

Message

From: Sunny Balwani [/O=THERANOS ORGANIZATION/OU=FIRST ADMINISTRATIVE GROUP/CN=RECIPIENTS/CN=SBALWANI]
Sent: 2/9/2013 11:39:39 PM
To: Antti Korhonen [/O=THERANOS ORGANIZATION/OU=First Administrative Group/cn=Recipients/cn=akorhonen]
CC: Michael Craig [/O=THERANOS ORGANIZATION/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=Michael Craiga09]; Sandeep Paladugu [/O=THERANOS ORGANIZATION/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=Sandeep Paladugu159]; Tim Kemp [/O=THERANOS ORGANIZATION/OU=First Administrative Group/cn=Recipients/cn=kemptm]; Sukhdev Bainiwal [/O=THERANOS ORGANIZATION/OU=First Administrative Group/cn=Recipients/cn=sbainiwal]; Sandhya Kaippa [/O=THERANOS ORGANIZATION/OU=First Administrative Group/cn=Recipients/cn=skaippa]; Daniel Edlin [/O=THERANOS ORGANIZATION/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=Daniel Edlin]; Ian McDowell [/O=THERANOS ORGANIZATION/OU=First administrative group/cn=recipients/cn=imcdowell]
Subject: RE: netowkring utility & connectivity in Aghanistan

For our test/Lab network we should try all of these scenarios and make sure red image is able to connect to the network using the admin tool we have in our app so the DoD can configure the machine using the tool and connect the device to the network. If they implement known mac addresses then we can give them the mac addresses in our machine (SANDEEP, can you display the mac address of the cards in our network config utility.)

From: Antti Korhonen
Sent: Saturday, February 09, 2013 3:32 PM
To: Sunny Balwani
Cc: Michael Craig; Sandeep Paladugu; Tim Kemp; Sukhdev Bainiwal; Sandhya Kaippa; Daniel Edlin; Ian McDowell
Subject: RE: netowkring utility & connectivity in Aghanistan

Best way to restrict access is to allow only known MAC addresses.

We could force unknown MAC's into separate network, without internet access nor access to any other part of corporate network.

We could also use user authentication (AD for example) to grant access or require machines to be part of domain to gain access.

Antti

From: Sunny Balwani
Sent: Saturday, February 09, 2013 3:03 PM
To: Antti Korhonen
Cc: Michael Craig; Sandeep Paladugu; Tim Kemp; Sukhdev Bainiwal; Sandhya Kaippa; Daniel Edlin; Ian McDowell
Subject: RE: netowkring utility & connectivity in Aghanistan

Seems like the code to manually configure a Ethernet network is already done by Sandeep.

Sukhdev, time, Sandhya and antti will test out this functionality per below in the test lab network and create a controlled network where only authorized devices (password based or safe-nic based or any other mechanism based).

Antti/Ian. Let me know answers to my following questions.

From: Sunny Balwani
Sent: Friday, February 08, 2013 11:15 PM
To: Antti Korhonen
Cc: Michael Craig; Sandeep Paladugu; Tim Kemp; Sukhdev Baniwal; Sandhya Kaippa; Daniel Edlin
Subject: Re: netowkring utility & connectivity in Aghanistan

Legit device would be one either whose nic address is in safe list on dhcp server or one that has uid and pwd entered to access dhcp to get an ip address or uid/pwd for proxy server.

What are other methods to restrict a computer from joining an Ethernet? How do we protect our network from visitors plugging their computers into our Ethernet network and still reject them Internet connectivity? Or any connectivity.

Sent from my iPad

On Feb 8, 2013, at 10:33 PM, "Antti Korhonen" <akorhonen@theranos.com> wrote:

How should we define legitimate device? SSL cert?

We could use FreeBSD based firewall for this to save costs.

Do we have test case scenarios yet?

Antti

From: Sunny Balwani
Sent: Friday, February 08, 2013 9:25 PM
To: Michael Craig; Sandeep Paladugu; Antti Korhonen; Tim Kemp; Sukhdev Baniwal; Sandhya Kaippa
Cc: Daniel Edlin
Subject: RE: netowkring utility & connectivity in Aghanistan
Importance: High

Antti.

Can you create a small network in a small room downstairs (like an IT lab) where we have a router that creates an Ethernet network but blocks any device from connecting to the internet using different networking policies and only

legitimate device that connect to the ethernet are able to connect to the internet. We should keep this room to simulate all different connectivity scenarios we will see in Afghanistan.

You can use the room downstairs outside machine shop or any other space that makes sense.

Thanks.

From: Sunny Balwani
Sent: Friday, February 08, 2013 9:22 PM
To: Michael Craig; Sandeep Paladugu; Antti Korhonen (akorhonen@theranos.com); Tim Kemp; Sukhdev Bainiwal; Sandhya Kaippa
Cc: Daniel Edlin
Subject: netowkring utility & connectivity in Aghanistan
Importance: High

We will need to deploy 4s in Afghanistan at the end of the month and need to absolute make sure that the networking utility in the device works flawlessly. Basically, the admin must be able to connect to a wifi network AND ALSO change any or all **Ethernet** network settings. This includes dhcp/fixed IP configuration, proxy setting, subnet masks, gateway – along with ability to provide any UID/PWD for proxy on ethernet network.

Perhaps also provide a small “shell Dos like” window where the user can ping network addresses etc. (only ping). Not a full Dos shell though.

Once this is done, we should try to test it in a small closed network where DHCP is disabled and then DHCP is enabled but the other security is implemented on the Ethernet network that blocks the device from connecting to the cloud.

Ideally, we can run this setup on a laptop/ML motherboard first and then take the red image on to a 4s or however you want to do this.

Thanks.