



ACE Remote Testing Capability

ACE has always maintained our security protocols and high standards of confidentiality when dealing with client test objects. In addition to the existing security measures, ACE has developed a process to provide vehicle testing in the Climatic Wind Tunnel with remote real-time monitoring by clients in a secure fashion. This capability will enable clients to complete testing even if they are unable to be onsite at ACE. With the current COVID-19 situation, this capability has value for clients, and we believe that clients may see value in remote testing beyond the immediate future.

How does Remote Testing Work?

Clients will continue to send their vehicles to ACE – either fully instrumented or provided with sufficient lead time for ACE to install the instrumentation. However, client personnel do not need to be in attendance – ACE will provide video and data feeds that allow you to control and monitor the test session.

1. Live Video

ACE will provide several views of the exterior of the vehicle, the instrument cluster, the test chamber, and the monitor displaying data of the chamber test characteristics.

There are multiple ways of broadcasting/streaming the video content to the client:

1. Secure YouTube server with access control and via invite-only
2. Local UDP stream & screen share via device by the client

2. Real-Time Data

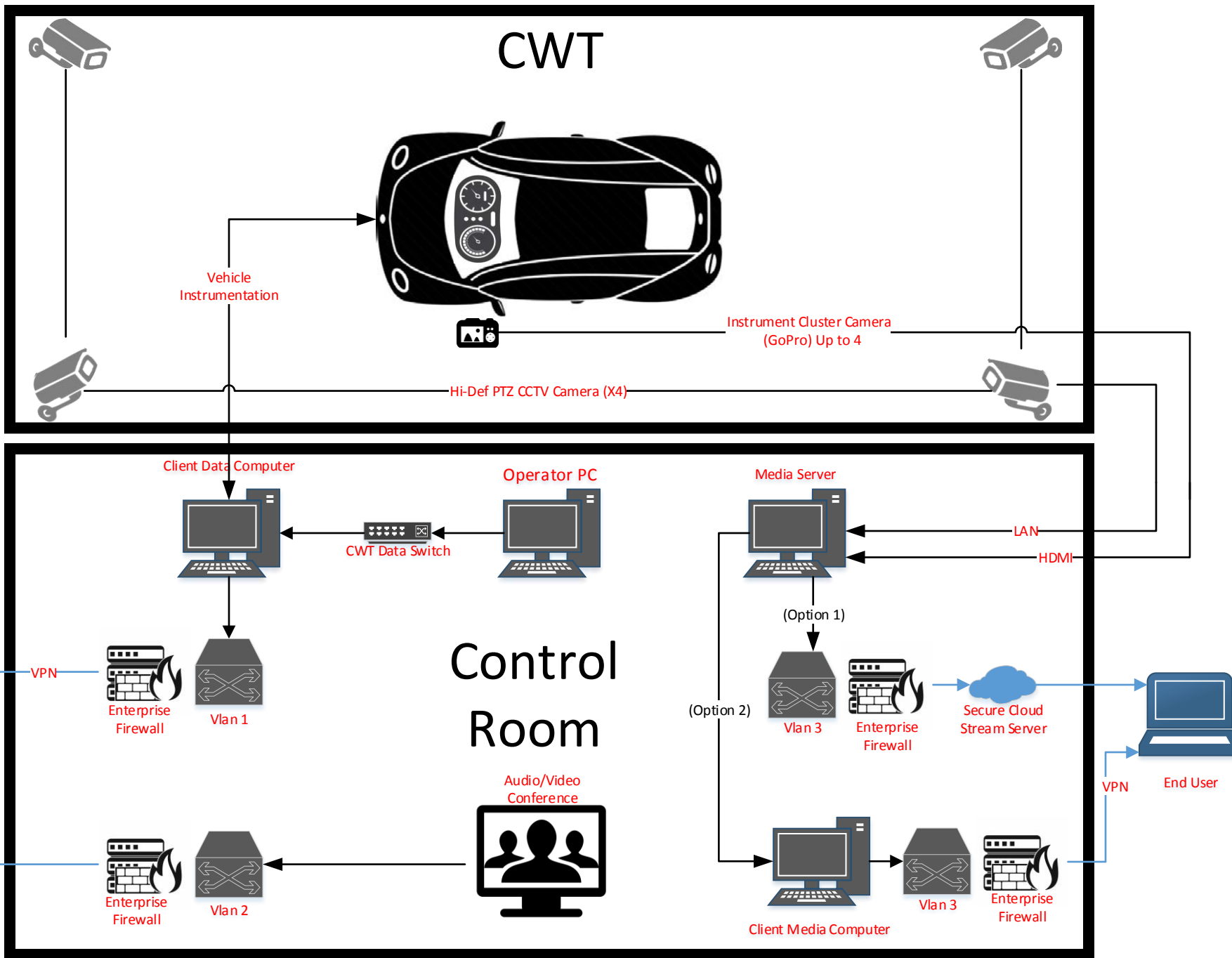
ACE will provide a data feed on a platform and network that meets your privacy and security policies. ACE can collaborate with your IT team to develop a data feed that meets stringent cybersecurity requirements.

Data comprises of two parts: Client Vehicle Data and CWT Data. Both feeds can be merged into a single secure platform/device which is provided by the client.

3. Live Conference (Audio + Video) feed within ACE CWT Control Room

During the testing, a live Google Meets (or another video meeting platform) will be used. ACE can collaborate with your IT team to ensure that the meeting session meets your cybersecurity requirements.

The ACE Team can connect with you to provide a demonstration of our Remote Testing Capability and to discuss your customized needs. Contact us for more information about Remote Testing at 905-809-3480 or acemarketing@ontariotechu.ca.



CWT

Control Room

Vehicle Instrumentation

Instrument Cluster Camera (GoPro) Up to 4

Hi-Def PTZ CCTV Camera (X4)

Client Data Computer

Operator PC

Media Server

CWT Data Switch

LAN

HDMI

(Option 1)

(Option 2)

Secure Cloud Stream Server

Vlan 1

Vlan 3

Vlan 3

Vlan 3

Vlan 2

Vlan 3

Vlan 3

VPN

VPN

End User

End User

End User

Audio/Video Conference

Client Media Computer

Enterprise Firewall

Enterprise Firewall

Enterprise Firewall

Enterprise Firewall

Enterprise Firewall

Enterprise Firewall