Network Update

CSCF Staff Meeting
2010-3-31

What's new with the network?

- VLAN update
- EduRoam and uw-guest
- unauthenticated DHCP
- ONA user search
- Maintain host expiry-date
- wireless address change
- MC vlan back-haul

VLAN update

- new VLANS being created, old ones removed
- old standard of 129.97.*vlan-id* **no longer works**!
  - 129.97.59.128/25 is vlan 1594
  - vlan 1732 is 129.97.173.192/26
- size matters! (/24, /25, etc)
- See Wiki reference (https://www.cs.uwaterloo.ca/twiki/view/CF/VLANInformation#Current_VLAN_assignments)

VLAN update

- new networks being created in private address spaces 10.15.0.0/16 and 172.19.0.0/16
- old VLAN numbering scheme definitely not applicable here:
  - eg 10.15.3.0/24 is VLAN 806
- VLAN number assignments are arbitrary (by IST) so you must refer to the Wiki to find out what's what
- NB: Maintain zones for private addresses

EduRoam

- solving the visitor wireless-access problem
- EduRoam: http://www.eduroam.org/
  - use your uwaterloo.ca WatIAM credentials worldwide (at participating institutions) for network access, and *vice versa*
  - 802.1x network, WPA2 secured
  - running now at UW and elsewhere

uw-guest

- wireless network that doesn't require any authentication
- very low bandwidth (500Kb/sec)
- intended to provide access for email and non-graphic-oriented applications
- currently deployed in DC library, “leakage” to other adjacent areas in DC
- full deployment eventually

Unauthenticated DHCP

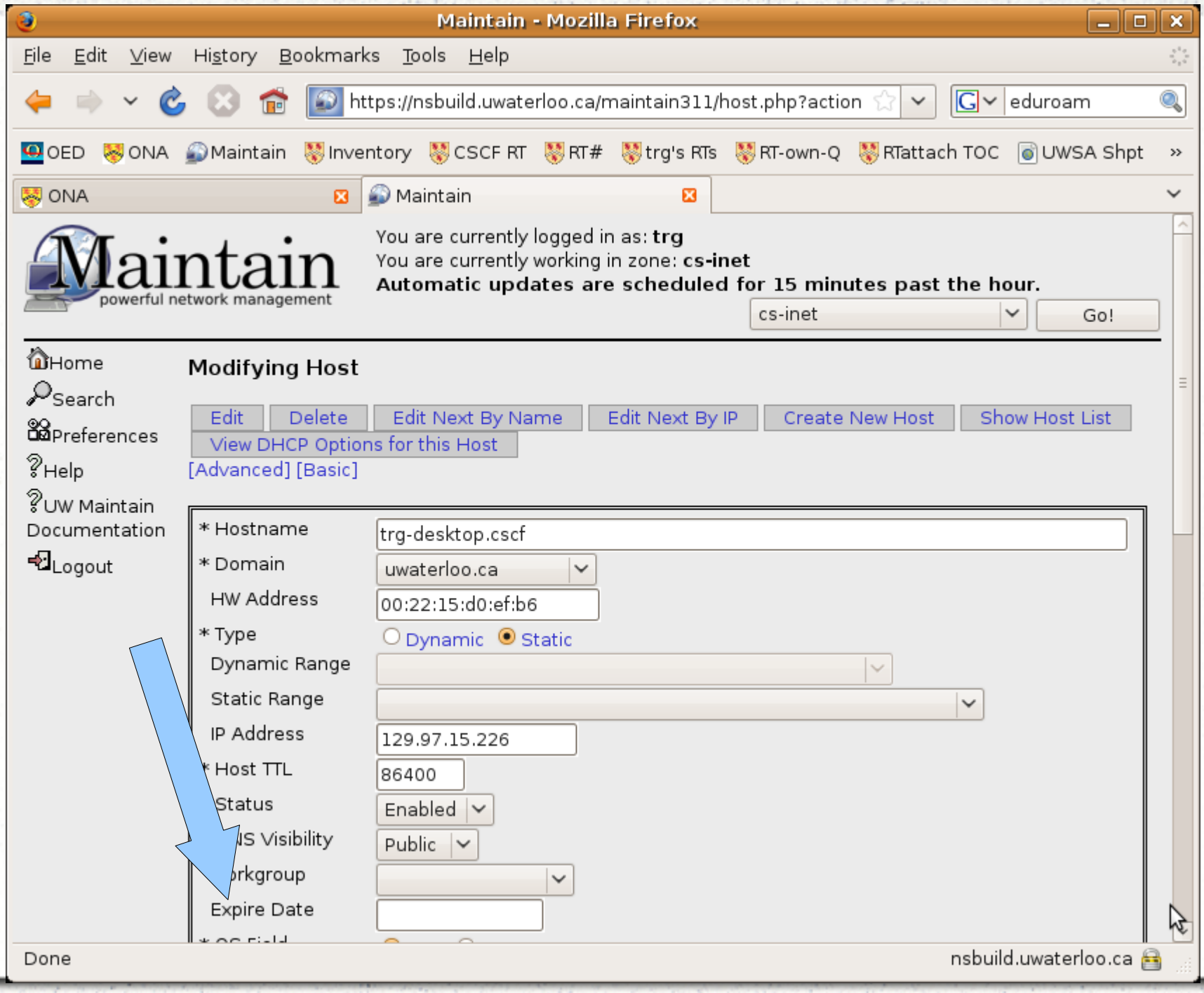
- UW policy change to allow unauthenticated DHCP
- must still be able to track users & usage if necessary – not for “public access”
- planning a test network that will provide a private address via DHCP and NAT it to a public address
  - use in visitor offices, meeting rooms

ONA user search

- https://cn-ona.uwaterloo.ca/ona/ona.php
- MAC 001f1615c360, 904CE50B7076

Maintain expiry date

- for documentation of temporary setups, post-docs, visitors
- generally ignored by Maintain and DNS


Maintain - Mozilla Firefox
File Edit View History Bookmarks Tools Help
https://nsbuild.uwaterloo.ca/maintain311/host.php?action
eduroam
OED ONA Maintain Inventory CSCF RT RT# trg's RTs RT-own-Q RTattach TOC UWSA Shpt
ONA
Maintain
Maintain
powerful network management
You are currently logged in as: trg
You are currently working in zone: cs-inet
Automatic updates are scheduled for 15 minutes past the hour.
cs-inet
Go!
Home
Search
Preferences
Help
UW Maintain Documentation
Logout
Modifying Host
Edit
Delete
Edit Next By Name
Edit Next By IP
Create New Host
Show Host List
View DHCP Options for this Host
[Advanced] [Basic]
* Hostname
trg-desktop.cscf
* Domain
uwaterloo.ca
HW Address
00:22:15:d0:ef:b6
* Type
Dynamic
Static
Dynamic Range
Static Range
IP Address
129.97.15.226
* Host TTL
86400
Status
Enabled
Public
Expire Date
Done
nsbuild.uwaterloo.ca

Wireless address change

- campus wireless now uses a private address from the range 172.21.0.0/16
- NATted for off-campus use, remains as is for on-campus
- causes problems
  - firewall rules
  - printer ACLs
  - anything that thinks UW addresses are 129.97

MC VLAN back-haul

- attempting to eliminate all inter-building VLANS
  - ongoing process, not there yet
- setup and testing may require a device to be “in the MC”
  - dedicated fibre from MC to DC for MC VLANs to switch in dc2560g (mc-dc-cs3)
  - tag the VLAN on mc-cs2:A7, mc-dc-cs3:26
- create and RT and assign to Dan or Trevor if you need a patch to your office