these companies are -- I don't know exactly how it works but I'll get



bounced back emails that look like they were sent from my domain name that weren't actually sent from my domain name. It's scary thing that there are people out there that are trying to be that malicious and do things like that.

Carl Franklin: The thing is Rob that I run my own mail server so I have it locked down like, there are things that you can do on the system that I run which is called Mdaemon. You can request that the user read their email before sending within the last five minutes, you can require authentication, which means that in order to send any email you have to send your POP3 password first. And they still get through, I don't know how they do it.

Rob Howard: I'll tell you another big problem that we face. It is spam on the blogging solutions. We get tons and tons of -- like if you look at blogs at msdn.com, you would just be amazed not email spam but comment spam.

Carl Franklin: In the last three or four days I have been deluged with it, as a matter of fact.

Rob Howard: I have been too. On weblog.asp.net, we've had a lot lately. I don't know what's going on. That's actually one of the big problems that we have been working on for the last couple of months is a more effective way to solve that problem for blogs.

Richard Campbell: I just upgraded my Das Blog installation to deal with comment spam as well. While I was at TechEd, suddenly I was just getting hammered with comment spam and the latest incarnation of Das Blog has fixes for it now. You have the captcha stuff and the blacklisting and so forth.

Rob Howard: No, captcha doesn't work as well as advertised.

Carl Franklin: Now what is this?

Rob Howard: Capcha. It's where you are shown in image that looks like it's distorted. Like the text will be curved or the text will have overlay.

Carl Franklin: I didn't know it was called capcha because I have actually taught people in my class how to do that, how to make a dynamic image on the fly and give the number and test it. But you are saying it doesn't work all that well.

Rob Howard: Well it's not that it doesn't work well. It does work well. It's inconvenient for the user to have to look at this and try to type it in but the whole idea is that it's text that should not be able to be read by the computer. Now the computer can obviously look at this image and

figure out what it says when in reality a lot of these attackers have written programs that will look for captcha images, find the captcha image and have pretty simple algorithms as it turns out. That can start overlaying contrast colors on the image and figure out to a pretty high degree of fidelity, what the actual text or numerical values were. And get around it. So we have actually -- as we have looked to weblogs.asp.net and blogs.msdn.com we are not going to use a captcha solution. We have got a separate system that we are going to use based on the profiles and the characteristics of spam. Especially the comment spam that we see command.

Richard Campbell: Some kind of bazian match. Something like that.

Rob Howard: There are some pretty good characteristics that we find across all spams for blogs. For blogging sites it's pretty easy because when a spammer hits a blogging site will typically hit every single blog that it can, so and so in the main feat. And so we could do a couple of things, we can count the total number of links in a comment, we can look at through the IP addresses, we can look at other information to characterize whether or not that comment has a percentage chance of being spam. And they will actually rank it and then what we will do is, we will say if we think it's spam we quarantine it basically and require the user to approve it and if we don't think it's spam i.e. score is high enough on our scale, we will let it post. That's what we are planning and doing and you will see that come out probably within the next couple of months on weblogs.asp.net.

Richard Campbell: It's an interesting thought because the other thing is that these guys are spewing the same spam over and over again. So if you see the same comment show up at half a dozen different entries you could probably bet it's spam.

Rob Howard: Or if the domain ends with .cn there is usually probability it's spam. Oh my gosh!

Carl Franklin: As we speak, I just got another comment spam about casino poker. It's rolling in.

Richard Campbell: We don't care. Stop it.

Rob Howard: You know how it works, don't you? What's happening with a lot of those is unfortunately 0.5 will hire a lot of these guys or people or whoever it is and however many links they get placement into a site which increases that site's -- the points at Google rank or whatever other sites they are trying to promote.



Those people will get credit essentially for any number of things.

Carl Franklin: It's crazy. It's crazy because how can you get credit for annoying people.

Rob Howard: I don't know.

Carl Franklin: That's all you are doing. Does anybody say, "I think I'll play Texas Holdem" and click on it?

Richard Campbell: But the point Carl is that they are trying to raise their Google ranking so they don't actually care if you like the link.

Rob Howard: Yeah, you don't have to click on it.

Carl Franklin: I know that.

Rob Howard: You know how Google rank works.

Carl Franklin: Sure.

Rob Howard: That's like even with my blog and weblog.asp.net every once in a while just because I can't make sure I look at every single one there's cases where comment spam will get through and that comment spam will have 50 links in it. And so well you know how it goes. This is really frustrating.

Carl Franklin: It is frustrating. I got a question from the chat room from Jason from Ohio who says, "Is there such a thing as cookie hacking? Change your cookie to become somebody else's? How does ASP.NET protect against this or does it?"

Rob Howard: That's a great question. It is completely possible to do cookie hacking i.e. spoofing a cookie from another domain. There are a couple of easy ways to do that. One is if you can get a hold of the format of a cookie that a sight is using and you can discern that cookie is not being stored in an encrypted manner or you can somehow tamper with the data. One thing that is really easy to do is you can just go into your LMHOSTS file on your Windows machine and spoof out the domain. For example, I could type in www.asp.net and it would in fact be hitting my local host machine or something like that. So there is concern for cookie tampering. What most applications will do is they will encrypt or store the data within the cookie securely. Now it's really, really hard to tamper with the cookie, just to be clear. The light we have seen will do is very low. I have seen just a few cases of that. I have actually seen a case in the ASP.NET site where someone tried to do some cookie tampering and it didn't work. What ASP.NET, for example, has by default is the forms based authentication,

which tells the cookie to store the authentication credentials. It will store that ticket but it will generate ticket and it will store it as an encrypted string. So that you cannot tamper with it because if you tamper with it then it...

Richard Campbell: ...breaks the encryption.

Rob Howard: Breaks the encryption, right.

Carl Franklin: That's good. Well, since we seem to be in a story telling mood, do you have any stories from back in the Microsoft days? About may be the roll out of ASP.NET, the first time or anything else that comes to mind.

Rob Howard: I don't know if I have any really good ones. The roll out for ASP.NET 1.0 was -- for a lot of us it was PDC, I think it was 2001 it was PDC in Orlando and that was a crazy time for every one because just about no one had seen ASP.NET yet. And I remember about two or three months before that PDC, Microsoft was trying to figure out the name for .NET. Like what do we call .NET? For a long time the ASP.NET was ASP+. I think some books got published that was called ASP+.

Carl Franklin: Next Generation Windows Services was another one, right?

Rob Howard: I think it was web services, I thought. Next Generation Web Services.

Carl Franklin: Was it?

Rob Howard: NGWS and that was a wonderful wonderful acronym. It was COM+ 2.0 for a while. Actually I have a set of poker chips in my house just kind of Microsoft's swag that I collected over the years and it says, they are poker chips and says COM+ 2.0 and of course COM+ 2.0 never saw light of day. But it was really came under the wire, remember it was like months before PDC when the name .NET was finally chosen. At the time when people were like .NET huhhhhh? And now it ust rolls off your tongue, it just seems like it's a natural name for the technology now.

Carl Franklin: It is clever, I remember being struck by how awkward it is to say at first.

Richard Campbell: Oh! It's not harder to say it's harder to spell.

Carl Franklin: Yeah it's hard to search for too.

Richard Campbell: Yeah, it's tough to search for it. And somebody didn't think about the issues about searching for .NET.



Rob Howard: Yeah, it's funny how much of an impact that has on technology now, like how easy you hit the find in Google. You are building product, you are building anything, you got to make sure it is easily discoverable in Google otherwise you are dead in the water.

Carl Franklin: Well here is a question for you out of the blue. You obviously worked on a lot of the features of ASP.NET caching, session all that stuff. What was your most satisfying moment, design wise or work wise or when you saw something working? What did you like the best?

Rob Howard: I have two things.

Carl Franklin: I have got more than that, man; so...

Rob Howard: Well, I can pick more than that too. This is such a tough question to answer. Professionally wise, it was such an amazing opportunity to be the part of that team and to have that fortunate position to be in to get to design some of the features which is even more amazing. And I am just forever thankful for the opportunity I had to be there. And as far as my favorite moments, I think one of them was doing database cache invalidation, which is a feature that comes online with ASP.NET 2.0, which allows you to do notifications from the database, it tells you when data has changed. You can basically stuff something in memory on your web server and it gets notified from the database when the data changes and that's just phenomenal. I showed that probably a year or two earlier, a prototype I'd built on ASP.NET 1.0 had a Microsoft conference called MGB, which is just for Microsoft people and people were just amazed like how is this possible! And the fact that we were able to productize it and make that a reality, that was just awesome.

Carl Franklin: Because you know what I was doing. Well what I am still doing because I am not using 2.0 ASP.NET in production but making a trigger that calls a stored proc that touches a file that is used as a dependency and you get the mouse trap game Rube Goldberg thing happening. It works.

Rob Howard: Yep, the first solution that I came up with that I actually published was Trigger. That would call -- one of calling the extended stored procedure that we are making HTTP call back to the originating server and passed in the cache key to be invalidated. Worked much the same way as the file mech...

Carl Franklin: So how does it work in ASP.NET 2.0?

Rob Howard: In ASP.NET2.0, there are two different implementations. There is an implementation for SQL server and there is an implementation for SQL server 2005. And the implementation for SQL Server 2000 takes advantage of a really great tip and trick that I have been advocating a lot which is using background threads. There is neat stuff you can do. We have done with community sever. We have done lot of other solutions. We are going to actually schedule background threads to do work using the system threading timer class.

Carl Franklin: That is cool.

Rob Howard: It's definitely an advanced technology. The way it works in SQL 2000 with ASP.NET 2.0 is you'll have 15 or say 20 threads extreme request in ASP.NET application and behind the scenes every let's say 5 seconds or 15 seconds ASP.NET kicks up a thread on the server without a request starting it. So there is no request coming in this threads out of five. It kicks up a thread and that thread connects the database, checks the database for some information and then comes back. And then based on what it finds in the database, either invalidates data in the cache or leaves the data in the cache. If it invalidates the data in the cache then the next page request that comes through for that data repopulates the cache. Well SQL 2005 works a little differently. In SQL 2005, SQL Server actually sends the web server a notification.

Carl Franklin: Through the service broker?

Rob Howard: Yep, through service broker. Let's say, the results from the stored procedure changed, the results from the dynamic SQL changed, whatever else you can think of changed fusion reification allowing you to remove this entry from cache now.

Richard Campbell: And it's just because SQL server is smarter about these sorts of things.

Rob Howard: It is. Whereas with the SQL Server 2000 solution, you are limited to only table based notification. So I can only tell you when, say the products they will change versus with SQL server 2005 I can say tell me when the results of this query have changed. I could have unlimited number of joins, I could be doing any number things in the application. Have to do notifications still. So when I look at building web apps, I think above anything else when it comes to providing developers with a tool that very easily allows them to solve performance issues. I think caching not only does that but database cache validation stuff will make the applications fly.



Carl Franklin: Totally, because now you don't have to worry about the data being old and not being fresh. The deal with your background thread scheduler, you are touching the cache object there and it's only because the cache object is thread safe,

Rob Howard: That's right.

Carl Franklin: So that was the first thing I actually noticed that I really loved about cache. You don't have to lock the cache object as opposed to the application object.

Rob Howard: That's right.

Carl Franklin: Very cool.

Rob Howard: That was one of my favorite things to do. The second thing would be the provider design pattern, which is something that really evolved originally out of the ASP.NET forms. The way it started was we wanted to have a solution in the ASP.NET forms so we could swap out different databases. Reason to goal was we are going to support SQL server and Access, which we'd never support the access. But we're kind of playing with this pattern and what we found out was, it was a really great way to allow us as the ASP.NET team to publish an API but then allow the developer to extend and change that API. One of the big problems that a lot of the organizations would face when you look at any technology whether it's ASP.NET or JSP or whatever else, if you look at the APIs and say, session state really doesn't meet my needs. I am using the Oracle database, I am not using SQL server in my organization. I want to use this out of process session state store but it's just not available to me if I don't have SQL server. And what the provider pattern allows them to do is to say, doesn't matter, I can unplug the implementation of that API that Microsoft ships and plug in my own. And it probably wouldn't be solve with version 1.0 of ASP.NET session state that was the original goals, we were going to make session state pluggable. And we just couldn't get it done.

Carl Franklin: This is really cool. The provider model is obviously for more than the database using it for session.

Rob Howard: It's used for session, role manager, personalization, membership. There is another big one. It's used for resources, for localization resources. Used for the web part manager. I believe almost every single infrastructural API inside of ASP.NET 2.0 is pluggable.

Carl Franklin: I was waiting to see which one didn't have it because as far as I know pretty much all of them have it. The whole idea here is you can get third party ones installed.

Rob Howard: It was pushed into as many different features as possible. So the goal was like let's build a system that any enterprise can look at and say, hey I don't like the way that it membership but so what I can train soon on the API. I can buy a book for the developer they can learn membership. But I can go in and I can re-plan how membership works and that's really a powerful statement.

Carl Franklin: And this is basically a plug-in kind of interface that you are talking about. Is that how it works or does it use inheritance?

Rob Howard: Yeah there is a little more doing that. There is a base class so there is a base class for membership for role manager whatever else. You can derive from that base class and then within the configuration systems of ASP.NET you can tell the feature like membership instead of using the [system.web.security.membership](#) SQL provider, you are going to use the whatever namespace dot SQL server custom provider and when ASP.NET loads up, it will use your class because you are using the built-in one. You can also do things like, dynamically at runtime chose which class instance you want to use.

Carl Franklin: That's sweet.

Rob Howard: Yeah, there is a lot of good stuff in there. There is a lot of debate still, our people say "Oh! All we have written is a database abstraction. In some way it abstracts the data access API.

Carl Franklin: Yeah, that was the way it was presented to me too.

Rob Howard: And that's not the case. It's an API abstraction layer. It abstracts out the behavior of an API as well as the data layer.

Carl Franklin: It's fabulous. So anything at all in ASP.NET that you don't like, you rewrite it.

Rob Howard: Yeah, You basically take the API's. One of the best selling point of it is you take a feature like membership or that has login control that everyone has probably seen demo. We drag it up to this login control on your page. You have all this reach functionality because it talks through the membership API. What's cool about that is, I could write a membership provider for an Oracle database that talks to my custom data store, let's say an AS400. I can write that



membership provider for an AS400 database. Wired up to talk the database AS400 system however it works. And as a developer, I can still grab the login control. Drag and drop my design surface and not write one more line of code because we are talking of that membership API.

Richard Campbell: You are totally hiding the differences from the field ASP.NET developers.

Rob Howard: And what's cool about that is for a lot of organizations, rather than having to write customs solutions for those problems, they can change the base default behavior and that means that when they hire someone to help them with their ASP.NET applications, they don't train some one app on their new custom APIs. They say, hey we are using the membership API to validate credentials. Here is a book on ASP.NET 2.0, read it. When you are ready let's see ___ writing some code.

Carl Franklin: Yeah that's very cool. And of course it brings to mind that we really have two classes of developers now. We are truly separating user interface development and user interaction development from the component development. The people who are behind the scenes, behind the API, writing the stuff and doing the overwrites and customizing. And it just makes it so much easier for the people who are actually writing the app, that they don't have to go down there, in Windows applications too. Especially in this next version of Visual Studio, which is just fabulous. As a Visual Basic Developer, I am not going to say have mixed feelings because I have very strong feelings but you can see that this next version of Visual Basic is going deeper in both directions. It's going deeper in the low level and it's going deeper in the high level. It's getting more high level for application developers and for component developers and people who really need to do stuff behind the scenes. They are getting more tools as well. I just think it's fabulous what Microsoft is doing with its next release.

Rob Howard: Yeah, it's definitely an exciting time. It's an exciting time to be a Microsoft developer. Absolutely, it's been exciting since PDC 2001 when .NET 1.0 came out. The transition, the delta between the technology stuff that Microsoft had prior to that and what they have today is really phenomenal.

Carl Franklin: And it's just getting better. Well I ask all of my guests this at the end of the interview and we are getting towards the end. What is the coolest thing that you have downloaded lately?

Rob Howard: Let me think about this. I don't even know. I haven't really been downloading lately.

Richard Campbell: Not using that whole Internet thing lately?

Rob Howard: The thing I have been playing the most with lately is Code Smith, which is something that Telligent actually invested in. But I don't really consider that as something being downloaded lately.

Carl Franklin: Yeah, well tell us about that anyway.

Rob Howard: Code Smith is a phenomenal tool. It has got an Eric Smith. Used to work at match.com and in his spare time he saw the need to write a -- the way he liked to sell it is, he is a lazy programmer. He is like "I don't want to have to repetitive stuff." And so what he wanted to build was a tool that allowed him to generate out code very easily that he would have typically sat down and written line by line. And instead of writing one of these magical push button applications, which were just look at the database, split out a bunch of code. He wanted to be very template driven. So he could write a template that would say, "this is how I want the code to look" pointed to whatever component or database, whatever else and would simply gen that code out. And I have been playing with that a lot lately. I am doing some talks on it, coming up with some user groups and some other stuff. But it's really a powerful tool. And it solves a lot of the problems that developers have today. I remember writing the collection classes for community server I spent hours and hours typing in all the properties and all the common framework code. And it just simplifies a lot of that.

Carl Franklin: Cool. Very good, all right. Well Richard you have got any more questions for Rob before we call it a show.

Richard Campbell: I'd like to compliment him on the fact that when I Google his name, the first four links are all him.

(Laugh)

Richard Campbell: Four different sites. It's impressive man. How did you pull that off?

Rob Howard: What's scary is I still get a lot of emails for Ron Howard.

(Laugh)

Rob Howard: Got once every year. Actually the funny story, we have Jason Alexander who was a



character on Seinfeld. I think Jason Alexander is also the name of the guy who dated Paris Hilton.

Carl Franklin: Well he's George on Seinfeld.

Rob Howard: Yeah and then of course my name Rob Howard. Probably once a month, I'll get an email on my blog from some woman or some guy saying, "hey I have got a great idea for a movie. I have got this friend you should ask," and assume, and Jason gets the same thing. He just sent around a funny one the other day where some tabloid in England was looking to get a hold of him to do an interview about, his DuckMan series.

Carl Franklin: Beautiful.

Rob Howard: No, not actually DuckMan and I'd love to talk to you about software but I am not the actor you think I am. I turned out a little more fun with it. I usually reply to those people with somewhat tongue and cheek reply and then at the end say, no, not actually Ron Howard. I am Rob Howard.

(Laugh)

Carl Franklin: Excellent. Well, what can I say man, thanks. It has been great, I wish we had more time and I'd like to invite you back anytime.

Rob Howard: That'd be great, I'd love to come back. However often you'd have me. I'd love to be here.

Carl Franklin: Well let's schedule you for July 29, what do you say?

Rob Howard: May be not July. But may be a couple months further out.

Carl Franklin: Okay maybe September.

Rob Howard: Definitely. I'd love to be back.

Carl Franklin: Excellent. All right Rob. Well, on behalf of myself and Richard Campbell in Vancouver and Geoff Maciolek in the sound room and everybody who is listening out there, thanks again for coming on the show. We will see you next time guys. Have a great week.

(Music)