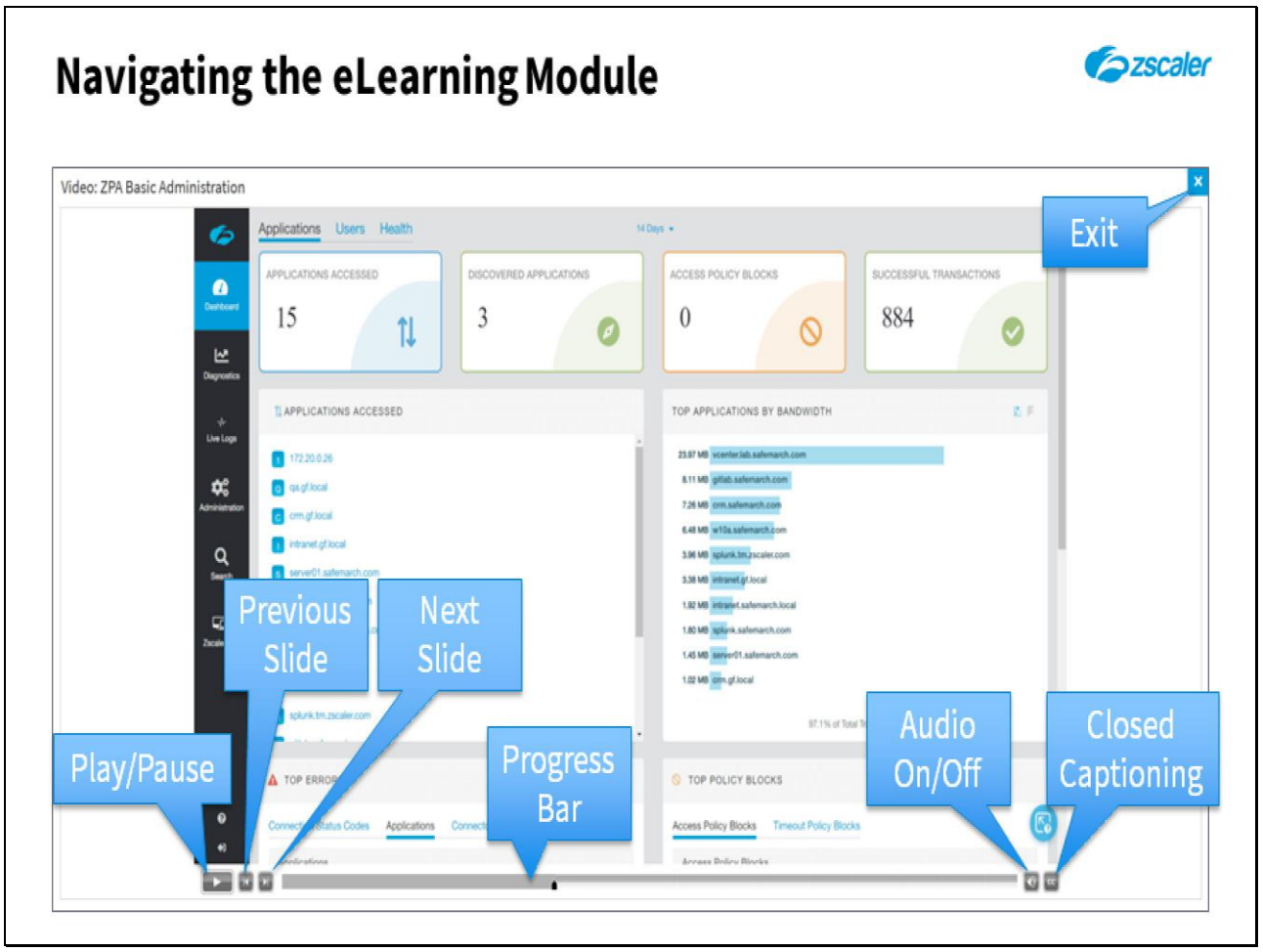
Slide 1 - Troubleshooting ZIA

Slide notes

Welcome to this training module on some of the tools available for ZIA troubleshooting.

Slide 2 - Navigating the eLearning Module



Slide notes

Here is a quick guide to navigating this module. There are various controls for playback including **play** and **pause**, **previous**, and **next** slide.

You can also mute the audio or enable Closed Captioning which will cause a transcript of the module to be displayed on the screen. Finally, you can click the **X** button at the top to exit.

Slide 3 - Module Agenda

Slide notes

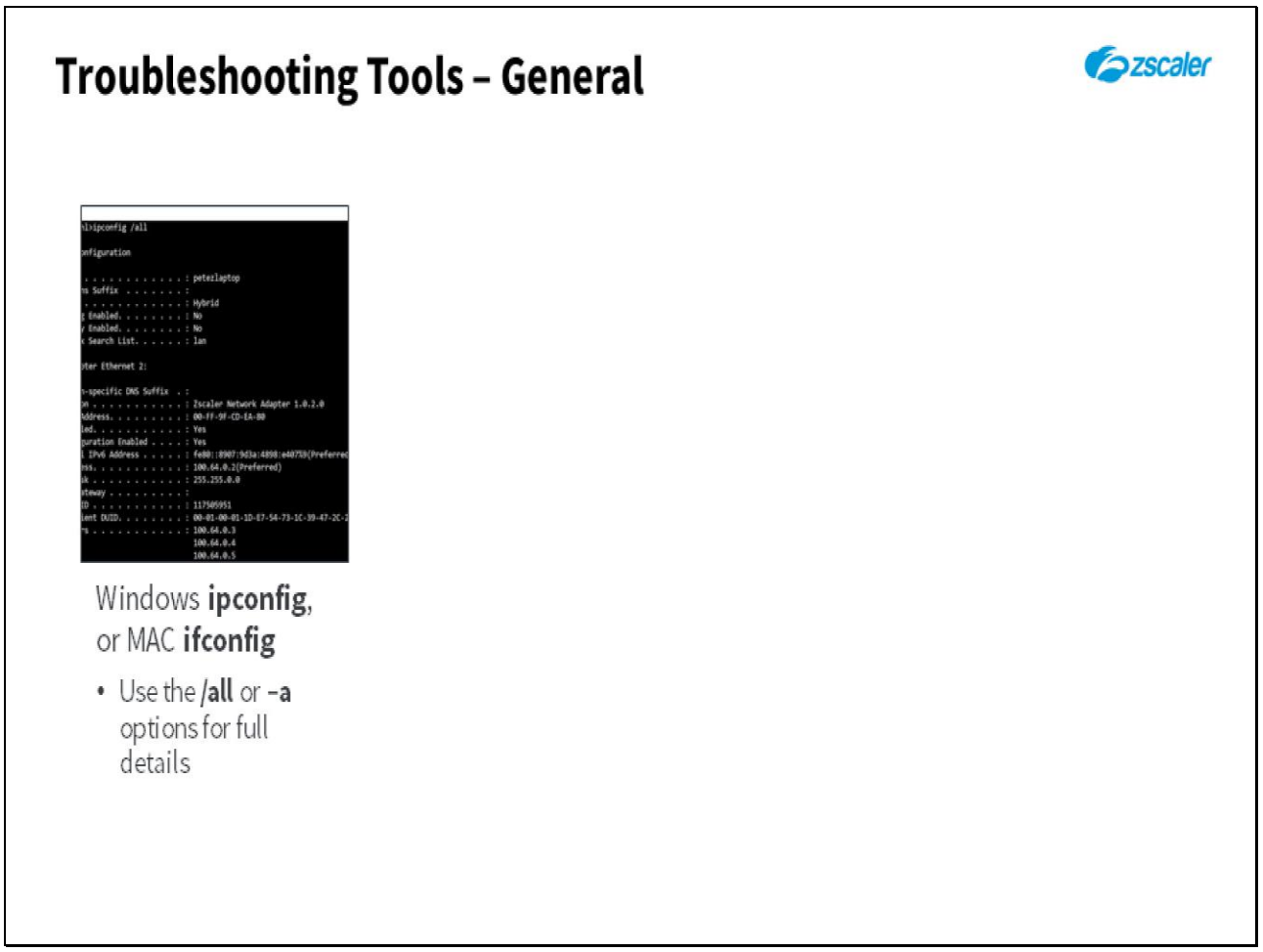
In this module, we will first review some standard network connectivity troubleshooting tools, then move on to look at some Zscaler-specific tools.

Slide 4 - Standard Troubleshooting Tools

Slide notes

In the first section, we will review some commonly used network troubleshooting tools.

Slide 5 - Troubleshooting Tools – General

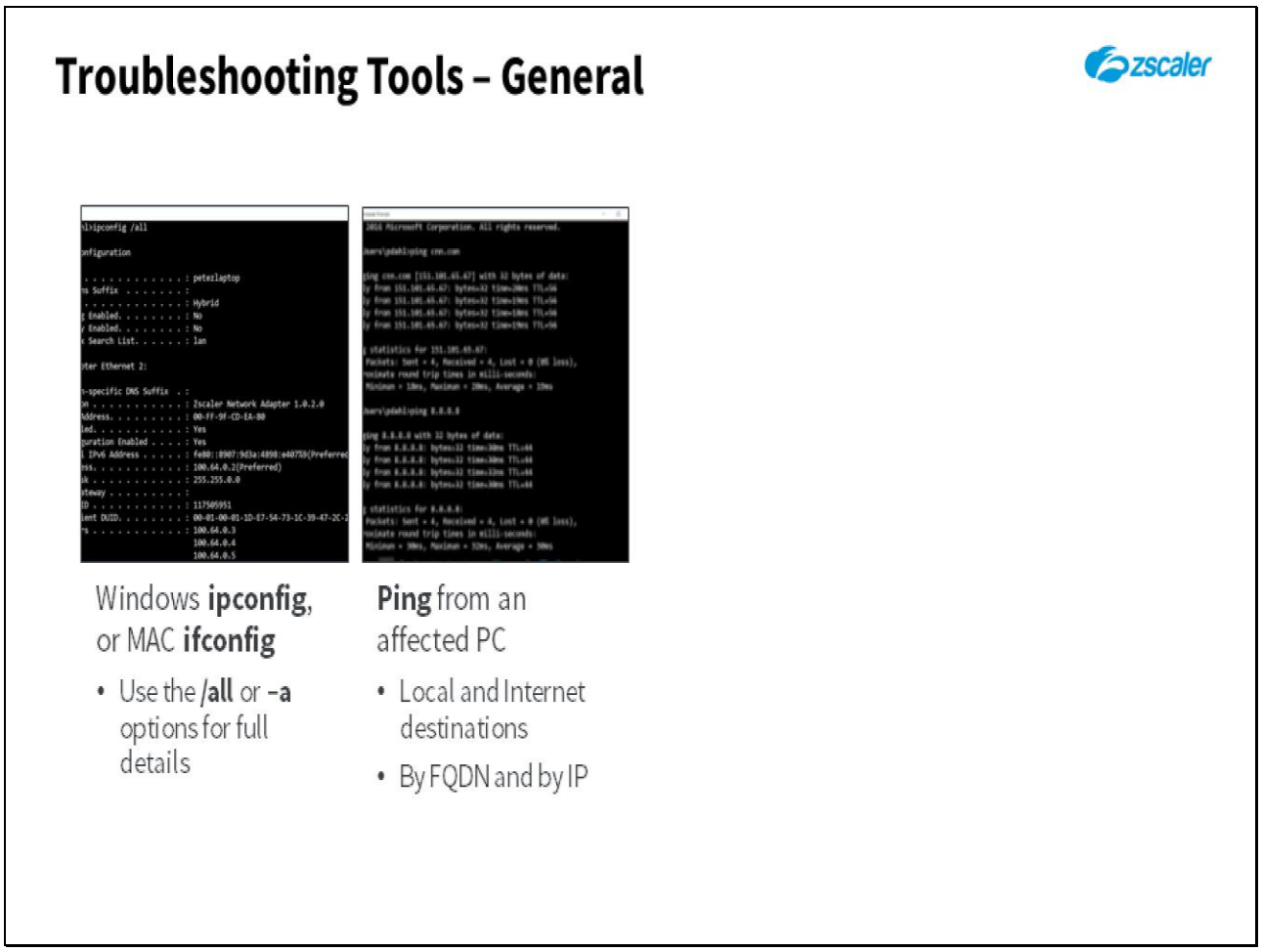


Slide notes

The first tool that we look at is the **ipconfig** (Windows) or **ifconfig** (MAC) utility. This tool allows you to review the interface configuration for the network adapters installed on a Windows or MAC PC. For full details use the options **/all (**Windows), or **-a** (MAC).

Verify that the device has a valid IP configuration, that it has a valid gateway set, and that there is a valid DNS server configuration.

Slide 6 - Troubleshooting Tools – General

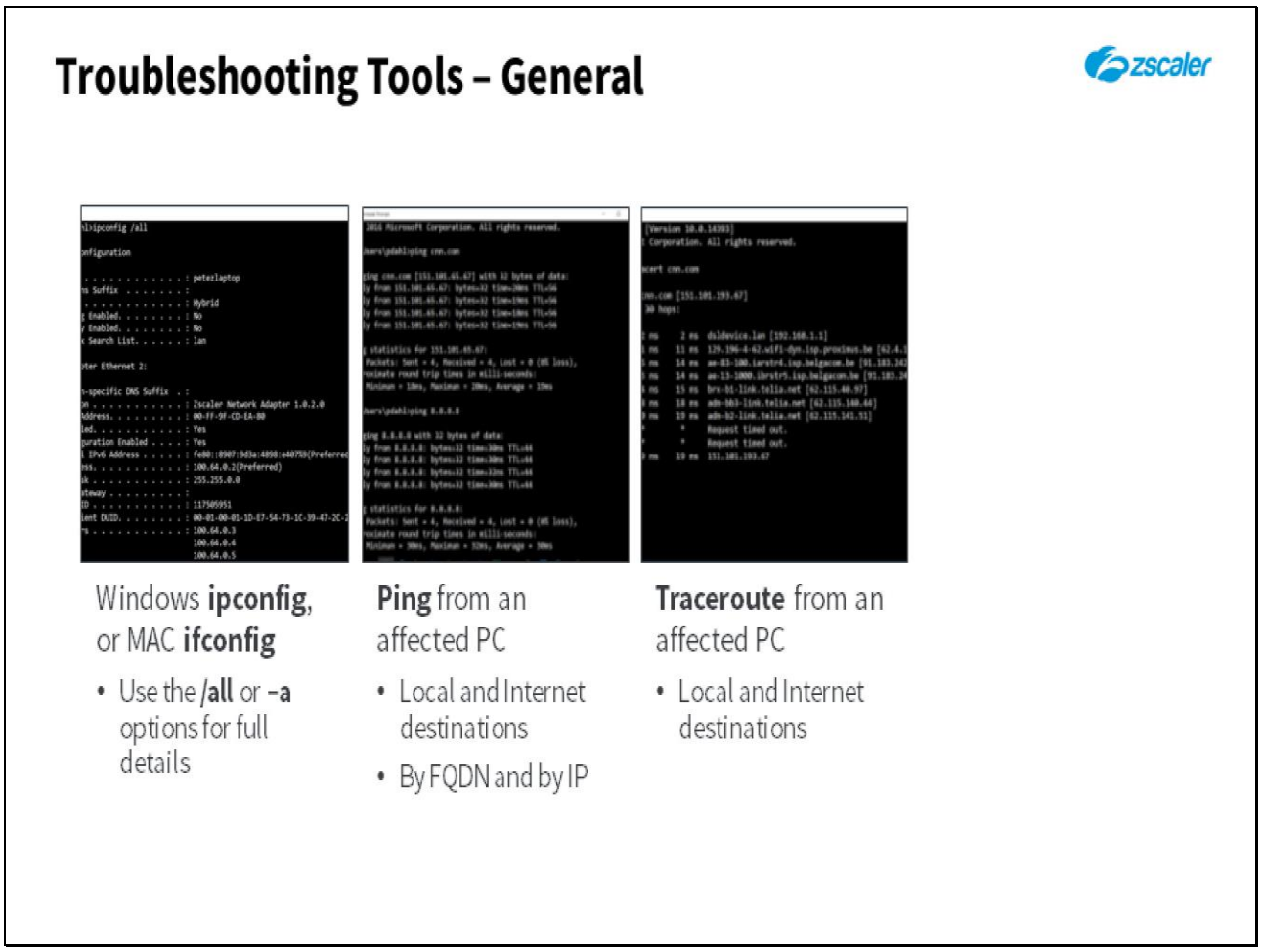


Slide notes

The next tool we will talk about is the **ping** utility, available at the command line on both Windows and MAC OS X machines. This tool can be used to evaluate the extent of a network outage. You can ping local addresses to confirm the device has connectivity, then ping Internet addresses to confirm that the gateway does actually go somewhere.

Also ping by FQDN, to verify that DNS resolution is working, and if not ping by IP address, for example to the **8.8.8.8** address of the public Google DNS service. Check the round trip time for the pings, to get a feel for the end-to-end latency on the connection.

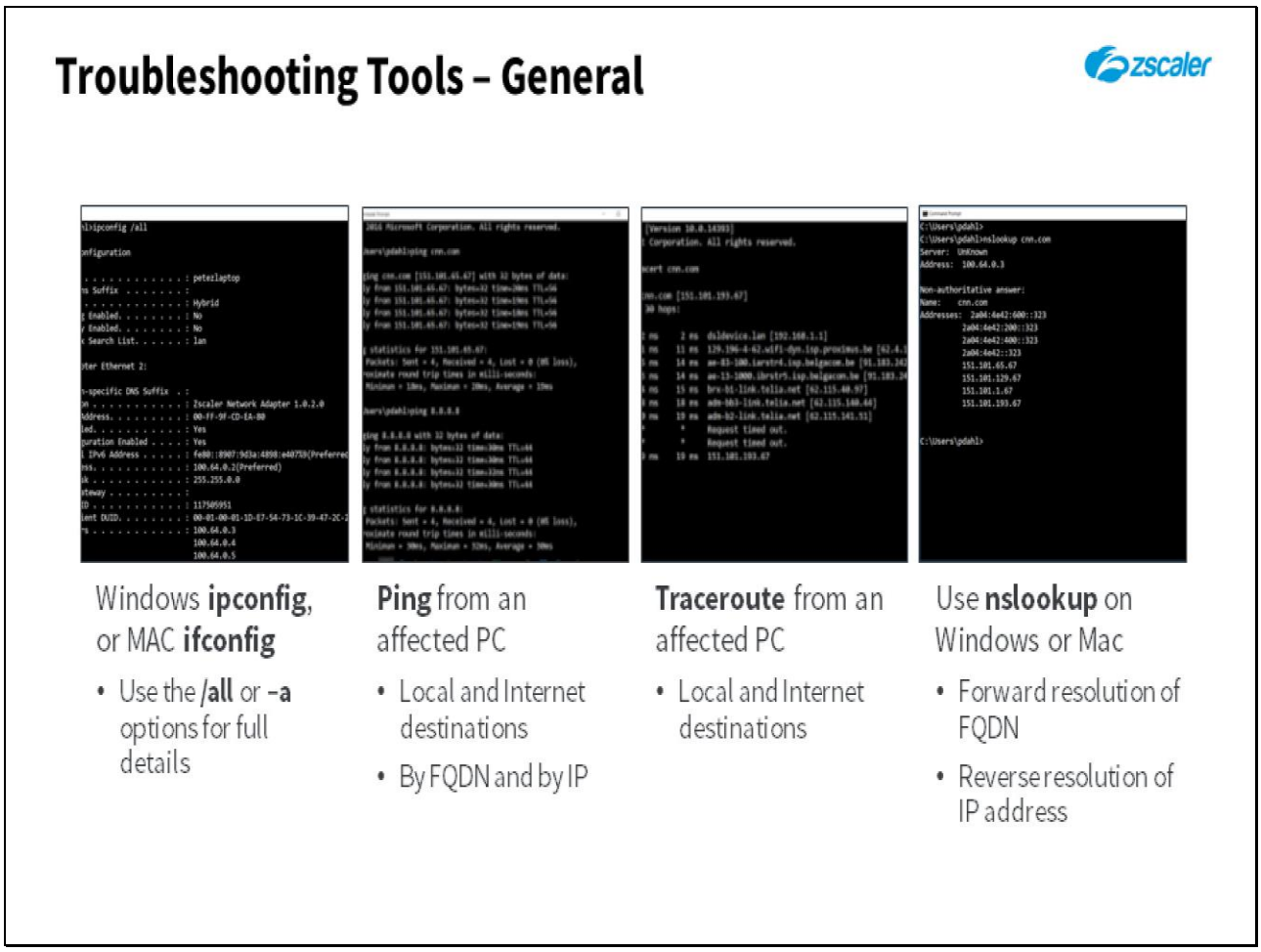
Slide 7 - Troubleshooting Tools – General



Slide notes

Next is the **traceroute** utility (MAC), **tracert** on Windows. This tool will tell you the full path of the traffic to the destination address, and the round-trip times for each hop. It can be used to identify where in the route a problem is occurring. Trace the route to local destinations (such as the default gateway) to confirm local connectivity, and to Internet destinations to confirm end-to-end connectivity.

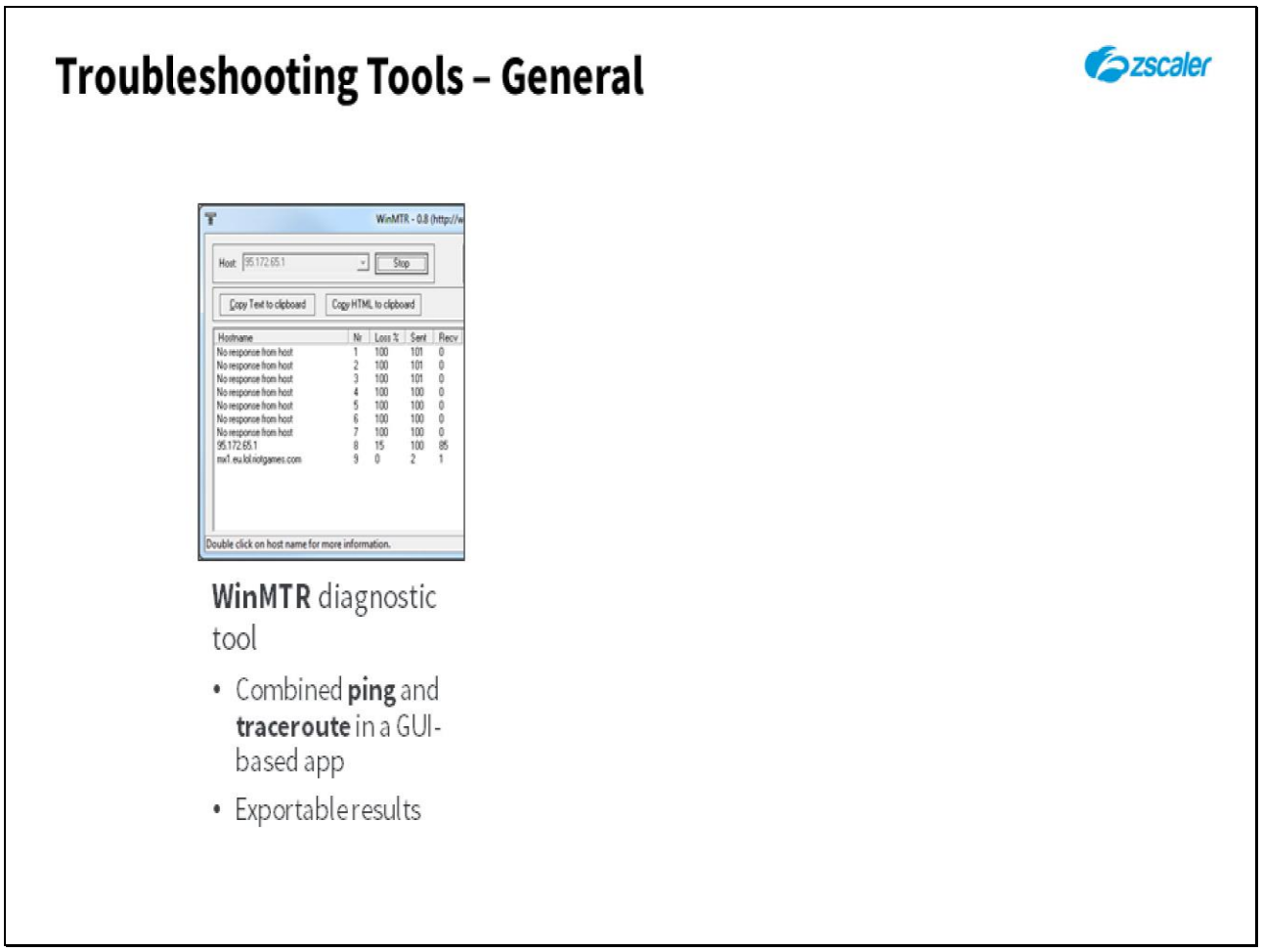
Slide 8 - Troubleshooting Tools – General



Slide notes

You can also use the **nslookup** network administration command-line tool for querying the Domain Name System (DNS) to obtain domain name or IP address mapping or for any specific DNS record. You can use this utility to forward resolve a FQDN to an IP address, or reverse resolve a public IP address to the matching FQDN.

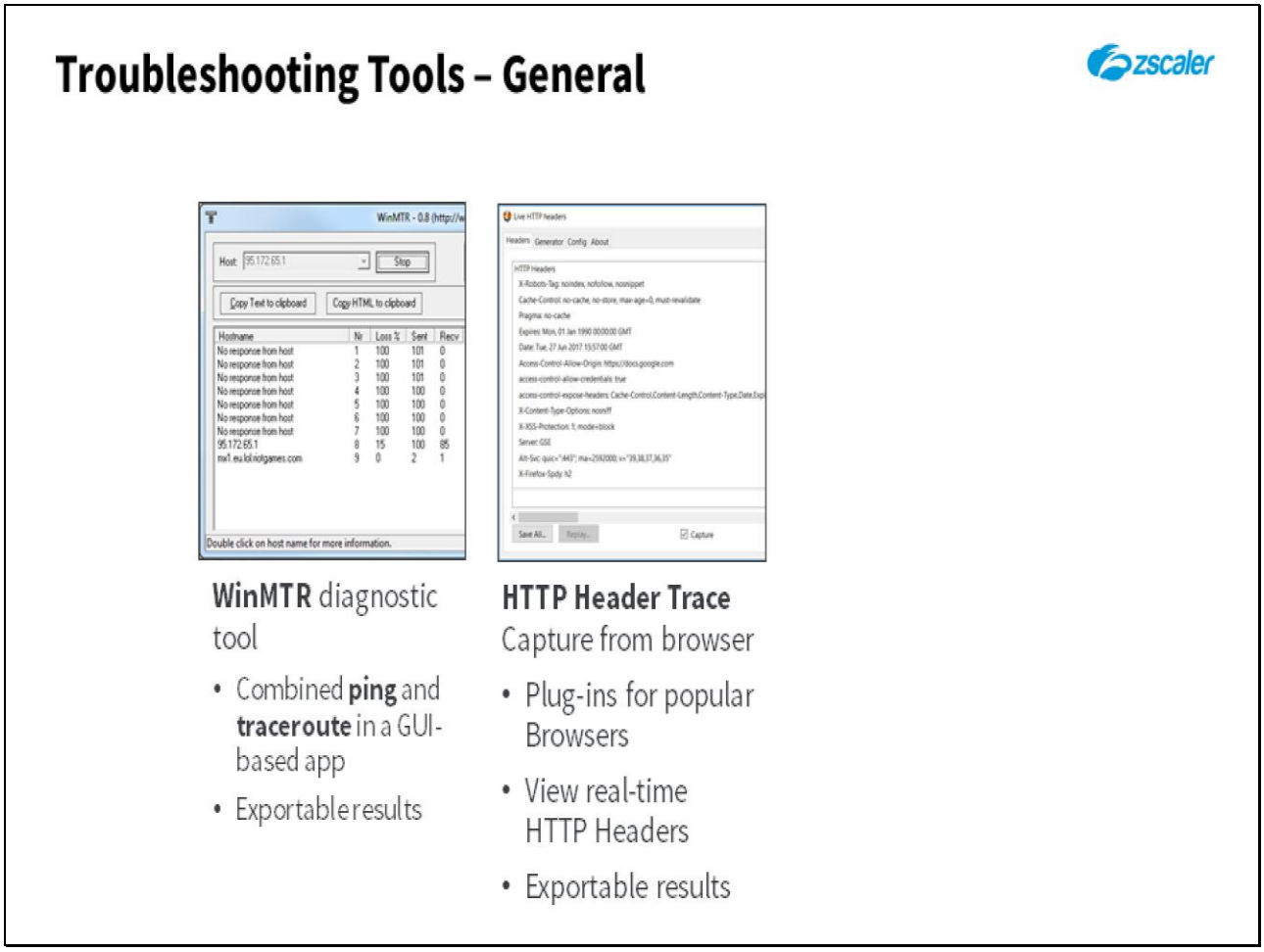
Slide 9 - Troubleshooting Tools – General



Slide notes

The **WinMTR** utility combines the functions of the command line ‘ping’ and ‘traceroute’ commands in a GUI-based application for Windows. It also allows for the export of data to a file, which could subsequently be uploaded to a support ticket if necessary.

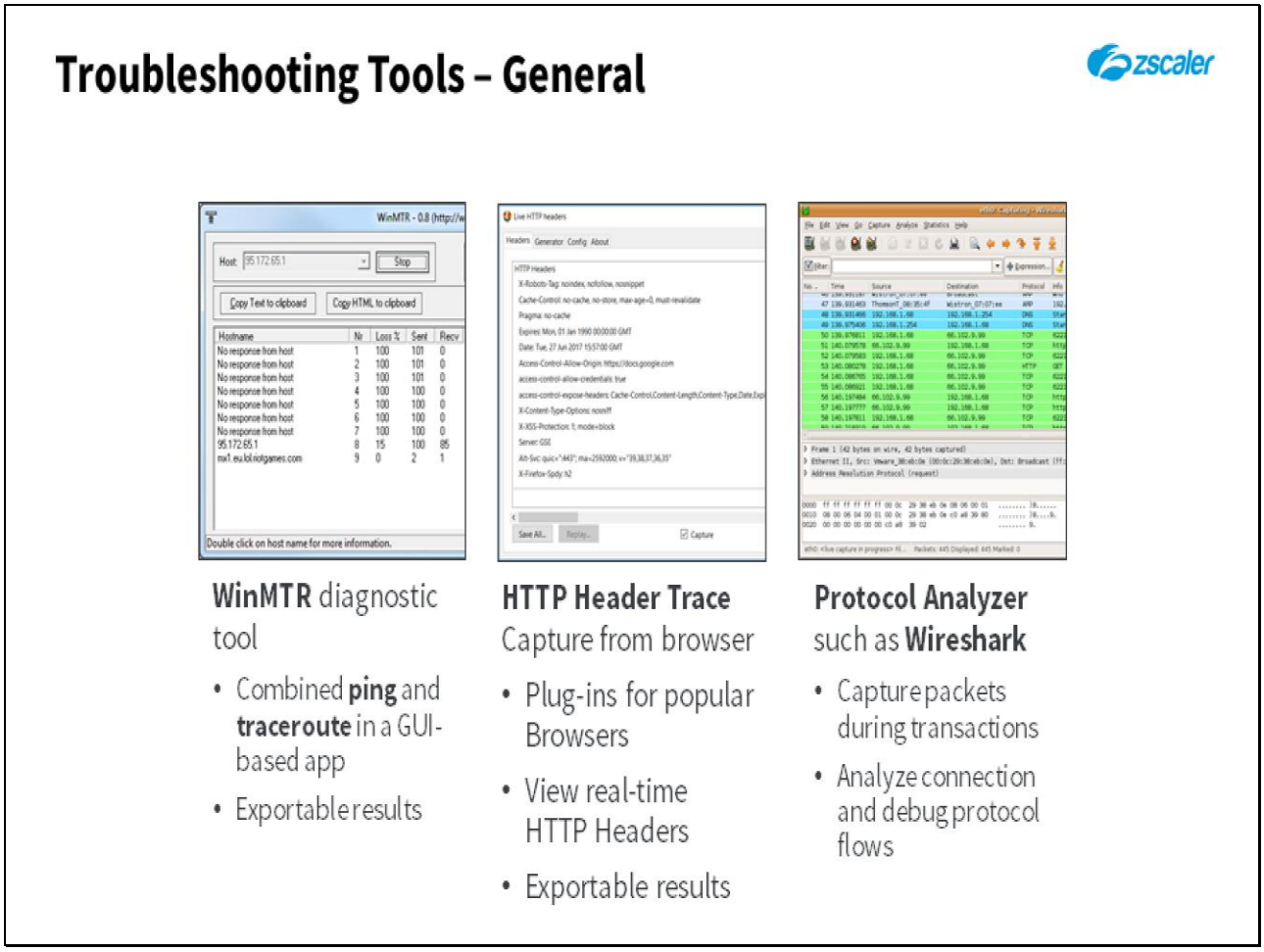
Slide 10 - Troubleshooting Tools – General



Slide notes

HTTP Header trace plug-ins are available for most popular Browsers, that give real-time visibility into the HTTP headers as pages load. The results can be saved into a file that can be provided to Zscaler Technical Support.

Slide 11 - Troubleshooting Tools – General



Slide notes

If necessary, you can also use a Protocol Analyzer such as Wireshark, to capture packets on the wire as transactions take place. The packet captures can be saved to file for analysis of the protocol flows, or to be uploaded to a support ticket.

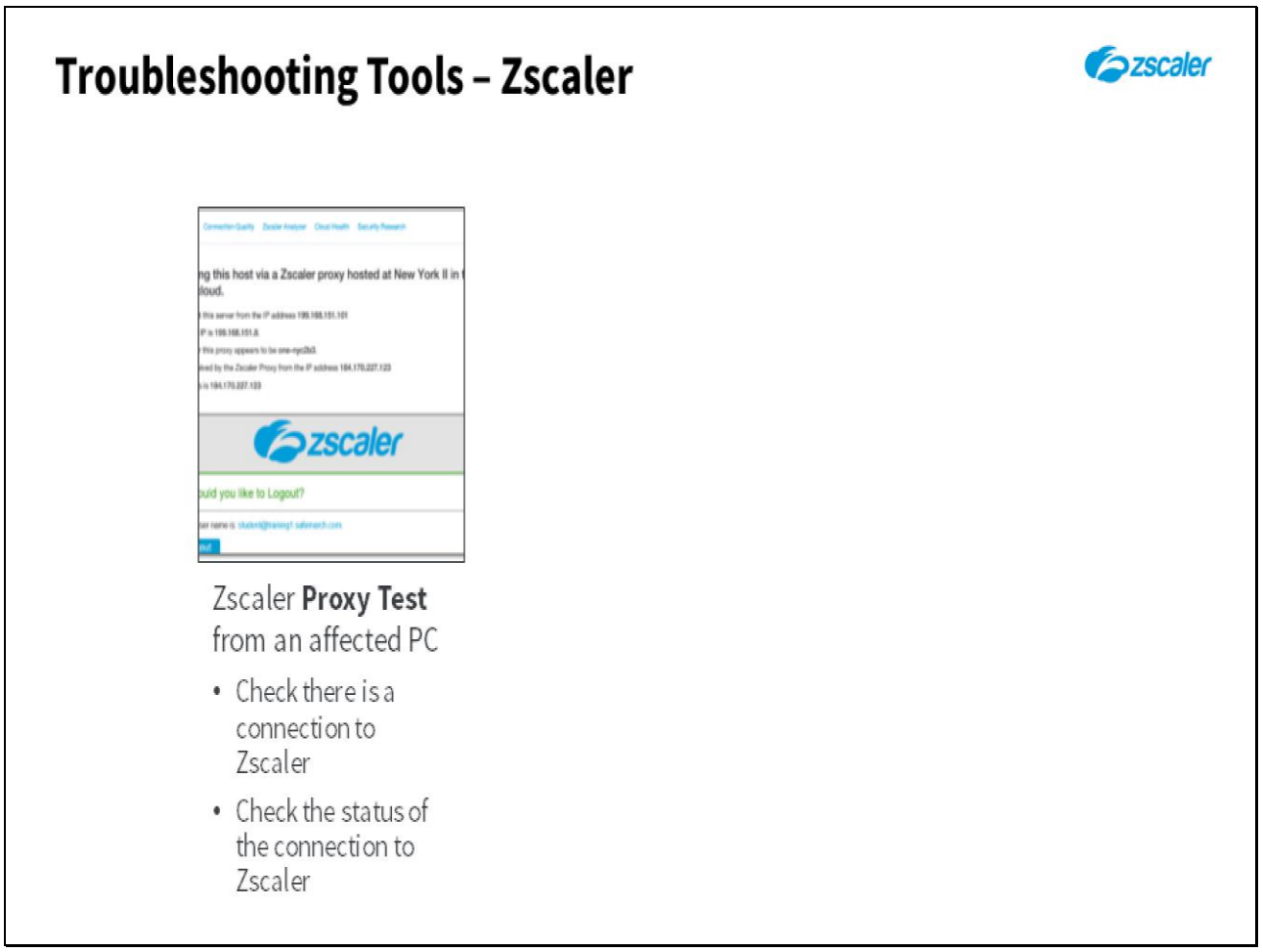
Note that a Protocol Analyzer should be a tool of last resort, as it can be quite a labor-intensive process to actually capture the traces. You must first identify where the captures are required and get an Analyzer in place, and you may need to do simultaneous captures at multiple places on the network path.

Slide 12 - Zscaler Troubleshooting Tools

Slide notes

In the final section, we will look at some of the Zscaler-specific troubleshooting tools available.

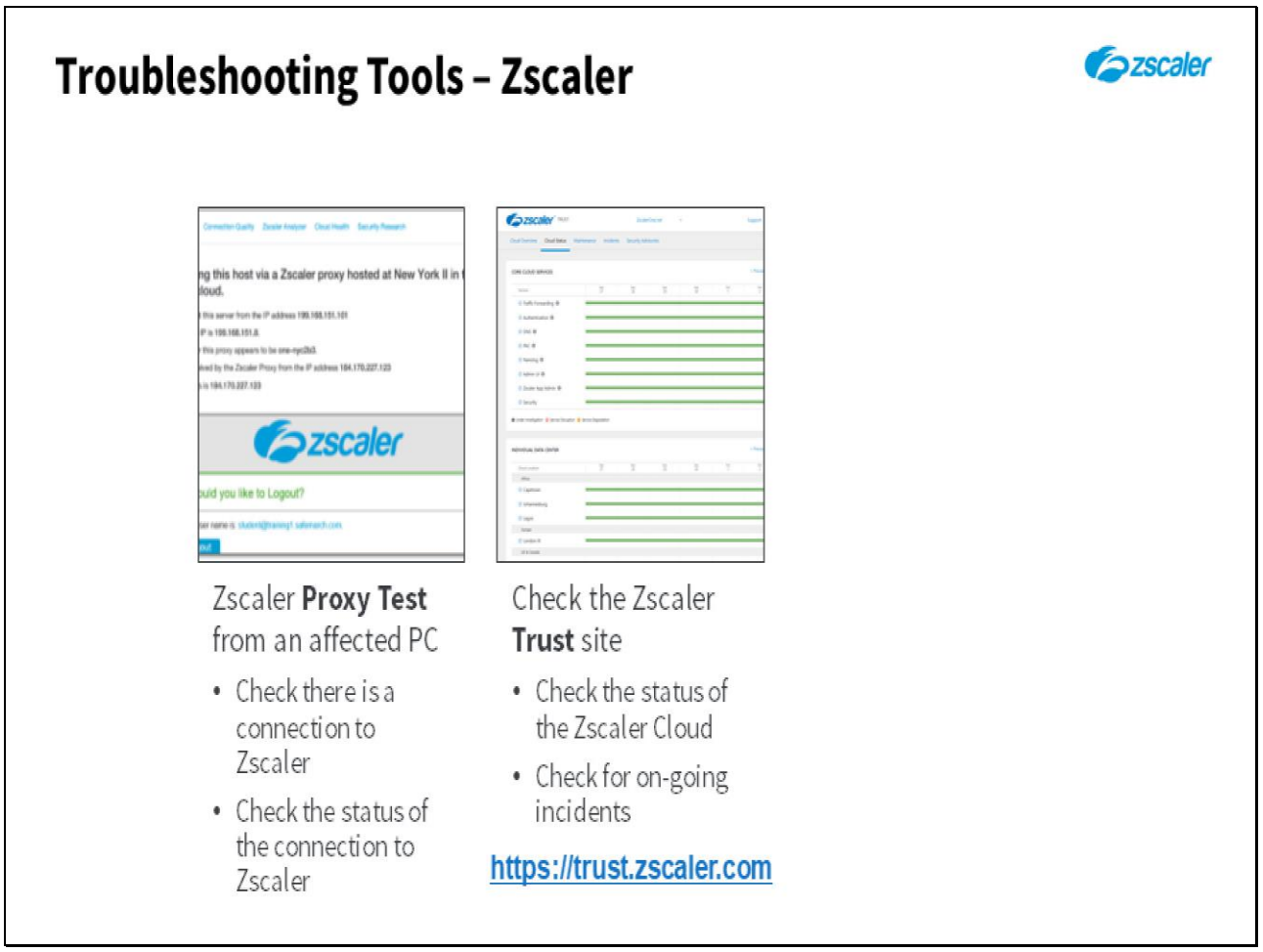
Slide 13 - Troubleshooting Tools – Zscaler



Slide notes

The first Zscaler tool you should try, is the Zscaler **Proxy Test** Website. Accessed from an affected device, this tool is discussed in detail in the 'Problem Localization' module. The output from the Proxy test page can show you if there is a connection through Zscaler or not, and if so what the status of that connection is.

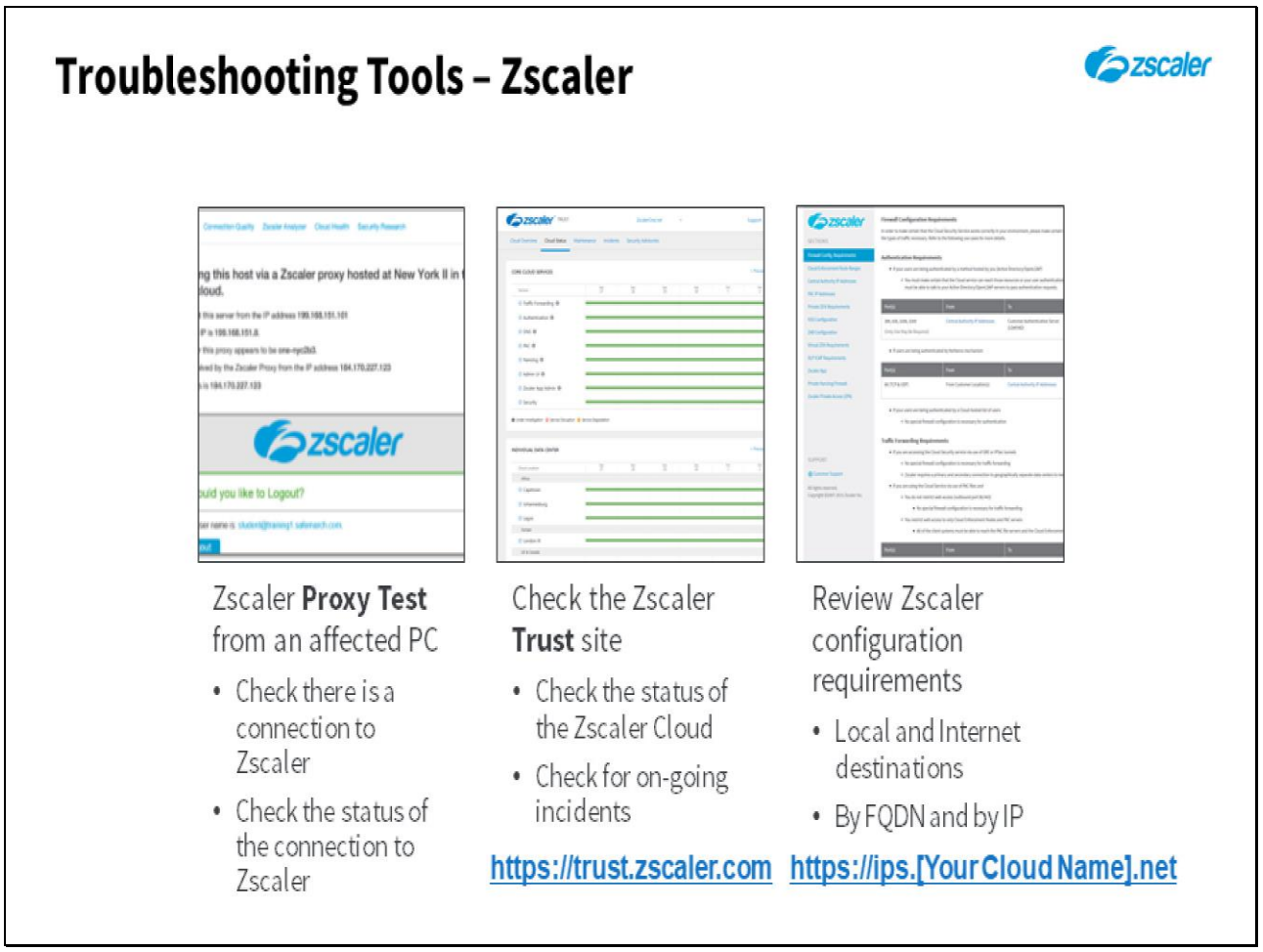
Slide 14 - Troubleshooting Tools – Zscaler



Slide notes

Next, you should check the Zscaler Trust page for the appropriate Cloud, accessed through the page at **https://trust.zscaler.com**, to check for known outages or issues.

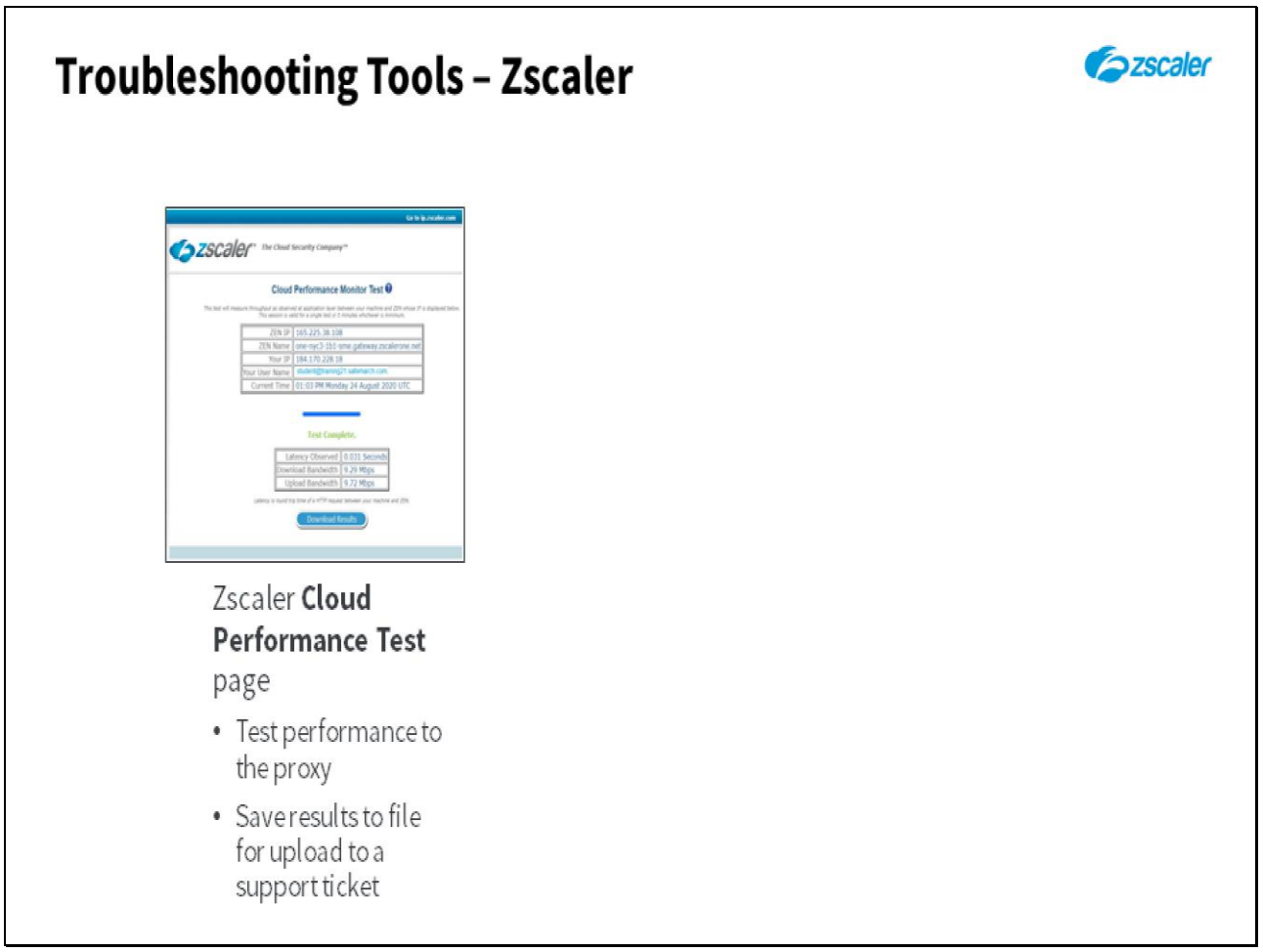
Slide 15 - Troubleshooting Tools – Zscaler



Slide notes

If necessary, you can use the Cloud-specific configuration pages at **https://ips.[Your Cloud Name].net** (where [Your Cloud Name] is the Cloud that you are provisioned on), to review what your settings should be, and check for misconfigurations.

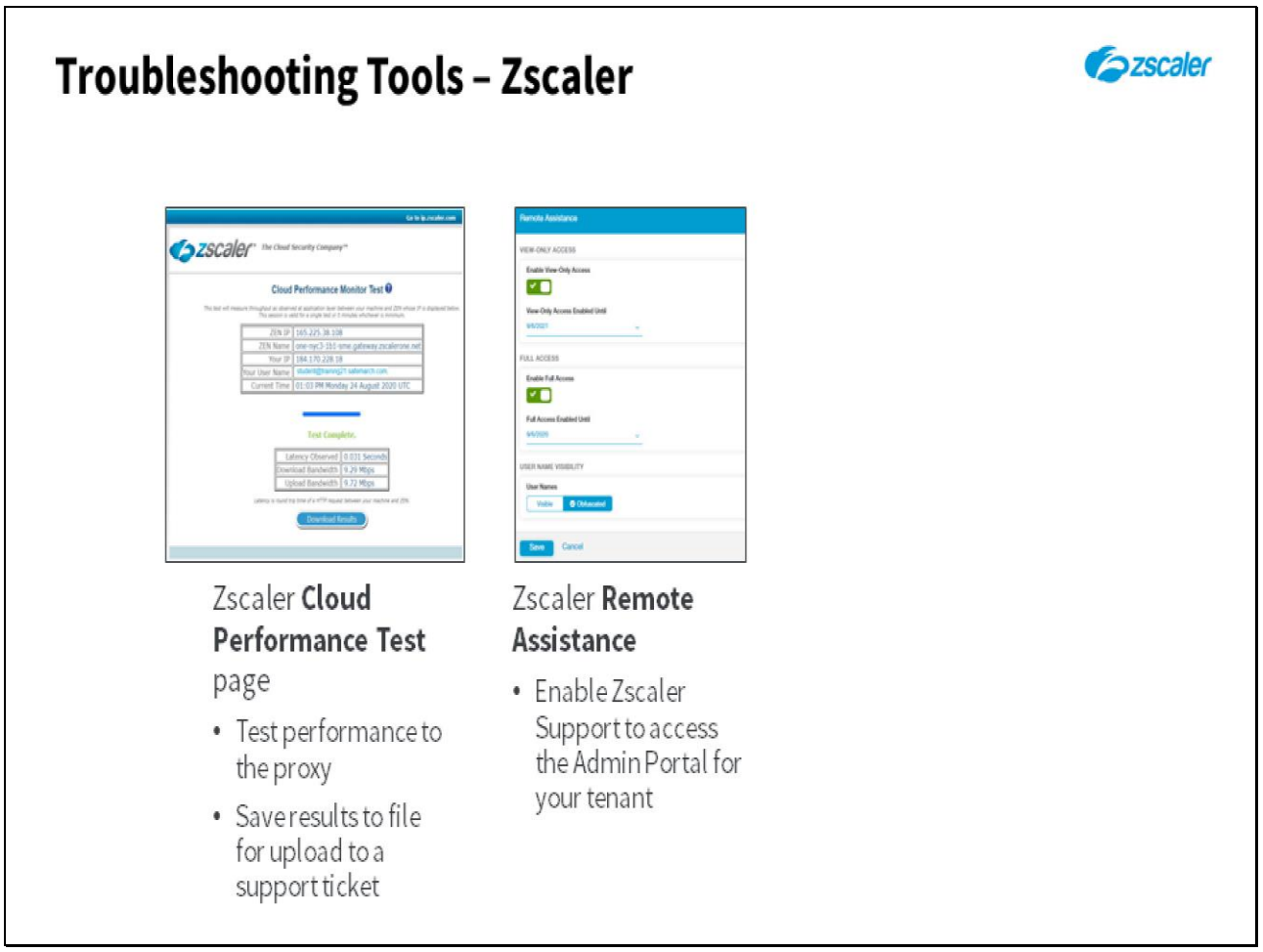
Slide 16 - Troubleshooting Tools – Zscaler



Slide notes

The **Cloud Performance Test** page, accessible from the **Connection Quality l**ink on the Proxy Test page, can be used to test performance to the Zscaler Proxy. The results can be saved to a file for upload to a support ticket if necessary.

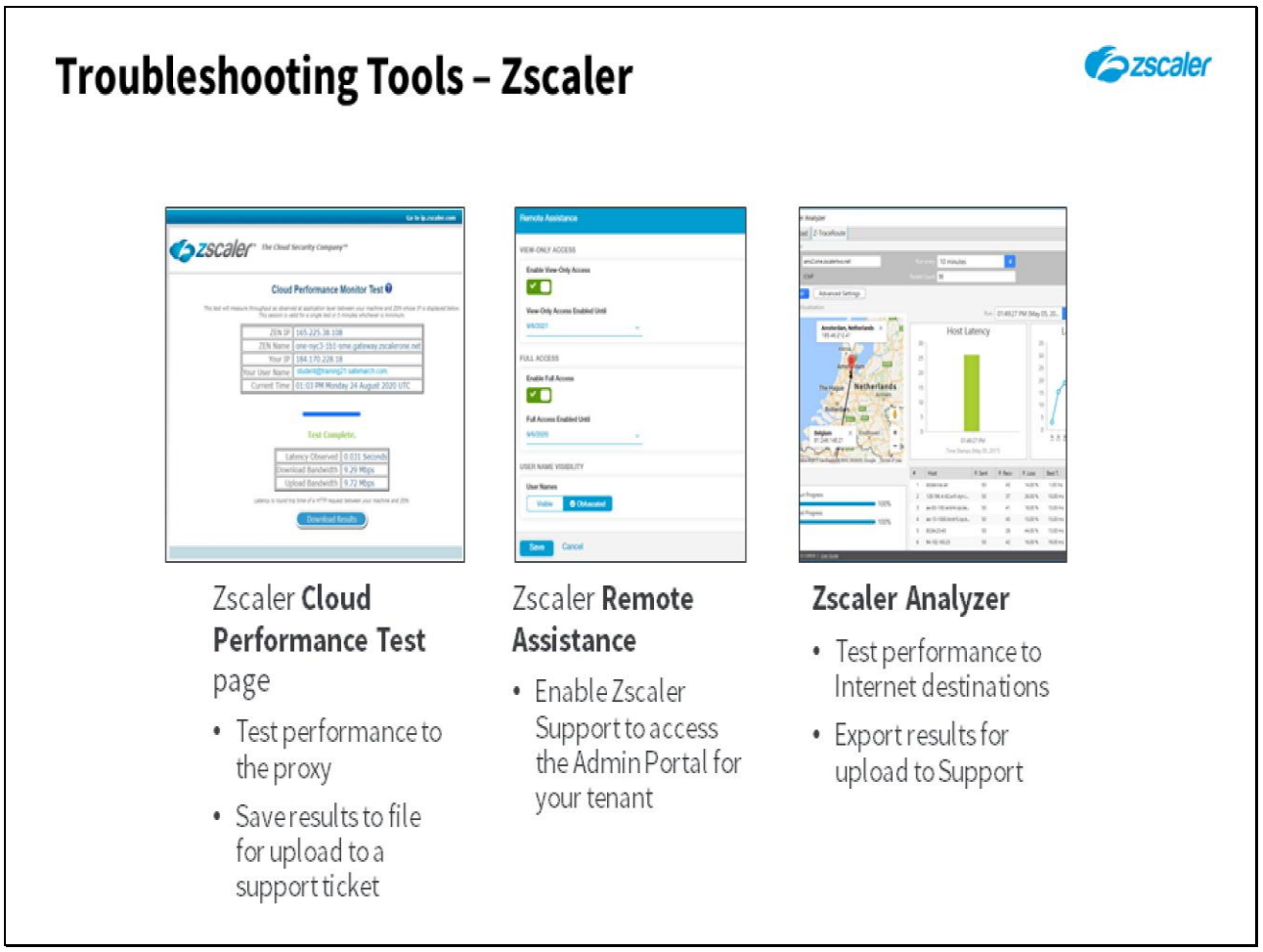
Slide 17 - Troubleshooting Tools – Zscaler



Slide notes

Remote Assistance can be enabled by an administrator at your Zscaler Admin Portal, to allow Zscaler Support to review your settings and Policy configurations and assignments.

Slide 18 - Troubleshooting Tools – Zscaler

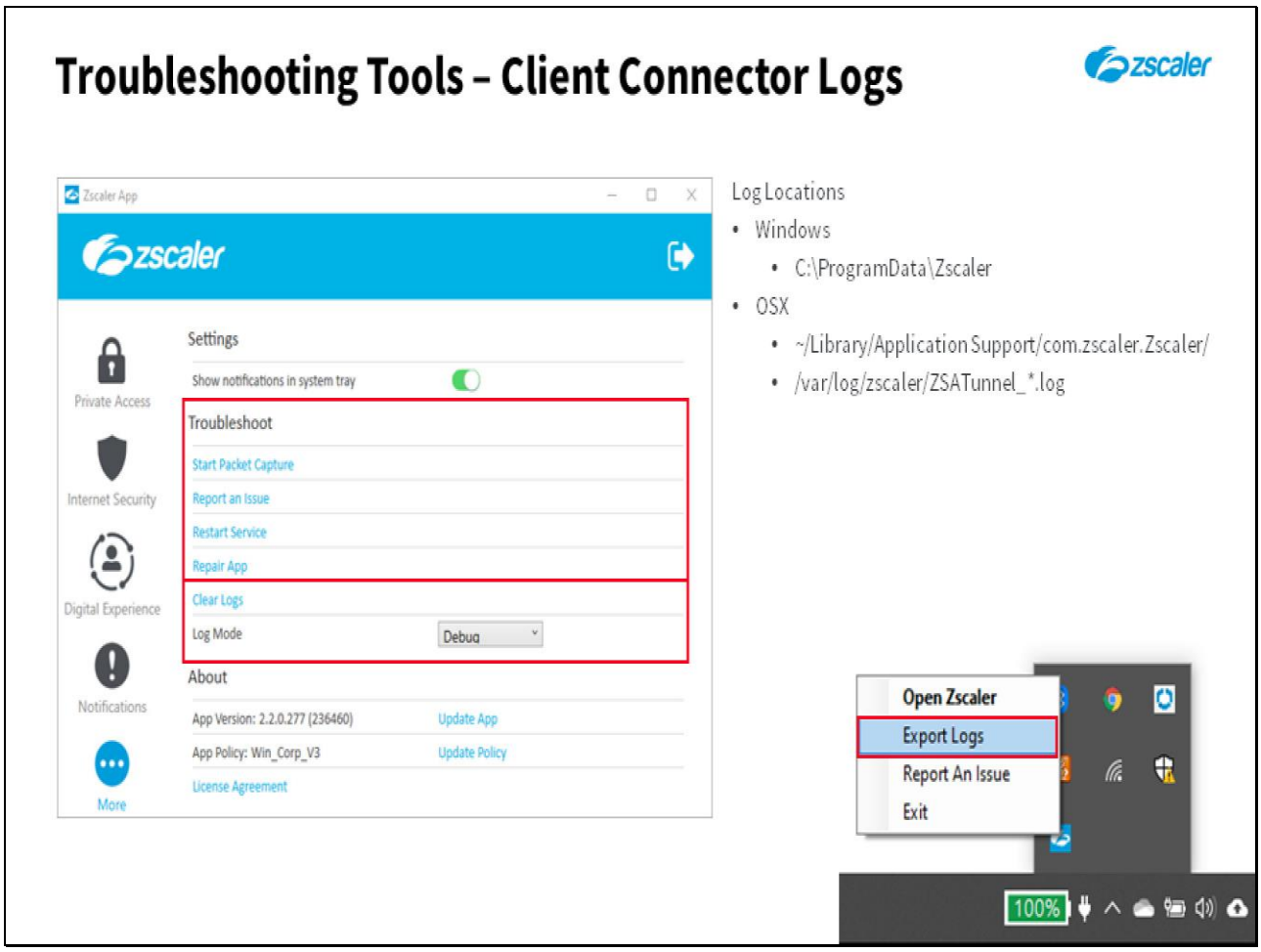


Slide notes

The Zscaler **Network Analyzer** can be downloaded from the Help Portal **Tools** page, or from the Proxy Test page.

It can be used to analyze the path between your location and the ZIA Public Service Edge that you are connecting through, or analyze the time it takes for your Browser to load a Web page. The results can be saved to file for upload to a support ticket.

Slide 19 - Troubleshooting Tools – Client Connector Logs

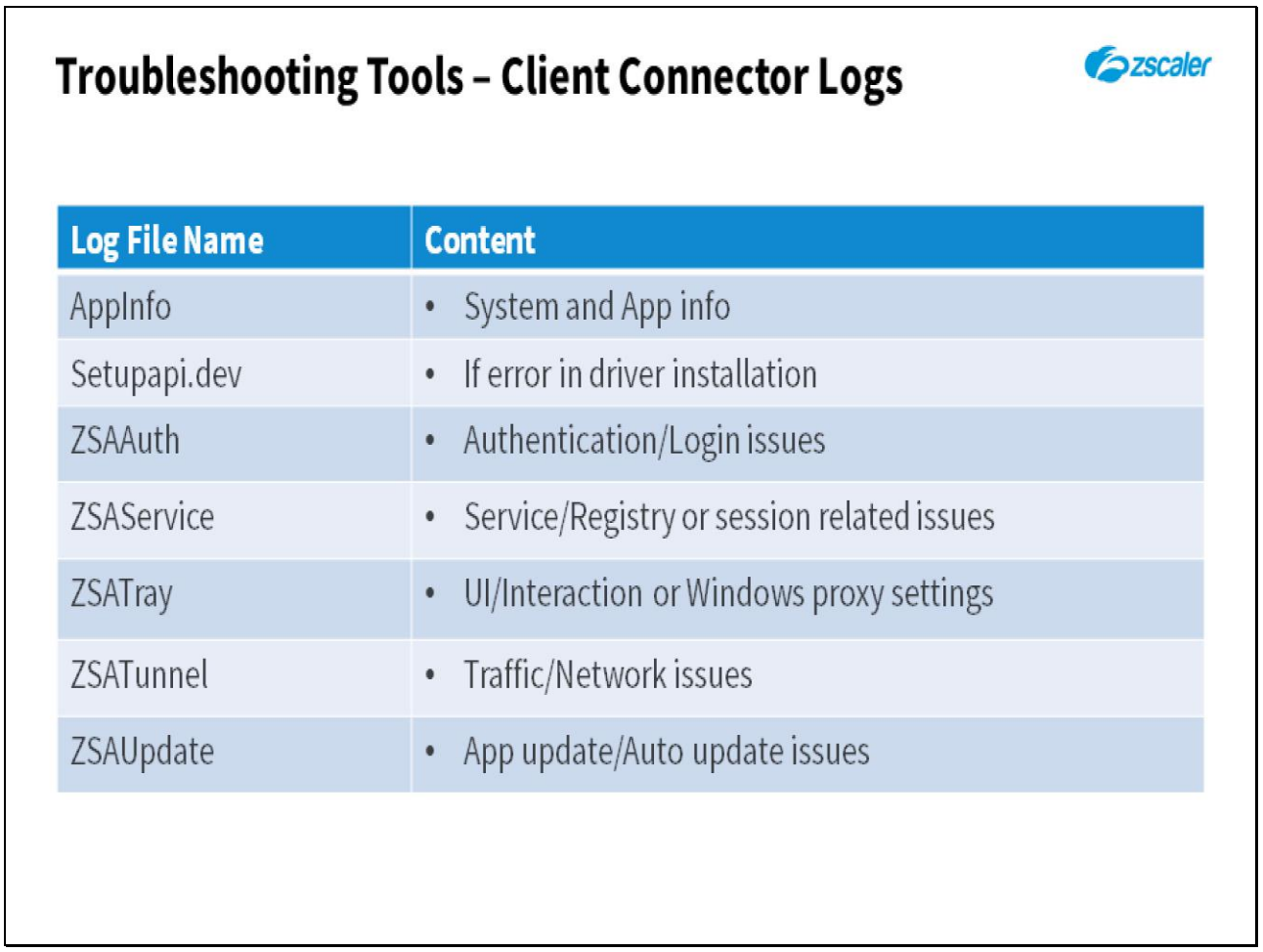


Slide notes

The troubleshooting tools available on the **More** tab of the Client Connector can be enabled in the Client Connector portal, under **Administration> Zscaler App Support**. Besides being able to clear log files, you can also set different log modes that determine what type of information is stored in the various logs. For example, the **Debug** Mode logs all client connector activity that could assist Zscaler Support with troubleshooting issues.

To manually collect the log files, navigate to the directories listed here. The recommended way to collect the log files is by using the **Export Logs** function. Log files are then exported as a zip file which can be attached to a support ticket.

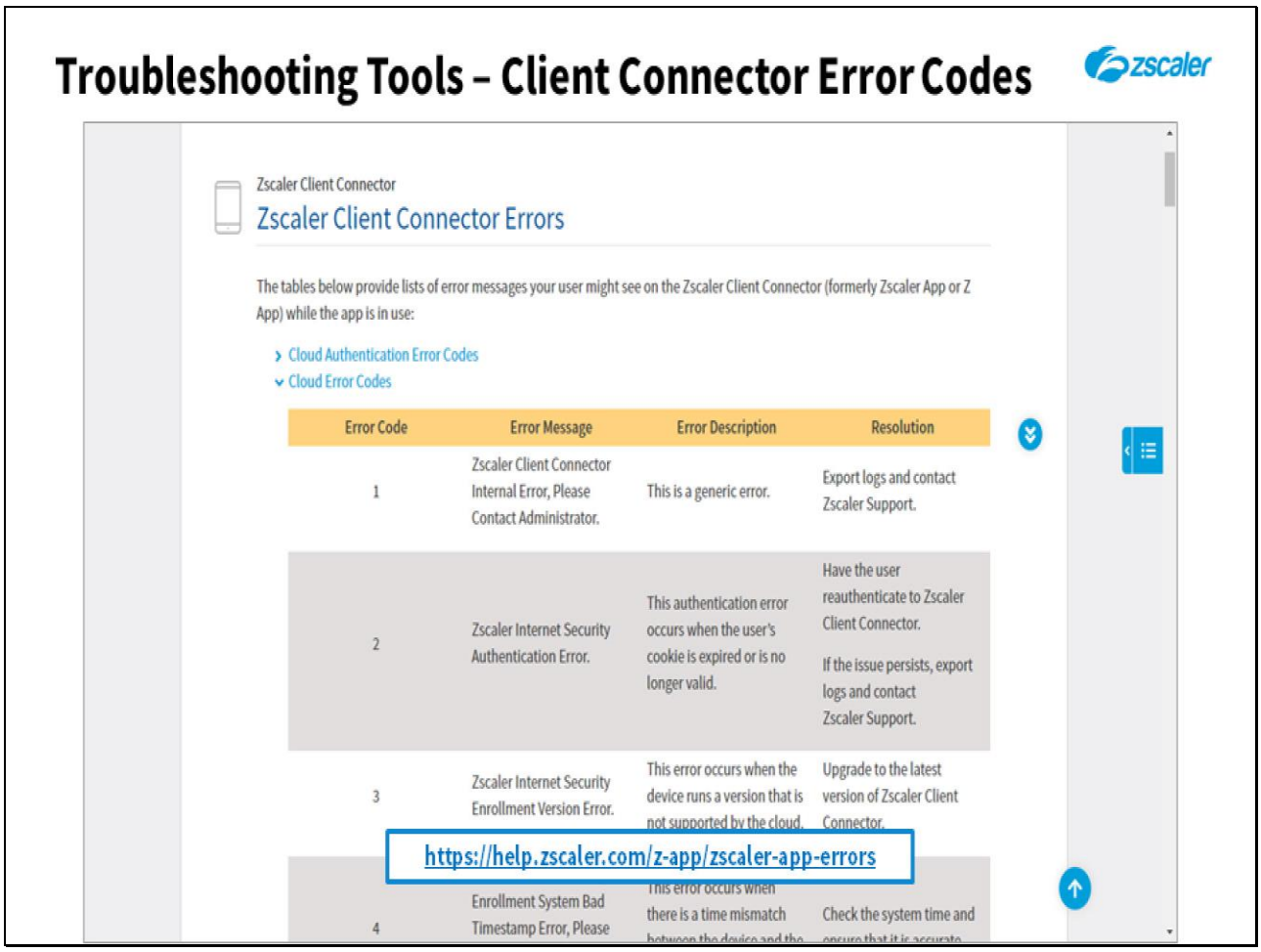
Slide 20 - Troubleshooting Tools – Client Connector Logs



Slide notes

This table lists the log filenames and what type of information is contained in each of the files.

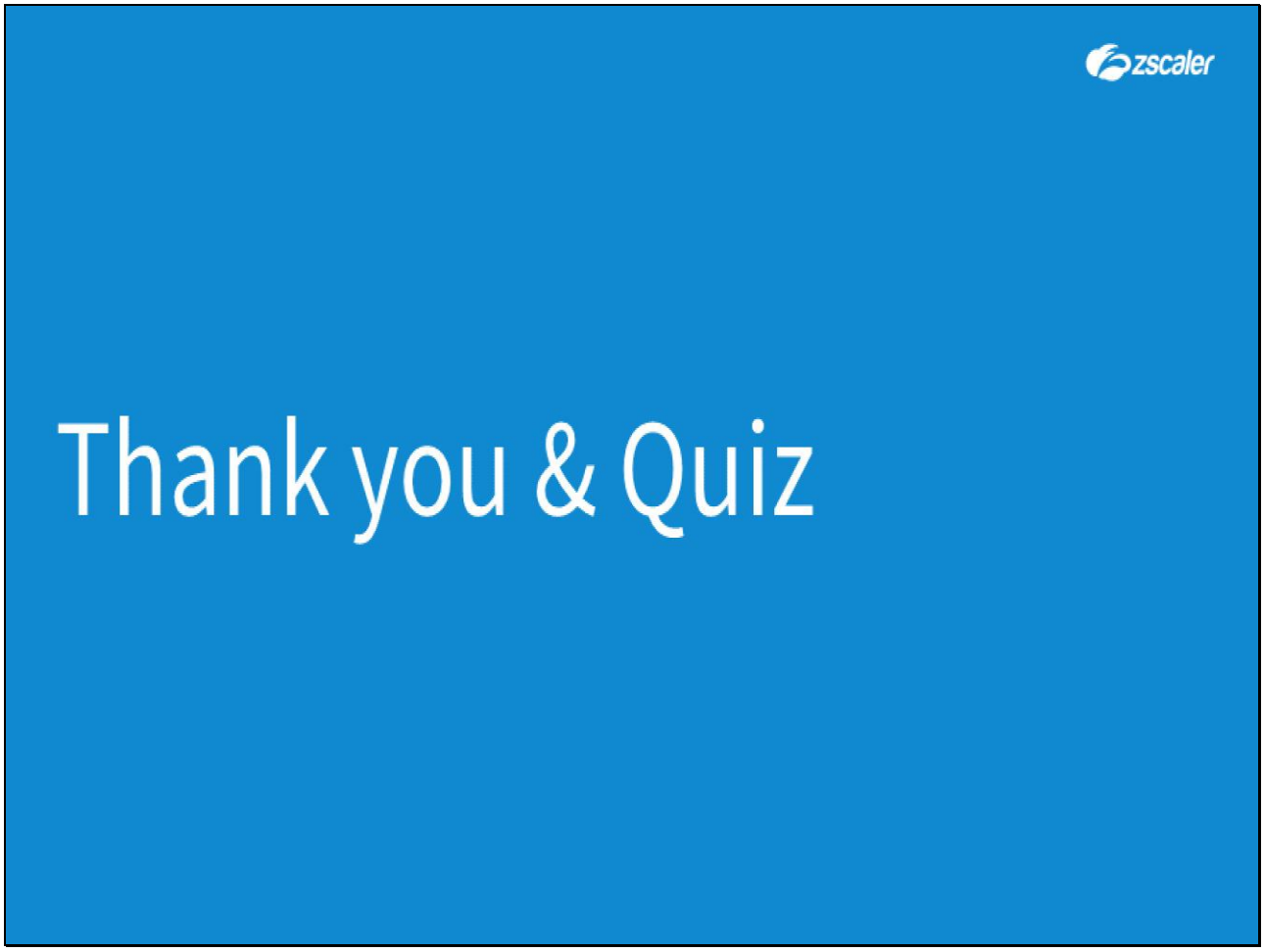
Slide 21 - Troubleshooting Tools – Client Connector Error Codes



Slide notes

The Help portal URL listed here provides more detailed information about any Client Connector error codes that you may see in the log files.

Slide 22 - Thank you & Quiz



Slide notes

Thank you for following this training module on ZIA troubleshooting tools. We hope this module has been useful to you and thank you for your time.

What follows is a short quiz to test your knowledge of the material presented during this module. You may retake the quiz as many times as necessary in order to pass.