aci LEARNING [PRACTICELABS]

DOCUMENTATION

Connecting to Practice Labs Devices.

How We Connect - HTML (webRDP)

The HTML5 client uses websocket technology to connect to the lab devices over port 80/443 to the given RDP gateway service endpoints. If the client is unable to make a websocket connection then the client will attempt next best negotiation for the connection for example to “long-polling”. Data (mouse cursor movements, keypresses, desktop graphic changes) are then sent back and forth over this “open” connection. If the client drops down to long-polling the user may experience slow ‘lagged’ performance, especially over higher latency links.

If using the HTML5 client, it is recommended that websocket connections be allowed to benefit from the performance improvements that websockets allows.

How We Connect - ‘Connect’

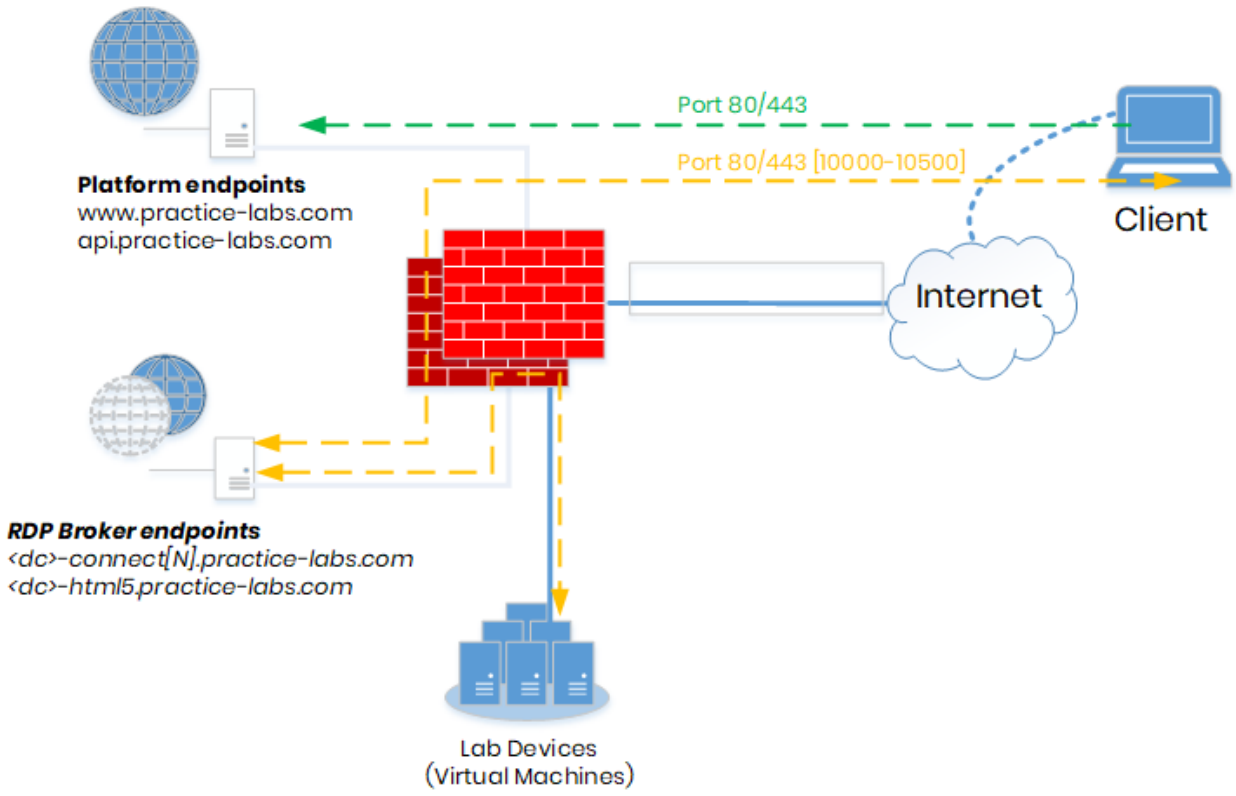
The ‘Connect’ client is our newest RDP gateway client and has the same requirements as listed by the HTML technology above. It connects to the lab devices over port 80/443 to the connect RDP gateways and to your machine. If the client is unable to make a websocket connection, then the client will change the connection method to “long-polling” too.

Websockets - How to test?

In order to test if websockets are permitted from your internet location you can use the following resource to test, however please note Practice Labs are not affiliated with; neither can we verify authenticity and trust of this website so perform due diligence prior to accessing this site based on your own internal web site access procedures. https://websocketstest.com

Network Diagram and Address Information

Type	Address
Network address range	185.48.165.0/28 64.19.223.64/28
Ports required	http port 80 https port 443 TCP on port range 10000 - 10500 (Accessibility Users)
Applications for next-generation firewalls	Websockets http-proxy MS-RDP & Web RDP (Remote desktop) T.120 (required to make RDP connections)



Domains

Whitelist Domains	Description
www.practice-labs.com	Primary Lab platform
portal.practice-labs.com	End user administration portal
api.practice-labs.com	Single sign-on integration platform
cdc-html5.practice-labs.com	[Legacy] HTML5 client broker gateway for Lab devices
atl-html5.practice-labs.com	[Legacy] HTML5 client broker gateway for Lab devices
cdc-connect(N).practice-labs.com	[New] RDP client gateway. Where “[N]” optionally represents a unique ID when screen sharing is in use
atl-connect(N).practice-labs.com	[New] RDP client gateway. Where “[N]” optionally represents a unique ID when screen sharing is in use
cdc-rdpproxy.practice-labs.com	Accessibility client gateway whereby true RDP connections can be established.
atl-rdpproxy.practice-labs.com	Accessibility client gateway whereby true RDP connections can be established.

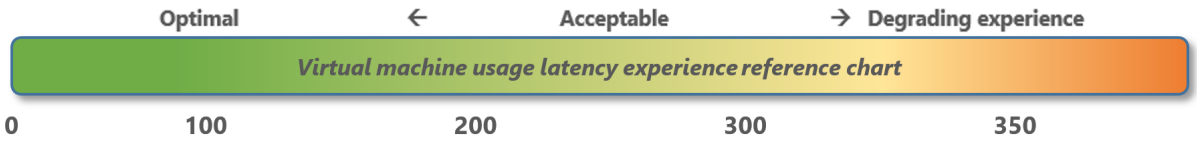
Network Troubleshooting and Diagnostics

Check for any known platform issues

Check our service status page here https://status.practice-labs.com.

If we are aware of any incidents that could be impacting access or the user experience in the labs we will post that notification here, including scheduled maintenance windows.

Latency reference to user experience chart



A latency of 320ms and above is known to affect the virtual machine usage experience when screen changes occur within the virtual machine desktop interface. We would recommend a latency of 300ms and less for the best possible experience.