Exploiting
by Neale Morison
neale@nealemorison.com
Phone: +61 417 661 427, 0417 661 427
Draft 0.1
2009-09-11 –

## **Exploiting**

## Exploiting

Hi Charlene.

Thanks for your email. Wednesday's good. We'll grab a coffee and check out some shoes. It'll be great to catch up.

You won't believe this. There's an ad for shoes, right here beside my email. I suppose they read it in your email to me. I mean not them, some machine. Have you heard of Mega Fashion Shoes Online? Why on earth would you shop for shoes online? You can't feel them and smell them and put them on. Whatever put up the ad, they just don't get it. They can almost follow the conversation, but they really have no idea what we want. Who does that remind you of? Cheers, Tess, xxx

Tess.

What? Who's that?

It's David, Tess.

Oh my God. There you are. How did you do that? What are you doing on my screen?

There's something important I need to tell you.

You're like a little cartoon.

It's an avatar. Low bandwidth.

But the lips are moving. Your expression is changing. You're like a cheap animation. You look like Astro Boy.

The 1960s series? You're a fan?

My Dad made me watch it. He said it was culturally important.

It is. Do you remember when the giant alien crab escaped and he had to ride the dinosaur to Hawaii...

How the hell are you doing this?

Well, I took a guess there were already some common backdoors on your machine and tried them out and sure enough, one was open. Then I installed the avatar program and some monitoring and management software and fired it up remotely. And I couldn't believe what I was seeing. It's Night of the Living Dead in here.

But how did you find my machine?

Oh, do you remember someone sending you a link to a site where you click to send money to help refugee children in central Africa?

That was you?

You should never click on a link someone mails you, Tessa. It went to a script that recorded your IP address and then forwarded you to the refugee site. I hope you've learned that lesson, at least.

But how did you find my email? I never gave you my email address.

But it turns out that one of the morons who sends lame jokes to a long list of friends, including you, straight carbon copy, not blind, also sends it to a mailing list that records the mail in an archive and the archive is indexed by search engines. You need to be more careful picking your friends. But I only used that approach because it was quicker. Half a minute. I could have found it in any case, Tessa. It's probably already in my files. I found your DNA. I know you better than anyone.

David. What does no mean?

What does no mean?

Come on, David. You're a clever boy. Give it your best shot. No means...? One syllable, two letters, begins with n, ends with o.

You're saying no means no.

It's not just me, David. Everybody's saying it.

Tess, I'm not harassing you. I'm not stalking you. But I'm worried about you. I care about you. There's something you have to know.

Don't I have any privacy?

That's exactly my point. That's what I wanted to tell you. You don't. You have no privacy. At all.

Apparently not.

This was the only way I could show you. I've been having a look through your system, Tessa. Do you have any idea how much X-ware you're running?

X-ware?

Exploitware, Malware, spyware, adware, viruses, backdoors, Trojans, rootkits, automatic updates...

David, I'm not your granny. I have antivirus software installed. I am not getting any reports.

You're getting one now, Tess. I'm making a report. Your system is teeming with this stuff. Do you notice it running slowly?

It's not great. But it's no slower than usual.

That's the thing, Tessa. It's all relative. It's a pretty good machine you have here, by the way. Plenty of memory, CPU. Must have cost you a bit.

It wasn't cheap. But you need it to get anything done.

And why is that? Why is that, when the capability of your software has not changed in ten years? When your office software hasn't improved in twenty years? All this stuff is from the last century, and it still runs like a wet dog. On a machine with more than a hundred times the capacity of last century's machines. Why is that?

Why don't you tell me, David?

It's because almost none of your system resources are devoted to running your own software. It's all running the operating system, the antivirus software, the background threads, and other people's software. Do you have any idea what that stuff does?

No.

It's a battleground, Tess. Your machine is the scene of a historic battle. It's the forces of control versus the forces of chaos. It's Digital Rights Management versus the Pirates of Pestulon, it's the Ministry of Truth versus the Spam Spirochetes, it's the Thought Police versus the Gladiators of Gutenberg. It's Totalitarianism versus Anarchy.

Look, David, I just want to do email and word processing. I can do that. So all your friends are welcome to use my machine for their battles. All I ask is that they keep their little avatars out of my face.

But they don't, Tess. They don't respect your privacy. They don't think you have any rights. They see you as something they can control and bleed until there's nothing left. As we speak, Tess, they are sucking your life blood. Don't you see that?

What are they doing that's so terrible?

Well, let's see. I suppose the most benign is a little program that uses idle cycles to analyze radio noise for alien communication. It's a breakaway black wing of the SETI project, that steals machines rather than asking nicely. Then there's the scumbags using your machine as a spam generator. Straight to execution for those guys. Then there's the industrial espionage agencies selling denial of service to the highest bidder and using you for the attacks. The graffitists who just want to show they've been there, and their friends the pervs who get a kick out of lurking while you do your private things. There are the pirate distributors caching stolen goods and feeding the channels through your connection. The porn-brokers serving porn off your hard drive. There are the keyboard and screen readers that capture every user name, password, bank account and credit card number and send it to be stashed away in databanks in Europe or Asia or Africa, for sale to anyone with the price. Then there's ...

Give me a break. David. I don't believe it.

Tessa, they are stealing everything. Your cycles! Your bandwidth! Your storage! Your identity! Every cent you own. Money you don't own. They'll put you in debt for the rest of your life.

This is the X-ware people?

Not just them! It's the people who sold you your operating system and your applications, too. The so-called legit operators. Do you ever wonder what those automatic updates are doing, Tess? Is it for your benefit, do you think? Trojan Horses, Tess. Backdoors into your system. They own you! They want to monitor everything you own, and make you pay for it again and again, and never give you anything new. DRM! Demand Revenue Mercilessly! They are watching you, stalking you.

Like you.

Not like me. They don't care about you. They're not strongly attracted to you.

I wish you'd stop saying that. Especially as a little disembodied head. It's just too weird. This can't actually be happening. I suppose I must be lying face down on my keyboard, drooling. There'll be a criss-cross pattern on my cheek when I wake up.

You're awake, and this is real, Tess. The danger is ever-present.

And I suppose you have the answer, David? You're not under attack by X-people?

I wrote my own operating system. It's based on the Linux kernel. There is absolutely nothing on this system I don't control. I wrote the network interfaces, I wrote the browser. I compile it all on my own compiler. I know this code, Tess.

That must have taken you forever.

I don't get out much.

But not everybody has that kind of time, David.

I'm not saying it's easy, Tess. You have to do without some things. I rarely see graphics. I work almost entirely at the command line, or in a text editor.

Vi or emacs?

It used to be emacs, but then I wrote my own. How do you know about that?

I've had geek boyfriends before, David. Not that you're my boyfriend. You're not. Most definitely.

Vi boyfriends, or emacs boyfriends?

One vi, one emacs. Then we all happened to meet up in a bar. They got into a fight, made it up, and went off with each other.

You're joking. That was pretty good.

Thank you.

I could come over and install it on your machine if you like.

That won't be necessary.

It wouldn't take very long.

No thanks.

Or I could take your machine away and set it up. I could give you a machine to use in the meantime. For your email and word processing.

This is good of you, David, but I don't think so.

You wouldn't have to do anything in return.

Like have your babies.

Not unless you wanted to.

I'm not having babies with Astro Boy.

Well anyway do want me to clean up your machine from here? I've already killed some of the obvious processes but I don't feel comfortable knowing there's all this evil stuff running.

But, David, I'd be afraid you'd see that as some kind of invitation. That by saying yes, I'd be saying it's all right to break into my machine and waggle your little Astro Boy mouth at me. And then I'd feel as if you were always there. As I was writing email to my friends. Writing my journal. Some creepy little cartoon, desperate for sex, burrowing around in my files. Do you see my problem?

Creepy?

It's creepy, David.

Don't you think it's creepy knowing your machine is a zombie in the hands of unknown powers?

Well, now I do. Before you started creeping me out I didn't.

So what do you want?

How can you even ask me that? I want you to go away. And promise me you'll never come back.

But don't you realize how vulnerable you'll be? Without me to protect you?

I'll just have to take my chances.

You won't have a chance. You're already almost beyond saving.

Then I guess I can't be saved.

Well, I tried.

You did. A for effort.

These forces are bigger than you can handle alone.

That's as may be.

If you need me, just call me. I'll be there.

Thank you, David.

Don't you want my number?

No.

Well, I put it in all your address books and contact lists.

I'll have to delete it.

I'll email it to you from time to time.

I'll get a new email address.

And I have your machine broadcasting a status beacon at intervals. I'll be monitoring those.

I'll get another machine.

I'll know anyway.

No. I can't be worried about you spying on me, David. I need your word.

My word.

Say it. I promise to go away and never come back.

I promise to go away and never come back.

I will not protect Tessa any more.

I will not protect Tessa any more.

I will not attempt to rescue Tessa from herself.

I will not attempt to rescue Tessa from herself.

I'm turning my machine off, now David. Goodbye.

I'm turning...oh.