Eidola™ Frequently Asked Questions

1. What other gear and software is required to support the use of Eidola devices?

Basically, you just plug the Eidola device into the network with the devices under test and do the same with a laptop or you can connect wirelessly to the device with the laptop or tablet (you will always need to connect the device to the network with the devices under test). IDmachines provides cabling for testing devices for conformance, configuration and maintenance of the Open Supervised Device Protocol (OSDP).

- Managed switch and network cable
- RS-485 cables (USB to RS-485, "Meter in the Middle" and Pigtails) for OSDP
- Laptop or tablet with wireless (802.11) connection
- For Windows® devices:

File Transfer: WinSCPCommand Line: PuTTY

- For Android®
 - File Transfer: Different options, e.g. AndFTP
 Command Line: Different options e.g. MobileSSH
- Alternately a keyboard and monitor can be connected directly via USB and HDMI or mini-HDMI ports.

2. What do you get with an Eidola maintenance contract?

This depends if you are on a subscription or perpetual license with a maintenance and service agreement. The annual subscription service and maintenance agreement provides coverage on the hardware and software in the Eidola-01 and Eidola-02 units. Device updates and new devices (and manufacturers) as well as replacement of devices are covered under a subscription. The contract provides free software updates to the current shipping Eidola units. In the case of a perpetual license and maintenance and service agreement all software updates are covered. For hardware under a maintenance and service agreement:

The Eidola-01a, b (EiBlock™ and EiBrick™) units have a limited hardware warrantee depending on the model.

The Eidola-01c and 02c (EiPi™) units do not have a hardware warrantee. We replace it for \$250.

3. Do I need to set the time on the Eidola units?

The Eidola units have settings for a time server that will set the system time but they must be properly configured on the time server network, go to the parameters setting for NTP Server. The EiPi™ units do NOT have a battery backed clock and time should be set on these units. This can be done from the command prompt. Connect to the device over the network, e.g. and open shell and command line with the PuTTY application or with a keyboard and monitor. Once logged in use the Linux date command to set the date and time"

Date -s "DD Month YYYY hh:mm:ss TMZ" time is optional and ss in time in optional, TMZ is timezone. You may need to get sudo (admin rights), i.e. sudo bash or bash before command.

4. How do I use Eidola in infrastructure mode and what does that mean?

Infrastructure mode means that the Eidola device is set up to provide the network infrastructure to support a network. This typically means that there is no other network infrastructure meaning no other DNS, Gateway, DHCP, etc. This allows a test bed or "sandbox" to be created that can be set up to mimic the network on which the system or component will be deployed. This set of features is different from the tester diagnostics that are used to gather information about the network, its devices and how they are configured and communicating. It also means that a technician confronted with a service call, where the network is down still can create a "pop-up" network and still be able to use the diagnostics to gather information.

5. What are the plans for the product and what does the roadmap look like?

We intend to focus on usability primarily in the next phase making it easier to configure and get data on and off the devices. This includes documenting options for integration of JSON (and XML) outputs of the diagnostics, and dashboard integrations. We have plans for analytics highlighting open ports, poor authentication (e.g. not doing TLS 1.2 properly), outdated firmware, etc. on the short-term roadmap, whereas these are now results returned. IDmachines offers analysis as a service and can also training users. Our commitment to technical automation throughout the system lifecycle means we intend to keep an equal focus ease of configuration, integration and use as well as ease of analysis in our quest for improved usability.

6. Are there any particular new functions on that roadmap?

We put quite a lot in the 2.0 release, 2.1 has PIV and SNMP v3 functionality and related tools (along with the launch of piv-i.com). And please let us know what you would like to see.

7. Are there things under the hood that someone who is comfortable with a Linux command prompt could use?

Good question, in fact the underlying code has a very wide range of capabilities as the platform combines a significant number of libraries. We don't promote these but feel free to "take command".

8. Might a network administrator have a problem if these diagnostics are run on his network?

Another good question, unless the network is completely isolated and run by the security organization (which can be done using the Eidola sandbox capability) it is imperative that the use of the Eidola product be coordinated with the enterprise IT department. One of the primary tools in the Eidola toolkit is network mapping (NMAP). This is a common IT tool but it is also a tool used by hackers and adversaries to probe for network vulnerabilities. IDmachines suggests that the IT department always be put into the loop and given a heads up when that the diagnostics are going to be run. This presents a good opportunity to build bridges to the IT department and also learn about the tools they have in their toolbox. They will likely be very interested to know that the physical security components are targeted for enterprise network readiness.

9. Are there specific items to engage IT on related to the Eidola product?

There are a number of things that overlap with the Eidola platform that present an opportunity to engage with IT. One item in particular is the use of digital certificates for device authentication. Ask the IT department if they have a certificate policy and certificate profile for networked devices. The other is whether or not the have an addressing scheme and fully qualified domain names. In most cases it is a requirement to engage with IT in order to get IP addresses, switches and the basic network infrastructure in order to run a modern physical security system, Eidola simply extends that conversation.

10. How do I set up and use the OSDP diagnostics?

The OSDP diagnostic are used by connecting the Eidola device with a USB to RS-485 converter and connecting this to a pigtail on an RS-485 Eidola "meter in the middle" cable. Application Notes #5 and #6 for more details.