



Hanselminutes

Hanselminutes is a weekly audio talk show with noted web developer and technologist Scott Hanselman and hosted by Carl Franklin. Scott discusses utilities and tools, gives practical how-to advice, and discusses ASP.NET or Windows issues and workarounds.

Text transcript of show #183

October 10, 2009

Hanselminutes Live: Gadgets, Hi-Def, WebCams, 4G and More

This wacky episode of Hanselminutes was recorded at 3am on a sad, sad Saturday morning with an intrepid group of UStream and Twitter users who watched Scott chat about gadgets and technology and ultimate fail to save the video. This is the only artifact. This is fortunate because Scott does an audio podcast.

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Lawrence Ryan: From hanselminutes.com, it's Hanselminutes, a weekly discussion with web developer and technologist, Scott Hanselman. This is Lawrence Ryan, announcing show #183, recorded live Friday, October 10, 2009. Support for Hanselminutes is provided by Telerik RadControls, the most comprehensive suite of components for Windows Forms and ASP.NET web applications, online at www.telerik.com. In this episode, recorded with a group of UStream and Twitter users, Scott talks about gadgets, webcams, hi-def, and more.

Scott Hanselman: Hi, this is Scott Hanselman and this is another episode of Hanselminutes except this is a very strange, very sad, very live, very internet episode of Hanselminutes. In fact, it is Friday night at 2:00 a.m. The children are asleep, the wife is asleep, and I'm talking to you guys. We're on ustream.tv in a channel called Hanselminutes Live with 35 other pathetic humans. Actually, forgive me, you're not pathetic human if you are in another time zone. I give great respect to the people in Sweden and Australia who are actually up at a reasonable hour. It's the people on the west coast that we feel bad for. Much respect to Andrew in the UK. You see, one of the things that we get to do here in UStream is we can see people chatting while I'm talking. So while we're recording the show, it's also going out live to a massive audience of, let's see, now 34 people. In fact, one left. We've already lost a viewer. This is the kind of high quality recording that we're going to give people here on the Hanselminutes. I guess it is Saturday morning. It's Friday night, Saturday morning. It's 2:00 a.m. on Saturday. Very, very sad. So what I wanted to do on this episode is I was sitting here on my office and I looked around and I noticed that there is just a ridiculous amount of gadgetry and crap sitting on my desk and I thought it would be interesting to do kind of a review of some of these interesting tools I've been playing with lately. We've got lots of stuff going on. We've got people from all over the world. We've got a guy from Poland, we've got a guy from UK, we've got my buddy Long from istartedsomething.com. He is on from Australia. Hopefully more people will show up from Twitter, and I can take their questions about these gadgets and some of the technologies here on the UStream so very, very cool.

So let me think here. It's really been a multimedia couple of days for me. I've got my classic Zune and this is the radio portion where I actually hold up the product and the people who are listening to this in their cars, in their commutes who have no idea what I'm doing. I've got my old Zune, this is my 30-gig Zune. And then I've got my new, shiny addition of the Zune HD. I'm showing the viewers here. This is the custom Scott Hanselman engraved version of the Red Zune HD. I put my URLs on the back and I posted a picture of this on Twitter and the first comment was, "What? You forgot your own website? Not cool." This is awesome because no one will steal my Zune

now because they're going to go to the URL, they're going to see my smiling face when I lose it, and they're going to mail it back to me. Loving the new Zune. I hold these up to each other, you can see the blocky, chunky kind of Fred Flinstone Ask Zune original edition, and then the incredibly sleek Zune HD. It's really, really nice and actually I just happen to have an iPod, there I go saying, "iTouch" -- I just offended both of the Apple geeks in the room, an iPod Touch and I hold it up. Next to it, you can see that the Zune is really, really small. The Zune is the strange place in between a iPod and an iPod nano. It's really, really small and the screen on this thing is bananas, I'm telling you. Even if you turn the screen up on brightness on the iPod to the brightest, the Zune HD screen is the OLED, this is the organic LED screen and this thing is ridiculous. The Zune has got so much extra graphics power that they even have a little screen, a little like a screensaver so when you're playing music with somebody famous like maybe playing music with like Beyonce or somebody, they'll have stuff going on in the back and I'm just showing the folks on UStream here a high definition episode of Heroes.

The irony, of course, is that because it's 3:00 in the morning the people who are listening to Hanselminutes Live don't have the ability to get this product. I don't know why these things happen that way, why folks overseas don't get these things but we do. The Albumart, and this is really amazing because they don't just have the art for the album on the Zune HD but they also have wallpaper going on in the background, and then after while when you're playing this it will switchover into this kind of like entertain mode where it's just like here I'm showing Beyonce just being awesome and then you get kind of that Ken Burns' effect, the Ken Burns, the documentary filmmaker on PBS, Public Broadcasting here in the U.S. This is the whole let's take a static photo and pan release slowly and then suddenly it feels more dynamic. So now we've actually got the Zune HD in Beyonce mode and much respect to the folks in the chat room who are appreciating this. The battery life on the Zune is fantastic as well. I haven't had any problems at all. It really is a shame that this didn't come out earlier because the Zune, it's prettier than the iPod. It's more fun than the iPod, but it doesn't have a phone and this is the part that just kills me. It is truly the best MP3 player that I've ever had. It's fantastic for podcasts but I keep wanting to pick it up and make a call and it just doesn't happen. We don't have that support. One of the things though that is comforting about the Zune to me is that the UI is so right, they've got this so correct that I think we may actually pull off Windows Mobile. We all know that Windows Mobile 6.5 is not Windows Mobile 7.0. It's kind of an evolutionary thing. They've got some sheen on it but people still complain about the old UI. The Zune is completely different in the way that it deals with user interface and it actually succeeds in making an iPod look old. I don't say this as a



Microsoft skill. I say this as a guy who has purchased basically every device that has ever existed. If it is a piece of software I have installed it, and if it is a gadget I have purchased it. This is the sadness that is my life. So seriously, the Zune HD is a joy.

The other thing about the Zune that is amazing, of course, is the Zune Pass. This is the ability to lease music and it's kind of complicated. The Zune Pass is a shame. I think this is not actually taking off with the kids because it's hard to explain. Basically, at 15 bucks a month for the price of one CD you can lease as much music as you want. You can listen all day long to music, and as a bonus you get 10 free songs that are actually MP3's. You would think that would be the elevator speech, but then people go why is this important? I get to rent music and I get 10 MP3s. So wait a second, what exactly happens there? You are paying 15 bucks a month, you get 10 songs, they're MP3s. When Zune goes away and Microsoft is gone and there's just nothing left, you still have that music, it's MP3s, and then you can lease as much music as you want. So for example, let's see who I've got here, I'm looking at my Zune for something that I would not ordinarily listen to. Avril Lavigne, okay. I cannot be held responsible for this. Someone in my house decided at some point that something Avril Lavigne did was inoffensive, probably my wife. She didn't say, oh, I like that song, and then she said, oh well, crap, I'll just take them all. And then suddenly Avril Lavigne is living inside my Zune. Of course this actually gets sync wirelessly so her Zune never actually have to touch my computer, it actually sits in the front of the living room there right next to the TV because this happens to be the HD Zune. We just dock it next to our big HD TV, the wife has got a remote control, she can control all of this music from there and doesn't have to think about this. It automatically syncs kind of overnight. I've caught it syncing itself a couple of times. I've snuck up on the Zune and found it doing this.

Here is the other cool thing. Because the Zune HD has wireless, I can also browse the web. It's kind of like an IE 6.0 on 6.0, the kind of browser that they had in the new Windows Mobile, just a little more advanced because it's got the pinchy Safari thing going. But here's the cool part. I scrolled down at the bottom of the Avril Lavigne and it says the Marketplace Discography. This is a part of what gets synced. So even though we only synced a couple of Avril Lavigne albums, they included in the sync packet not only the album covers and all the songs as well as the wallpaper, but in fact all of Avril's other albums that I don't care about. Avril Lavigne has put out a lot of stuff. Yes, someone online just said the long tail sale. This has actually happened a couple of times where I was listening to my favorite comedian, Patton Oswalt, who is incredibly offensive and if you like being offended you should listen to Patton's stuff. And then I clicked on marketplace discography and found two albums I didn't know Patton did, hit

download and instantly, wirelessly "bought them, leased them" from the Zune. That's a pretty cool experience and big props for Microsoft for pulling this off. If Windows 7.0 looks anything like this, if I can go like, "Hey, it's a Zune," it's great. "Hello. Yes, one moment. I'll be right there." That would be a killer thing.

This actually gets to another thing about Microsoft and working as a professional Microsoft skill. Of course I work for the developer division so my job is to make people successful in C#. Not to sell Zunes. But I was at my Windows 7.0 launch party yesterday with a few other nerds and people on Facebook who showed up and I actually found myself saying, "Gosh, it's nice to work for a company where I don't have to be kind of completely ashamed of what we did." You know, Windows 7.0 is just such a joy and the Zune is kicking butt and the Xbox is awesome and I was like, "Wow. We don't completely suck right now," and that just made me feel really awesome about working for Microsoft, speaking of things for Microsoft that don't suck. Check this out. This just came in the mail. This is my Microsoft LifeCam Cinema, 50 bucks my friends. I think it retails for 80 but the internets have got a way for you to get these things cheaper. Got this with the Bing CashBack. This is the LifeCam HD. This is a \$50 camera. It is a tiny little webcam and it does full HD, 1280 x 720p. I actually bought two. I didn't just buy two so I could hold one in front of the camera and have the one that I'm using pointed at it, but I needed one for the wife and one for myself so when I leave and go on trips I can talk to the kids in HD. So the deal with this is you've got a full 16 x 9-720p HD camera, it will do all the different resolutions from 4 x 3 all the way up to full 1280 x 720p. It's got an actual glass lens. The only problem with this is that it doesn't have the software to really back it up. A couple of people online here are saying that they read the blog post. You may have seen me blog about this. You go to my blog at hanselman.com. I've got a number of tips on how you can actually hack Skype to do full HD on this by actually messing with their configs.

Here is the tragedy though. From what I can tell and the disclaimer of course on my blog and in this talk here is that I don't know these people. I just bought this. I don't know the guys on this team, but you need a beefy machine to run this thing. You need a machine with some chutspah for a lack of a better word. I have a quad proc and when I was encoding, fully two of my processors were working to get that thing encoded to talk to the other side. I was talking to Brad Wilson actually. But HD, it was rocking sweet. I ended up calling Jeff Atwood from Coding Horror and we tried to find a balance. We hooked it up at 640 x 480 and that wasn't kind of nice because it's like once you see a DVD in a widescreen and suddenly you don't want to do it anymore, you don't want to do the 4 x 3 square. It's funny, Jeff was saying he would actually prefer a 16 x 9 low res version of



me as a video chat than a square once he had seen it. So we ended up finding a halfway mark. I think it was like 960 x 544 or something like that. Basically a 16 x 9 rectangular shape that was slightly less than HD but clearly better than DVD quality, and even though I'm sure there were some tricks of motion and some pretty hardcore compression going on, it was like being there and I definitely plan on hooking up the Hansel portal which is the machine that I use to talk to Phil Haack, it's over here to my right with one of these cameras and I love these cameras so much I actually sent one to everyone on my team because I am a manager and I can do stuff like that. So everyone on the team got one of these.

So as I understand it, looking at one of the questions here: Messenger doesn't seem to do HD chat. The word on the street is that it will, and when I say "word on the street" that implies that I know something I don't. It in fact means don't you think they would do it? When someone comes out with a piece of hardware like this and it says right there in boldface, bigger than Skype, look at the bottom of the box here, it says "Works with Windows Messenger," and actually they made the font twice as big. Yeah. That's because it's probably going to work with Windows Messenger. So I have no doubt that at some point in the future, an awesome version of Windows Messenger is going to come out that supports this. But I've used it on Office Communicator, Live meetings, Skype, ooVoo that let's you do up to six people and they're talking about HD as well, as well as Windows Live Messenger and it works awesome. This camera works immediately with Live Messenger and switches into DVD mode, which is basically 640 x 480p, as soon as you go full screen and you have enough bandwidth. A little thing at the bottom says, "Oh, you're in high quality mode." So very, very cool, and as I understand it there's support somewhere in Office Communicator for this kind of stuff as well, but again all speculation. So I think the takeaway there is that the hardware for HD is happening. It is clear that at some point the software will work it out too. The Skype thing that I blog about is clearly a hack but I'm sure that the people are working on this, would it be Office Communicator Live Messenger. Interestingly and as I said in the blog post, the thing that's going to make HD Chat work is that everything else has to work. I mean, think about all these stuff that has to happen. You're talking about 30 frames a second hi-def video on the fly compressed, quad proc machine, a megabyte up and I just pulled that number out of my butt, a really great camera. So many things need to work. I would understand why they wouldn't just turn that on and say, "Hey look, it kind of halfway work," because what would happen is a bunch of people would have bad experiences and then people would say, yeah, HD Chat doesn't really work. There's a lot of stuff that has to happen to it to make that work.

I'm interested for the folks that are international. What do you think about that? Like for example, if I turn my camera over here to this side, we've got the Hansel portal, this portal here is the one that I have on all the time talking to Phil Haack and here is the camera. I leave that running all day long. Is that terribly wasteful? To people from overseas who have bandwidth issues or with bandwidth challenge, do you think of that as being an incredibly wasteful thing to do? Really Damien does that in Australia, and do you have unlimited internet? Because I always have this sense that unlimited isn't really unlimited. He says it takes about a gig of his data plan a day. That's funny. The last time I was in Australia and I was in a hotel, they gave me 15 megabytes and I was halfway through syncing my inbox when I run out of that and then was kicked out of the hotel. Yes, it's a bit wasteful to talk to Phil but -- well, it's not really wasteful because bandwidth is like water here. I am very lucky. I've got fiber optic to the house and I pay \$50 for 20 megabytes up, 20 megabytes down. Actually, my buddy John Batdorf, he just went and called the Verizon Files, that's our fiber optic internet provider here in the U.S. and he said, "Well, you know, I want an extra 5 megabytes." So he paid them \$4 more a month and now he's got 25 megabytes down. So if you're in a country with limited bandwidth, then you are offended by our bandwidth hogging. On behalf of America, I apologize.

Other cool stuff that I've got, speaking of high def, so yeah, we saw this here and the LifeCam is really great because it comes with the software out of the box to queue high def videos. If you go to my blog, I actually did this up on Vimeo. Vimeo let's you upload high def. I did that before and after. But I've talked about this device before. This is a great device. This is the Creative Vado HD and this is the device where if you have a non-technical friend who doesn't read a blog, you show them this and their minds are blown and then you say, "And it's only a hundred bucks." They go, "Oh," and then they immediately think that you are trying to sell it to them. This came up at the Windows launch party yesterday. I showed this to a few people and I said, "Oh yeah, you know I took these videos that I'm showing you here on the media center with this little camera." "Oh, where is the camera? Where is the camera?" They're all expecting me to come out with a big Sony super optical or something. I said, "Oh yeah, I took these on this little chicklet-sized camera here," and then you bust out the USB cord at the bottom and they're, "Oh, my God. It's got a USB built-in. That's the greatest thing I've ever seen." This thing is fantastic, Creative Vado HD. I've had the Flip, I had the Flip Ultra, I had the Flip Mino. God bless Flip, I've sent the Flip Mino back. I like this camera, this is fantastic. It had a little bit of codec wankiness, but the great thing about this camera is when you plug it into a Mac, you plug it into a PC, it got the codex built in. So if you happen to go to an XP machine that doesn't have the right software,



this will install it. Windows 7.0 plays it all out of the box.

People are very quite on Twitter here but I appreciate that Ray Linder has taken a moment to type in that he has left. I mean, that makes me happy. Is the lens glass? That's a good question. I don't know. I guess I could scratch it with a diamond and then when it scratches -- I'm tapping it and I don't get a glassy feel on this particular device so I don't think the lens is glass on a Creative Vado HD. But remember what the great philosopher Quentin Tarantino said, "He who is most likely to make declarative statements is most likely to be called a fool in retrospect." Therefore, if I declare on my show and lay it down in a wav file that this is not a glass, we will learn immediately that it is in fact glass. So I don't know is the answer to the question of is the lens in the Creative Vado HD glass? I don't know. Oops, here's another person. Damien is saying that his is a Logitech LlifeCam Pro 9000, and in fact the LifeCam Pro 9000 from Logitech is often considered to be kind of like the competitor I guess for the LifeCam. It will do 960 x 720 which interestingly isn't true HD. If you're being really technical you'll only have 1280 across, but yes, it will work with Skype too if you use the Skype pack. It's not widescreen though and that's the thing that's interesting about this. When I use the LifeCam Cinema HD in Office Communicator, I actually see bars across my head. So I get that 16 x 9. So people with chat programs that only do square end up being a little DVD bar across the time so that's crazy. I see now Damien is turning around. "There you go with the declarative statements," and he is saying it does do widescreen. So another optional one to look at is the Logitech LifeCam Pro but I wouldn't have buy a pile of this. If you are a friend or a family you are going to get one this Christmas because 50 bucks for a high definition camera is freaking awesome.

Hey everybody, this is Scott coming at you from another place and time. No doubt you probably bump into testing tasks now and then in your work and you know writing functional test is probably not your favorite thing. It's kind of difficult. It takes time and the results can be dubious. Well, get ready to start liking tests, thanks to Telerik. With the new WebAii testing framework, building web automation tests is a breeze. You've got code automation with advance ASP.NET AJAX and Silverlight applications. You can write a single test, have it execute against multiple browsers at once. You benefit from a rich API, there's LINQ support, integration with Visual Studio unit testing, also NUnit, xUnit, and MbUnit, not to mention the free wrappers for a Telerik RadControl for ASP.NET AJAX and Silverlight all shipping with Telerik's new testing tool. One of the best features, the WebAii testing framework which is developed by ArtOfTest, is absolutely free. If you've already got hooked on WebAii testing framework, start using it

right away. Go to www.telerik.com for more info. Thanks a lot.

What else do we have around the office here? Oh yes, speaking of bandwidth, today I was at a local bread shop called Panera. Panera sells overpriced sandwiches and then forces you to sit with them and surf the internet, and in fact this is basically conference room B for me. So its like, "Hey, Scott. How is it going?" "Hey, can I just have a small soda and sit here and use your internet for the next eight hours?" "Sure, Scott, yeah, yeah." And then they go over and have like a little separate table for me with a little cardboard folded piece of paper that says "Reserve" and I just sat there in the back and suck the internet down until I finally get nailed by their sonic wall firewall and they said that I can't use a tiny URL because it's a naughty site, but I'm not bitter. So I'm at Panera this morning and I'm in the middle of a call and then suddenly I get the Panera captive portal so I'm typing and typing and was doing a live meeting and then suddenly everything gets switched over to the Panera captive portal with a nice, big red boldface "Please limit your session to 30 minutes during the hours..." Basically they needed the chair. They needed the chair so they kick me out and you think you're a geek, my friends. You are not a geek until you're sitting in Panera, and this is going to be visual joke because the people on the UStream are going to appreciate this, but you're not truly a geek until you bust out the Office Communicator VX-3000 headphones and you're sitting in a coffee shop like you're about to take off in a black cock helicopter and you're having a full screen video call. You know how you usually like to peek over the shoulder of the guy in front of you, "It looks like he is typing a word document. He must be doing his dissertation," and I'm the guy who's like, "No, no, I don't like anymore cream cheese. I'm on a live meeting right here. Hello, hello, can you hear me?" Yes, I was wearing headphones. In fact, I wasn't wearing these, these are the LifeCam I think 3000, and these are decent enough headphones if you want to look like pots. The one I was using is this little guy here which in fact didn't make me look like a black cock helicopter person. This made me look like the kid of person who would answer the phone if you dial zero. I had to kind of always be closing Glengarry Glen Ross kind of headset here like I was calling for donations for the local Public Broadcasting Service. I was wearing this at Panera.

So I got kicked out of Panera. Well, I didn't like actually get kicked out of Panera but effectively when your MAC address is block you just remove yourself from any bad places that have blocked your MAC, and then I wondered around the parking lot looking for Linksys or NETGEAR or anything at all that I could do to get some connectivity and then I saw one of these signs on the side of the road like a sandwich board that said Clear. I had my Clear modem go over here. It's on the ground. Clear is a 4G WiMax service, here



it is, that we have here in the U.S. and it's like WiFi except it's really, really wide reach. Like basically my WiFi fits the cul-de-sac in the house where I live so I kind of get the cloud of internet is over my house. This apparently goes over -- yes, thank you, the dongle is ugly. These go over about I think a two or three-mile radius. So I mean hold up the dongle so that the people who think it looks ugly can agree that it is in fact looks ugly. It's actually a Motorola USB adapter and when you look at it in Device Manager it says like Be mean or be wee, or something, but it is a WiMax USB adapter, and then they give you this strange little dilly and you go like this and you plug it in and basically -- you see, I don't know how to plug it in, and you get a little -- this is a really irritating adapter so we're going to give you another adapter that allows it to kind of like hit it, yeah, it's pretty special. So this is just as I was looking ugly with my little headset on, now my computer can look like crap.

Hey, so here's the tragedy. You're ready for this? Here's the tragedy, and this is what happens when you're an early adaptor, a couple of things happen for me. One, I go and I buy this thing and this is a special deal at Clear right now for 22 bucks a month for the first six months where you get unlimited bandwidth. That's great. Very limited coverage but it works all over Oregon and it works all over Seattle so that's great. I'm thinking, hey, 90% of the time I'm in Oregon and Seattle, this is going to be fine. And it worked just fine, but no Windows 7.0 support so I have to lie and say I was Vista 64-bit and normally I don't feel bad about that. But the guy gives me a disk that says October of 2008 and you know that 2008 in internet years, especially when you're talking about device drivers, is effectively a decade and no geek in their right mind would install anything from October of 2008. So I decided to go up like the clever guy that I am and I decided to go and download the new drivers. So I go all the way to September 2009. Ha, ha, ha, I'm so clever. Well, those drivers totally don't work with Windows 7.0 and they completely rewrote the little launcher tool. So long story short, I end up installing the really old drivers from Vista 64 manually and then the really new connector and then things worked. Then I called the highly trained technical professionals at Clear that were ready to take my call and help me through my problem and immediately when I mentioned Windows 7.0 they said, "We don't want to talk to you. We can't tell you anything." They thought I was a reporter. I just wanted them to say, "Do you commit to support?" I just wanted to know immediately. I tried to say, "Fizzbin," they had no idea. Really, don't call anywhere and say, "Do you know who I am? I'm Scott Hanselman," because it will not get you to second tier support at all. So this is the tragedy.

This is a really ugly, stupid dongle that sits like this but I have a lovely -- let's pick it up, I'm picking up my Lenovo here. This is my Lenovo W500. This is God's own laptop, He used this on the seventh day. When

he rested, He was watching hulu.com. This has a WiMax system built into it according to the specs. Apparently it has got -- yes, I'm holding it like a baby, like a wee baby, and apparently the WiMax is all around and it's got a little icon here that actually says wide connector, whatever. I don't have the drivers for it. I have no way to understand how to hook this thing up and try going in to your local 7-Eleven or a corner shop or ABC store or whatever Reese's Pieces and Coffee are sold at 7:00 in the morning and try to explain to the reseller there, not the Clear guy but the guy who's selling the Clear crap from underneath the thing, the guy who gets five bucks commission on my \$20 a month and try saying, "No, no, no. I don't want your crappy USB dongle. I want the WiMax thing needed to build into this. I want the Intel magic." I don't know how it works. I don't know where to plug in an SD Card, I have no idea how to get WiMax working on this. So instead I have a thanks sticking out of my machine. So if anyone within the sound of my voice has any idea how to get the WiMax magic to work in here that does not involve popping open the laptop, this is great. So I often say most W series Lenovo laptops have antennas for WiMax. Thank you sir, "pop open the laptop and the card is fairly visible." Would you like to tell me exactly how I'm going to pop the laptop. This is a \$3,000 laptop, okay. I just get a butter knife and pop this open? Tell me how to do it. I will do it. I'll do it here live on the show and I'll rip -- it got screws on the bottom. It doesn't void the warranty. No, plastic ruler? People are now saying to use things that I don't think are very good ideas. All right, well, you and me will take this off offline and we'll see if we can between a screwdriver and a butter knife or maybe a spork. Let's do it. Now he's saying it will have four to eight screws, that's great. Four to eight screws? Could you be a little bit less specific? There will be as many as 12 or as few as zero screws that you have to take out on the Lenovo PC here. I would very much like to learn how to do that so you and I are going to go offline and we're going to talk about that because that would be epic win.

The next question, of course, is who at fifth level technical support at Clear is going to help me set this up? But yeah, it would be awesome if I didn't have to carry this around. But then of course you have a problem. This is portable. I can plug this into my tiny Dell Mini. Where's my Dell Mini? It's somewhere around here. I've got my little, tiny Dell. I can plug this into a Dell Mini. It looks ugly but then I get internet everywhere because it isn't the account married to the thing, it's like married to the MAC address. This is the tragedy of being an early adopter. It's very, very unfortunate but I'm digging Clear, it's been pretty cool so far and I've enjoyed myself. Other people have said why won't I tether. There are a couple of reasons. One, I've got an AT&T account and of course Microsoft doesn't like iPhones so they won't pay for an iPhone account. So there are a couple of things. If you have an iPhone and you want to tether, it's not turned on yet in the



U.S. and additionally it's just crappy 3G, and when I say crappy 3G I mean AT&T 3G which by definition is crappy. 3G will not get you very fast speeds. I think the iPhone original can do 3.6 megabytes per second max. When we say 3.6 per second, we're talking about like on a magical day when no one else is on the network and the sky is blue and pigs are flying, and then the iPhone 3GS has a little bit faster chip and it will do 7.2. Again, only on magical Tuesdays. However, I was able, sitting on the patio of Chipotle with the Clear card and I busted out a solid 6.5 with the speedtest.net and didn't have to do a thing. So how big is this? Someone said this is big. Here's how big it is. This is just a reference. There's my middle finger and then it is of the same size as my middle finger. I'm not flipping you off, audience, but rather AT&T who forced me into this. Now I have to pay these guys. The nice thing though about Clear, no contract. I like that, no contract. So I'm going to try this out for a couple of months and see if it's a good idea. I do not know, I do not know.

Let's see what else we've got around the gadget house here. This is another old camera here. Oh, actually this is good. You see, I'm looking all over. Oh, here it is. Where is it? It's right in front of me. Let's see if I can pick this up without breaking anything. This I blog about a couple of days ago. This is wonderful, a magical little thing here. This is an iMo Pivot. Since my wife's name is Mo, she approves. This is a little tiny USB monitor and I have it sitting in front of my screen and I'm just actually going to fire up Hulu as an example. Hulu in the U.S. is what we use to piss off the cable industry, and Hulu is a place where I can go online and watch all sort of great shows for free. So there's hulu.com running on my little screen here and it works great. 800 x 480 is the word on the street with these things. I can run DVDs off of it, I can run little movies off of it, I can put twitter down here, I can put you guys down here, here's the live-streaming video, I'm just going to -- look at that, move it down to where you guys are, I'm going to move you guys up, and it's all over USB. Truly magical. When I had Hulu running the little device driver that was doing whatever magic it need it to happen to make this little tiny monitor work, it was only using about 3% or 4% of the CPU and that's an important thing to point out because this is not really a monitor in the sense that it is not hooked over with display link or VGA or HDMI. It's just shoving a ridiculous amount of information through a USB cable. Interestingly, it has a little tiny USB on the back and then it uses two connectors on the front, one of which I believe is power and one of which I believe is the data. It's not a sideshow device.

Microsoft had this thing in Vista called Windows SideShow and this was the declaration that all sorts of laptops would suddenly start using little tiny screens that would allow you to check your email and allow you to look at your Twitter on maybe the back side of your laptop. So you'd close your laptop and there'd

be another screen on the other side. Or you'd open your laptop and you'll have a little monitor pop up the side. This is not a sideshow device. This is a full on actual monitor. So for example if I go over here to my desktop and I hit personalize to bring up what my resolution is, I can take that little resolution thing here and I will just drag it down and you can see, for those of you who are not listening too, tiny, tiny, tiny monitor number 3 down there. That's this monitor. You see how I actually laid it out the way the physical layout is. There's tiny, tiny monitor 3 and it is right now 800 x 480. I could even make it my main display if I wanted to, yeah. Some of the Dell XPS's have sideshows but I don't think sideshow really took off.

Long Jeng, like everybody in Australia, wants to know if he can do Portrait and I was going to make a little joke and I was just going to say, yes, it can, and then just turn it. But yes, of course it can. Everything can do Portrait in Windows 7.0 because it's part of the driver process. You just have to go and click on orientation and then you say Portrait. It's got a little thing on the back here that lets you hold it up like a picture frame and it comes with this little lovely thing which is a little stand for it. I put on a stand and then, ah, look at that. It's pivoting chrome. So yes, it can truly pivot. It is the greatest \$129 that I have spent since the \$129 bottle of insulin that I bought yesterday. So yeah, definitely check it out. That's the iMo Pivot and I've blogged about that last week. It is awesome. I'm thinking about bringing it with my Dell Mini9 because I think nothing would be funnier than a guy with a little, tiny 9-inch laptop, that's what she said, and a little, tiny 9-inch monitor next to it. Imagine like literally being on an airplane and then busting out a tiny little pink -- because every time you pull out a Netbook on a plane somebody goes, "Oh, I didn't know they came that small. That's fantastic." And then you have, "Oh well, let me bring my second monitor out." Like we'd just be on a plane on a tiny Dell Mini watching a DVD on dual monitor, that will be freaking epic. It's \$129. It's fantastic.

What frame way can you get? So interestingly, and this is one of the questions here that's happening on UStream live. Ben Marsh wants to know what the frame way I can get. A moment ago there, I just showed Hulu running on it. It ran fine. I don't know if it goes 30 frames a second, but I can tell you that it's not noticeable. No one knows that this is not a real monitor. Plus if it becomes a problem, and it hasn't been, but if it becomes a problem you can always right click and it will try an icon. You've got a button here that says "Optimize for video," and this basically says let's have fewer pix holes and get them out faster. When I did this, I ended up getting kind of like not 100 x 480 but like 400 x 240. So basically the view became black here but the thing became smoother. But honestly, with this faster machine, with the dual-core machine I just don't need to use the optimize high video feature. I'm using some release candidate drivers that you can get up at the iMo Pivot



forums. The only problem that I've had, and I'm sure it's a beta thing, is that when my machine falls asleep the monitors won't turn back on until I unplug them on there and then plug it back in. So that's weird. And then Damien of course is providing some value here by letting everyone know that there's some carbon offsets that I need to purchase because I'm becoming like a George Hamilton of the .NET late night talk show set. My skin is tanned or burned or just stained blue from the nits that are kind of emanating from the multi-monitors set up that I have here. Thank you so much. Yeah, you're really not one to talk. Remember that you're on a live webcam chat with me so I don't think anyone gets to complain here.

People keeps saying show the Kindle DX so here's the deal. Speaking of breaking international law, the Kindle DX that I got to play with wasn't actually mine. I have a Kindle, it's upstairs. The Kindle is fantastic. I'll talk about the Kindle if you like. But the Kindle DX was an interesting trick. A buddy of mind in Amsterdam desperately wanted to have a Kindle and he realized that as a European he wouldn't be able to use it and he couldn't wait to see whether or not Amazon would release a European version so he PayPal me the money and then I bought the Kindle DX, and in exchange for sending it to him I would check it out and try it out for a couple of weeks. So I had both the Kindle and the Kindle DX and I played with them for a while and it's pretty cool, and then I ended up mailing it to him and I think I labeled the box used computer parts, or something like that so he wouldn't have to pay duty. Now he's got a Kindle DX and he uses it for PDFs. It works great for PDFs. A Kindle DX is fantastic. It's got an automatic pivot so when you pivot it will pivot as well, but you can turn that of which means you can actually lie down in bed and look at your PDFs and they're really, really clear. Technical documents are not good on a Kindle 2.

I've had the Kindle 1 and the Kindle 2, and Andrew Tobin here just asked the question that I mentioned tech docs are not good but they are good on a DX. The deal is this. When you have a PDF on a Kindle DX, you're looking at like a 4 x 6 screen, maybe even a little smaller than 4 x 6. It's tiny. The bezel, the bezel is the part of the device that is not the screen, is really thick on a Kindle. Not thick in the depth sense but thick in a really wide sense like those in chunky monitors. This monitor is about this size of a Kindle and that big frame on the outside is about as much space as you have between the frame and the outside of the Kindle itself. It becomes a little irritating, but it's less important when you have a Kindle DX because the Kindle DX is like 10 inches large. It's fantastically huge. So when you take a PDF and you put it on a Kindle DX, you're basically getting an 8-1/2 x 11, or for our international friends an A4 piece of paper in about a 9 x something space. So it's like looking at a small full piece of paper. Imagine if you took an A4 sheet of paper and then photocopy it at about 75%, 80%, that's what it looks

like. It looks really good. Remember though that the resolution, the DPI on a Kindle is insane. If I remember correctly it was 150, 160. It's not quite the 300 DPI that you would expect from the old laser printers but it's definitely to the point where you don't see the dots. You cannot see the dots plus the Kindle DX, if I remember correctly, and also the Kindle 2 and the Kindle DX have a new E Ink screen that use 16 full gray scales so photos look fantastic. So anytime you're going to a PDF and you see a photo, you see a diagram, you want to zoom in on it, they'll just take that whole thing, rotate it, zoom in on it and you can see it fill up the entire screen. So any PDF of reasonable complexity will be fine. I did have one or two really over the top complicated PDFs and I think they had the viewer options turn on or some kind of super PDF feature, you know, PDF 9 or some new thing, and the Kindle said, no, I'm sorry, I can't do that.

The problem with the Kindle, and actually if you go up and Google with Bing for -- I think it was Princeton who did an experiment where they're going to have every student in their sociology class get a Kindle, they're going to do no dead tree books. Everyone was going to get their books on a Kindle, and they said no one wanted to keep the Kindle after the end of the class. It's too slow to navigate and it's impossible to take notes. While a Kindle on paper seems like a brilliant, brilliant idea for doing books for colleges, if you can't take notes in the margins then what can you do, and that is a huge problem and they declared it unacceptable for them, unacceptable for print if I remember correctly. So if you're a person who likes to read and take notes and annotate, the annotations are a joke. It's not going to happen. But for novels, for fiction, it is a joy. The way that you know, as a user of Kindle, the way that you know that this is going to be something big is when you go -- it has happen to me actually. I was at the airport at a bookstore, I go into the bookstore and I see a book, and then I opened up the book and I read the outside and I feel the book, I caress the dead tree and then I walked out of the bookstore and I buy the thing on my Amazon Kindle. I mean, literally Jeff Bezos reached out of Seattle and into my pocket and pulled money out of my account with the ease of one click and boom, suddenly I'm reading the next episode of The Southern Vampire Diaries and Mysteries, the Sookie Stackhouse Novels if you must know what in fact I'm reading. I'm on Book 7 and don't knock it, it's great stuff and watch True Blood on HBO.

So we're coming to the end of about a 45-minute show on Hanselminutes here. Let's just have a little five-minute period at the end where we have open questions on the UStream. So start busting it out and then I will say goodnight to you guys. I think the ustream.tv has worked out pretty well so far. I have a link for this on the show. Its ustream.tv/channel/hanselminuteslive but again all of these will be set up at hanselminutes.com. We end



up with about a total of 196 people who came through the UStream and right now 60 of them ended it up. So it worked out pretty good. The only thing I don't like is that I can't do the kind of Larry King where I can push a button and have someone talk. I'm going to keep trying different techniques like this and I think maybe once a month we'll do a show like this and maybe I'll be as famous as Leo, what's his name. Apparently he is making quite a load of money. For those of you who have joined late and those of you who are listening to this recorded, again you can all go up to hanselman.com or hanselminutes.com and we'll have links, and as soon as I stop broadcasting this show -- oh no, I didn't push start record. Oh, no. Well, it looks like we've only got audio. That's scary crazy. Because I'm looking at this button here that says "Start Broadcast, Start Broadcast." That's red. Next to it is a button that says "Starts Record." That's green. Or if you're red/green color blind, the two gray buttons on the right. Good deal. Well, this has been an episode of Hanselminutes that has not been recorded in video. So for the 57 of you who have enjoyed this little video piece, I think that's great. Good for you. For the rest of you, you're listening to Hanselminutes audio edition and there's nothing else to see. Thanks again and I'll see you again next week.