



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 #77

August 17, 2007

### Moving your Email into the Cloud - Google for Apps and Live Custom Domains

Scott and Carl talk about Scott's Family's recent move to Google Apps and Carl considers moving to Live Custom Domains. What are the benefits of moving your life into the cloud?

(Transcription services provided by [PWOP Productions](#))



*Our Sponsors*

 **telerik**  
*deliver more than expected*  
<http://www.telerik.com>

 **nsoftware**  
<http://www.nsoftware.com>

 **NET** DEVELOPER'S JOURNAL  
<http://dotnet.sys-con.com>





**Lawrence Ryan:** From [hanselminutes.com](http://hanselminutes.com), it's Hanselminutes, a weekly discussion with web developer and technologist, Scott Hanselman, hosted by Carl Franklin. This is Lawrence Ryan, announcing show #77, recorded live Monday, August 13, 2007. 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](http://www.telerik.com), and by .NET Developers Journal, the worlds leading .NET developer magazine, online at [www.sys-con.com](http://www.sys-con.com). In this episode, Scott and Carl talk about *moving to a hosted email provider*.

**Carl Franklin:** Hi, this is Carl Franklin and you're listening to Hanselminutes from [hanselminutes.com](http://hanselminutes.com). I'm here with Scott this week. Hi Scott!

**Scott Hanselman:** Hey. How are you sir?

**Carl Franklin:** I'm fine. You enjoying your hiatus before you jump ship over to the "motherland?"

**Scott Hanselman:** Yeah. It's definitely weird. I don't like being idle.

**Carl Franklin:** Yeah.

**Scott Hanselman:** It's supposed to be vacation, but I'm learning, I'm learning.

**Carl Franklin:** Right. So, this is going to be an interesting show.

**Scott Hanselman:** Well, it is because originally you're going to talk about debugging and I think we'll still do one on debugging next week, but I sent you an email and I had asked you if you've received it yet or you were searching for an old email.

**Carl Franklin:** It was an old email you wanted me to look for.

**Scott Hanselman:** Right. I wanted you to look for an old email because of a missing package that was sent.

**Carl Franklin:** Right.

**Scott Hanselman:** And you said you couldn't do it because you hadn't been in the office in a while and that's where your searchable archive was.

**Carl Franklin:** Right.

**Scott Hanselman:** You said you had some kind of a plan with a 16 gig flash drive?

**Carl Franklin:** Yeah. So, here's my email system, right? I have a mail server and it's not Exchange. First of all, I don't do Active Directory. That's not my thing. So, setting up Exchange is probably not an option for me. It's just a matter of "pain in the ass" factor. I'm not an IT guy. I don't have a whole lot of users. It's just me and a few people here. None of them have accounts on my machines. Everybody's Internet account, it's all POP3. So, I have Alt-N's MDAemon and their Outlook-style web client is okay, but it's not great and it has little bugs like when somebody sends you an invitation to a meeting, it doesn't take into account time zones. So, it will say 9:00 a.m. Pacific Time, whatever it is, and it will go in at the wrong time. It will go in three hours early or late.

**Scott Hanselman:** Why aren't you doing hosted Exchange? You can buy an Exchange server and have it handled for you entirely outsourced for 40 to 50 bucks a month.

**Carl Franklin:** Yeah. That's just something I don't want to deal with. I'm a control freak, right? I want things to run under my own domain.

**Scott Hanselman:** Hosted exchange can run under your own domain.

**Carl Franklin:** You're right. That is an option, but it means giving up a certain amount of control, which I enjoy. I know that if there's a problem with it, that I can solve it.

**Scott Hanselman:** Is the control about holding on to your email? Like having it in your control in a sense of having the bits or the bytes available to you or is it about your domain?

**Carl Franklin:** Pretty much, that's it. I like to know where my data is all the time. I just need to know that I have access to everything. I really dread the idea of getting on the phone with somebody at 3:00 in the morning so that I can get access to a file or something like that. That's the kind of stuff that I don't want to do.

**Scott Hanselman:** Okay.



**Moving your Email into the Cloud - Google for Apps and Live Custom Domains**  
**August 17, 2007**

**Carl Franklin:** So, I have Outlook and my main machine here at work. I used to have my main Outlook box be my laptop, but it proved to be too much of a pain to back up all the time. So, I have a big RAID system here at work and my Outlook PST file is on there.

**Scott Hanselman:** Okay.

**Carl Franklin:** So, when I need to search for old emails, I need to be on my machine at work.

**Scott Hanselman:** Okay.

**Carl Franklin:** So, that's the story.

**Scott Hanselman:** I think you're insane.

**Carl Franklin:** Yes, I am insane.

**Scott Hanselman:** Yeah. That's ridiculous.

**Carl Franklin:** So, I thought about getting a 16 gig flash card so I could carry my PST file around with me so then I could use it on my laptop, I could use it at work, I could use it at home or whatever and backing up should be a little bit easier.

**Scott Hanselman:** Okay.

**Carl Franklin:** That's just what I thought.

**Scott Hanselman:** Okay.

**Carl Franklin:** Until I spoke to you.

**Scott Hanselman:** Yeah. So, I think it's just the craziest thing I've ever heard and I've heard a lot of crazy stuff and I do a lot of crazy stuff too. I'm total control freak, but I recently moved my whole family over to Gmail. I considered Windows Live for domains, we'll talk about that too, but at the end of June, I moved the entire Hanselman family on three continents and 11 family members over to Gmail, which is basically moving them over to Google apps. I didn't move them to the [Gmail.com](http://Gmail.com) domain. I actually signed up for Google Apps for domains.

**Carl Franklin:** Now, this is a service that Google offers?

**Scott Hanselman:** Right. It's at [google.com/a](http://google.com/a) and basically you set up your MX record, your mail

transfer record for your DNS such that Gmail is in charge of it.

**Carl Franklin:** Right.

**Scott Hanselman:** And then you set up what are called CNAME aliases and that's like basically pointing a subdomain at Google.

**Carl Franklin:** Sure. This is all DNS stuff.

**Scott Hanselman:** Right. Very, very simple stuff that may have been difficult years ago where you have to actually edit a text file and you don't have Telnet access, but now with all of the different control panels that your ISPs provide you, it's a very simple operation. Google's even made a real simple wizard that even my dad could go through. "What's your ISP?" "Click here." "Here's a screencast to explain exactly how you need you log in and enter these values under these boxes." They've got step by step for all the major ISPs.

**Carl Franklin:** Yeah.

**Scott Hanselman:** So, I pointed things like [mail.hanselman.com](http://mail.hanselman.com), [calendar.hanselman.com](http://calendar.hanselman.com). I've even got docs like [documents.hanselman.com](http://documents.hanselman.com).

**Carl Franklin:** Okay.

**Scott Hanselman:** So, my wife and I can share kind of Word and Excel-like applications that are all AJAX-based.

**Carl Franklin:** Okay.

**Scott Hanselman:** I imported all my Outlook email. I used a program called gMOVE from a company called LimitNone and I paid I think 25 bucks or something for this program. I moved 2+ gigs of Outlook email over to this thing.

**Carl Franklin:** So, you took an Outlook PST file and you uploaded it to Google?

**Scott Hanselman:** Well, it's a pretty cheesy process right now, but yes. Essentially, I did. What you do is gMOVE hosts an intermediate format, an intermediate place. So, basically, gMOVE uses OLE automation to talk to Outlook, uses the Outlook automation interfaces. It takes all of your email on a folder by folder basis or by a date range. It's up to you. You can decide if you want to do it by folder plus



## Moving your Email into the Cloud - Google for Apps and Live Custom Domains August 17, 2007

date range. I think I set all folders for the last two years or something like that. It sends it up to gMOVE and holds it in a middle place and then makes a fake POP server and then basically Google sucks it in via POP.

**Carl Franklin:** Oh.

**Scott Hanselman:** It looks like the email came exactly as before. It doesn't look like it's coming from you. It looks like it came as it came.

**Carl Franklin:** Now, POP3 can do that. I mean you just get the original emails.

**Scott Hanselman:** Right.

**Carl Franklin:** Yeah.

**Scott Hanselman:** gMOVE, even though they're sending it themselves, they modify the header such that it looks like it's a fresh import from POP.

**Carl Franklin:** Okay.

**Scott Hanselman:** And then if you pay Google -- Google has two different things. They have the free version, which is 2 gigs per user and it's free, and then they have the \$50 per user per year, which gives you 10 gigs, but it also gives you IMAP import support. So, if you have an IMAP folder already or any email with a public IMAP available account, it will just suck all that over.

**Carl Franklin:** So, let's slow down a little bit. Basically, what you're saying is -- now, I have like 100 accounts at [franklins.net](http://franklins.net), your family, friends, whatever, and I also have some other domains that I host here. So, you're saying I could keep all of those domains the same names. It's not going to be [franklins.net@gmail.com](mailto:franklins.net@gmail.com), it's going to be [franklins.net](http://franklins.net). Right?

**Scott Hanselman:** It will absolutely be [franklins.net](http://franklins.net). So, for example, I've just logged in to the dashboard for Google maintenance. So, I'm at the [hanselman.com](http://hanselman.com) Google dashboard and it says, "Welcome Hanselman Family. All services are running smoothly." It actually says this, "Daily active users: 11 active users in the last 90 days." I can click on the 11 users. It has an option where I can go and upload and provision all of my users. It also has a web service available such that I could provision my

users remotely. I could write an administration application.

**Carl Franklin:** That sounds like it's got full features, but last I knew Gmail was an invite-only kind of thing. Is that still true?

**Scott Hanselman:** No, no. Anyone can sign up for Gmail, but this isn't Gmail. This is Google Apps.

**Carl Franklin:** Okay.

**Scott Hanselman:** Gmail hasn't been invite only for many, many months.

**Carl Franklin:** Really? Okay. Shows what I know.

**Scott Hanselman:** This is a totally separate universe. This is Google Apps and you're getting something that looks like Gmail, behaves like Gmail, but the domain is yours.

**Carl Franklin:** And I guess the thing that hits me all of a sudden is when you want to search for emails, it's in one place and it's Google Search.

**Scott Hanselman:** Right. Exactly. One of the things that's nice about it is that there's even a mobile version, so I can log in to my email on my Windows mobile device and I get a tiny HTML version and I can search all my email from there.

**Carl Franklin:** Yeah. I mean I can do that too with my web server. It sounds like a lot of the same things that my mail server does. It just sounds like it does it better.

**Scott Hanselman:** What do you mean? How can you search all of your email?

**Carl Franklin:** Well, if I moved all of the email from my PST file on to my mail server like back, I could do the same thing and I could just run the web client...

**Scott Hanselman:** Via which format? Via IMAP?

**Carl Franklin:** I could do it with CSV. So, I could export to CSV. I could upload and import into my domains and then I could have web access, but the fact is that the client, the web client, is just not that good.



**Moving your Email into the Cloud - Google for Apps and Live Custom Domains**  
**August 17, 2007**

**Scott Hanselman:** Yeah. I mean I'm really surprised that you would compare that kind of crazy hack to something like a complete provisioning system for user management.

**Carl Franklin:** Well, I take offense at that.

**Scott Hanselman:** Okay.

**Carl Franklin:** It's not a crazy hack. It's a mail server system that has a web interface. In fact, it does...

**Scott Hanselman:** Is it SmartMail or do you know what the name of it is?

**Carl Franklin:** In fact, it does all of the things that you've said so far.

**Scott Hanselman:** Okay.

**Carl Franklin:** And it does them pretty well except that there's a few killer features that are deal breakers for me.

**Scott Hanselman:** Do you know what the name of the mail system is?

**Carl Franklin:** Yeah. It's MDAemon from Alt-N.

**Scott Hanselman:** MDAemon.

**Carl Franklin:** M-D-A-E-M-O-N. And it's what I've been using for years and years and years, but another reason that I want to move away from it is because it's freaking expensive. It used to be like you pay \$499, you get the server and then updates are free. Then they've started doing this you got to get upgrade protection; otherwise, you can't get updates.

**Scott Hanselman:** They have an Outlook connector. Do you use that one?

**Carl Franklin:** Yeah. I have used that, but I don't really need an Outlook connector. What I needed was to be able to just move things.

**Scott Hanselman:** Oh, I see.

**Carl Franklin:** Yeah, once.

**Scott Hanselman:** I'm looking at their site here and if you have 100 users, it's \$720 for their Outlook connector.

**Carl Franklin:** Yeah. Yeah. Exactly.

**Scott Hanselman:** That's pretty harsh.

**Carl Franklin:** No, it is and that's exactly what I'm saying. I want to move away from this and into something else. Certainly, the alternative is moving your PST file around on a 16 gig stick, but that doesn't help the rest of my users.

**Scott Hanselman:** One of the things that I liked about the Google Premier Edition, this is the one that you actually pay for, is that there is a 99.9% uptime guarantee.

**Carl Franklin:** Yeah, I know. Well, I would expect no less.

**Scott Hanselman:** Right. So, you get that Google level of uptime and I've never had them been down in the last two months, so that's not a lot of data to calculate as far as uptime, but it's been very nice because there has not been a single problem. Being able to go in and reset my users' passwords, it seems like these are small things. I mean you can do these like you say with any commercially available email server.

**Carl Franklin:** Yeah.

**Scott Hanselman:** But it's just so clean. It's just so simple. Right now I can see who's used a certain amount of space in their quota. I can up their quotas. I can change their -- all these different things are very clean, very simple. I can create internal lists and also we have the Google Calendar so we can share our calendars, which is nice.

**Carl Franklin:** Now, if you have the Premier Edition, does that mean that everybody on your domain has to pay \$50 per user?

**Scott Hanselman:** Yeah, exactly.

**Carl Franklin:** Okay.

**Scott Hanselman:** So, if you have multiple domains, what I would do if you were switching over is I would decide which domain is the most important to you. There are two ways you can do this. You



## Moving your Email into the Cloud - Google for Apps and Live Custom Domains August 17, 2007

could just go free. All you lose with the free one is you get 2 gigs instead of 10 and there's no uptime guarantee, which means that if they were down, then they're down.

**Carl Franklin:** Right.

**Scott Hanselman:** Okay? And then you could go bonkers, it could be totally free, but it's advertiser-supported, so you still have the little ads on the side.

**Carl Franklin:** Oh, I see.

**Scott Hanselman:** So, you switch over to the Premier, you get the 10 gigs, you get the provisioning tools in the web service, and you get to remove the ads, but then you do have to pay \$50 per user per year.

**Carl Franklin:** Wow.

**Scott Hanselman:** So, for us, with the family, it was nice and simple. They just pay me the 50 bucks. I send it off to Google and everyone gets this benefit. We get shared family Google chat. We get shared calendars. So, from a family perspective or an organizational perspective, it's great. A lot of universities are doing this. They've got a setup now where a university can basically outsource all their email to Google, which is nice for the kids now because it looks a lot more like the stuff that they're used to be using rather than like Elm or whatever the university system is. The university could potentially use the free version and not pay anything, so they can save tens of thousands of dollars a year, but you could have multiple accounts. You have multiple domains. You don't have to sign all of them up if you don't want to.

**Carl Franklin:** Okay.

**Scott Hanselman:** But at the same time, if some of your domains are aliases, you could go in -- right now, I'm going in the domain settings and I'm going under domain names. I have my primary domain and I have three domain aliases so users can share the same mailbox with different addresses. So, you could have [carl@franklins.net](mailto:carl@franklins.net), you could have [carl@pwop.com](mailto:carl@pwop.com), they would go to the same place.

**Carl Franklin:** Okay. Now, you mentioned that Windows [live.com](http://live.com) also has a similar service?

**Scott Hanselman:** Right. So, at [domains.live.com](http://domains.live.com), they've got the new Windows Live Custom Domains. It's a real similar kind of a service. You get Windows Live Mail, which looks like Windows Hotmail. You can have basically an unlimited number of accounts. You get 100 accounts initially and then once you've proven that you own the product -- you have to fill out a questionnaire then you can have an unlimited number of accounts. So, you can have 100, 200, 500 accounts. Then the accounts that you get on that particular custom domain also automatically become Windows Spaces, so they can have a blog and they become Messenger logins. So, then they immediately become something that can be logged in to Messenger. So, it's integrated with the whole kind of Live family of services.

**Carl Franklin:** Is it free?

**Scott Hanselman:** Yeah. It is free. Let me go ahead and just -- I'm going to click Get Started. You can click Get Started and it says, "Purchase a domain or use a domain you already own." I could say "Purchase a new domain." They have a questionnaire where I can go in and say, "I want to go to [register.com](http://register.com)," and then it will send me through this questionnaire and I could potentially buy a domain right there on the spot. I'm going to go ahead and put in that I want to use [hanselman.com](http://hanselman.com) and see where the process takes me. So, here, it says, "Do you want [scott@hanselman.com](mailto:scott@hanselman.com) to be the administrator?" It's basically saying do you have an existing Live ID that you want to do administration of this particular site. It's a very, very clean kind of familiar interface. It looks a lot like Hotmail and like Windows Live, like the stuff that we're kind of used to seeing.

**Carl Franklin:** Right.

**Scott Hanselman:** I'm going to say go ahead and make Scott the administrator. Then it pops in and it says, "Service Configuration." It says, "I need you to do this with your DNS. You can go in and click on Membership Accounts and sign up."

**Carl Franklin:** So, it looks like it's free. It looks like it's free for life and I don't see anything anywhere about quotas, about disk space or anything like that.

**Scott Hanselman:** Well, when it first came out last year, it was 250 megs and I believe that when Windows Live Mail was released, it was upgraded to 2 gigs.



**Moving your Email into the Cloud - Google for Apps and Live Custom Domains**  
**August 17, 2007**

**Carl Franklin:** Yeah. I think I saw something on Digg about -- this was about backup, which I think like both Google and Microsoft are now sort of battling for offline backup strategies and they're offering a whole bunch of gigabytes for free. I think that was something different.

**Scott Hanselman:** Yeah. All of this is representative of moving your life into the cloud.

**Carl Franklin:** Right.

**Scott Hanselman:** I mean think about what we would have felt 5 to 10 years ago to put all of my inbox and all of my calendar into a cloud system like this, but we built up trust, right? When Hotmail runs for years without too many downs and Gmail runs for years. I can count on one hand how many times I've hit [Google.com](http://Google.com) and had it been down.

**Carl Franklin:** Yeah. Never happened to me.

**Scott Hanselman:** I had like three or four times and I hit Refresh and it's back.

**Carl Franklin:** Right.

**Scott Hanselman:** Little hiccups. That trust, you can't just say, "Click a button here and move your life into the cloud." It took years of trust.

**Carl Franklin:** Right.

**Scott Hanselman:** For me, Google did what I wanted it to do. I like the Gmail interface and it was really easy to move the whole family over and I was able to let the family continue to have their same email addresses. Because they're my family, I went and asked them what their passwords were and I set their passwords up so they were exactly the same, which made a lot of people more comfortable.

**Carl Franklin:** Yeah. Now, what about if you don't like it. Can you move it back?

**Scott Hanselman:** With Windows Live, you can always turn around and move it back. Any change that you make just something like a DNS can always be turned around. You can switch back if you don't like it, although one of the things that's nice about Google domains that I haven't seen on the Windows Live Custom Domains is that they'll give you a temporary email address on Google without changing

your DNS. For example, you sign up for Google Apps. You're not quite sure if you like it yet. What you can do is set a rule on your current email system that you want your email temporarily forwarded, then they'll give you a funky email address like if I was going to be [scott@hanselman.com](mailto:scott@hanselman.com), they'll say like [scott-hanselman.com](mailto:scott-hanselman.com) and then some GUID@gmail.com.

**Carl Franklin:** Yeah.

**Scott Hanselman:** Basically, a throwaway address that no one would ever, ever see. You set up forwarding to go to that temporary place and then that lets you see your email in two places. So, it stays where it is. Your existing system stays the way it is and then you can also see it in Gmail and if you like it, then switch over and then you're set, but you've never made the DNS change, so it doesn't matter.

**Carl Franklin:** So, I found the FAQ for Windows Live Custom Domains. If you go to [domains.live.com](http://domains.live.com) and click on Help, which is in the upper right-hand corner, there's a FAQ and it tells you, "With Windows Live Custom Domains, you can: Use your own custom domain name to send and receive emails and instant messages," which we've been talking about. "Create up to 100 email accounts within your domain," so if you need more accounts, you can apply to receive unlimited number. So, I suppose I don't know what that application involves.

**Scott Hanselman:** There's a questionnaire that they ask you to fill out and then once you fill out the questionnaire, you can get unlimited.

**Carl Franklin:** Okay. Then "Receive 2 gigabytes of Inbox storage space for each of your accounts with Windows Live Hotmail; Check your email from any web computer; Control junk email with Microsoft SmartScreen technology; Receive email virus scanning and cleaning; and interact..." Yeah?

**Scott Hanselman:** Right there. You just nailed two things that were huge for me. Now, junk email and virus scanning.

**Carl Franklin:** Yeah.

**Scott Hanselman:** This is a really important thing. The folks that were handling my email previously charged like 10 bucks for virus scanning and then 10 bucks for spam and because my email address is so



public, spam was becoming a huge problem for me. I mean I get literally 100:1 spam to legitimate email.

**Carl Franklin:** Right.

**Scott Hanselman:** So, I actually hired a company called Spam Soap, which is basically dedicated to doing nothing but spam filtering for email and I was paying them \$150 every three months. When I switched over to Google or if you switch over to Live Domains, you get all of their spam filters and all of their virus scanning and that's all built in. So, for me, I actually saved money by switching over to a service that had much smarter spam. I've had about six false positives once I set those up in my white list. I don't think about spam anymore and that has been a huge benefit.

**Carl Franklin:** Wow.

**Scott Hanselman:** So, I think moving to a big system like a Microsoft or a Google would be a benefit for anyone who gets an impressive amount of spam.

**Carl Franklin:** Wow. This has been definitely a life-changing episode for me, Scott, because this has been a problem constantly throughout my IT career if you want to say that. So, I'm going to do this. I'm really going to do it.

**Scott Hanselman:** Are you serious?

**Carl Franklin:** Yes.

**Scott Hanselman:** You're really going to do this? So, you need to do this. Let's research them.

**Carl Franklin:** Yeah. It's not just the money. It's the hassle.

**Scott Hanselman:** It is the hassle, yeah.

**Carl Franklin:** And the accessibility.

**Scott Hanselman:** I would be really interested. Let's do some research offline and let's you and I sit down and think about which one is ready for you, if prefer Gmail, if you prefer Hotmail.

**Carl Franklin:** I think I'm going to do Live. I'm going to try Live because you're doing Gmail, I'm doing Live. It would be nice to be able to compare notes and see what happens.

**Scott Hanselman:** Let's do that and we'll get some of the Live Custom Domains guys to maybe help walk you through it, maybe just move one of your accounts that doesn't matter or do a temporary switch over.

**Carl Franklin:** Well, I'm going to have to do it because my mail server expires probably in a few weeks, so I'm going to have to do it.

**Scott Hanselman:** So, the interesting thing will be how hard of a time you have transferring existing stuff.

**Carl Franklin:** Right.

**Scott Hanselman:** Because really, for me, it wasn't useful until I got at least the last six months of email up there.

**Carl Franklin:** Yeah.

**Scott Hanselman:** Yeah, that would be really interesting. I think that this is all representative of us moving our lives into the cloud and not feeling so bad about it.

**Carl Franklin:** Right.

**Scott Hanselman:** I mean 99.9% uptime or, you know, five 9's even. These kinds of uptimes were just impossible to comprehend at least in the PC world and the web world, certainly mainframes have this kind of uptime a lot, but what I'm saying is that we're so used to our machines crashing. We're so used to having really lousy service from the various service providers whether it be cable. I was looking at the Verizon FiOS User Agreement. I signed up recently with FiOS, which is the fiber-optic Internet service here in the US.

**Carl Franklin:** Right.

**Scott Hanselman:** It turns out that in the small print, it says that there is absolutely no uptime guarantee. I have no way to get any money back or anything. If they're down, they're down, and there's nothing I can do about it. Think about it in terms of the airline industry, right?

**Carl Franklin:** Yeah.

**Scott Hanselman:** How many times you've been kicked off a plane because they overbooked?



**Carl Franklin:** Sure.

**Scott Hanselman:** If Google or Microsoft did these things, if my Gmail suddenly said, "Oh, sorry. We're out of space," even though they had promised that I wouldn't be, that would be pretty frustrating.

**Carl Franklin:** Pretty frustrating.

**Scott Hanselman:** But they have gotten to the point where they can actually provide these services in a way that we can trust them and I don't feel bad about using these guys at Gmail because I'm still downloading these things into Outlook via POP, so I have a local archive.

**Carl Franklin:** Right. Good. All right, Scott. That's a show. This is a good one. Like I said, it's a life-changing one for me. I'm going to bite the bullet. We'll see you next week on Hanselminutes.