

PROBLEM TITLE

Network Computer Visibility

CHALLENGE

Air Force test engineers need a common operating picture of the devices on their network in order to perform required mission and maintenance tasks.

BACKGROUND

Air Force test engineers continuously run experiments, utilizing multiple computers on the same network with one computer overseeing the functions of the other computers. In the past, test engineers have been able to view all computers and devices on their network on one computer through a Microsoft tool known as Net View, via the Master Browser Function of Microsoft Windows. However, Microsoft recently disabled the Master Browser function because of discovered security vulnerabilities. As a result, Windows 10 computers no longer include the function.

When a Windows 10 machine assigns itself a Master Browser on a network, the network discovery does not work or does not work correctly. Test engineers must manually input every computer and device on the network each time they run an experiment, which is very timeconsuming and inefficient. A work-around is to disable the Master Browser on the Windows 10 computer, and allow a non-Windows 10 computer (e.g. Windows 7) to be assigned the Master Browser. This allows the network discovery of connected computers to work properly again. However, this workaround isn't sustainable because the Air Force is working on modernizing technology and going forward, only Windows 10 computers will be used. Therefore, Air Force test engineers need a better way to understand all the devices on their network.

OPERATIONAL CONSTRAINTS

- Solution cannot have wireless or cellular capabilities
- Solution cannot have a camera or microphone
- Must work with Windows 10

PROBLEM SPONSOR

David Mulvey, 772nd Test Squadron, Air Force Materiel Command
(david.mulvey.ctr@us.af.mil)

PROBLEM SPONSOR LOCATION

Edwards Air Force Base, CA

SENIOR LEADER

David Cooper, 772nd Test Squadron, Air Force Materiel Command
(david.cooper.26.ctr@us.af.mil)
Ruben Castaneda, 772nd Test Squadron, Air Force Materiel Command
(ruben.castaneda.ctr@us.af.mil)

Do not exceed one page