CT919 LANforge ICE 2 Mbps WAN Emulator

The CT919 is an excellent choice for a portable network emulator supporting speeds up to 2 Mbps (bi-directional). The CT919 has no moving parts and will fit into a small travel bag or briefcase for easy portability. It is also completely silent, so you can include it in your customer demos and presentations. No additional hardware or software is required, but it is suggested that you manage the system using the LANforge GUI on a separate machine. The CT919 can also be managed over serial console in text mode.

NOTE: This product may have a different hardware configuration than the system pictured above. Refer to your official quote for details.
Quick Start Guide

1. Connect Management Ethernet port to Management network or management PC.
2. Connect Client to eth0 and Server to eth1. The eth0 <-> eth1 interfaces will be bridged and this bridge will inject the network emulation.
3. Connect power brick to standard US or European AC power source.
4. Install the LANforge GUI on a separate management PC or Laptop. Windows and Linux GUIs are supported: Select the correct one from the CDROM or Candela Technologies Download page and install it.
5. The CT919 should now boot. If DHCP is enabled on the Management network, the CT919 will automatically acquire an IP address. If DHCP is not available, the IP address will be set to 192.168.1.101 by the LANforge scripts.
6. Start the LANforge GUI on the management PC and click the 'Discover' button. It should find the CT919 appliance and add the IP address to the drop-down box in the Connect widget. Press 'Connect' and you will be connected to the CT919.
7. Select the WanLinks tab in the GUI. One of the pre-configured tests should already be running. You may double-click the row in the top section to modify the configuration. You can also view a real-time report of the test with the 'Display' button. Any modifications take place immediately after you click 'Submit'.

LANforge-ICE Related Screen Shots

WanLinks Tab
### WanLink Display

#### WANLink for Selected Test Manager

<table>
<thead>
<tr>
<th>Name</th>
<th>SID</th>
<th>K-M</th>
<th>State</th>
<th>Endpoints (A &lt;-&gt; B)</th>
<th>Pkt Tx A-&gt;B</th>
<th>Pkt Tx A&lt;B</th>
<th>Rate A-&gt;B</th>
<th>Rate A&lt;B</th>
<th>Pkt Timer</th>
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</thead>
<tbody>
<tr>
<td>VRWL-11000</td>
<td>5.22</td>
<td>Run</td>
<td>VRWL-11000-A...</td>
<td>559,080</td>
<td>439,422</td>
<td>1,000,000</td>
<td>1,000,000</td>
<td>1,000,000</td>
<td>1,000,000</td>
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<tr>
<td>VRWL-11001</td>
<td>5.3</td>
<td>Run</td>
<td>VRWL-11001-A...</td>
<td>4,004,105</td>
<td>4,058,228</td>
<td>1,000,000</td>
<td>1,000,000</td>
<td>1,000,000</td>
<td>1,000,000</td>
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<tr>
<td>VRWL-11002</td>
<td>5.2</td>
<td>Run</td>
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<td>18,632</td>
<td>18,599</td>
<td>44,736,000</td>
<td>44,736,000</td>
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<td>44,736,000</td>
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<tr>
<td>VRWL-11003</td>
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#### All WANLink Endpoints

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<th>Name</th>
<th>Run</th>
<th>Script</th>
<th>Max Rate</th>
<th>Tx Pkts</th>
<th>Rx Pkts</th>
<th>Tx Rate</th>
<th>Tx Drop %</th>
<th>Dropped</th>
<th>Tx-Failed</th>
<th>Failed-Late</th>
<th>TX Bytes</th>
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<tbody>
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<tr>
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<tr>
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<td>3,986,511</td>
</tr>
</tbody>
</table>

Logged in to: 192.168.100.138:4002 as: Admin
Create/Modify WanLink Window
Software Features

1. General purpose WAN and Network impairment emulator.
2. Able to simulate DS1/T1, ADSL, CableModem, Satellite links and other rate-limited networks, from 10 bps up to 2 Mbps (full duplex).
4. Supports Packet corruptions, including bit-flips, bit-transposes and byte-overwrites.
5. Supports WanPath feature to allow configuration of specific behavior between different IP subnets, MAC addresses or other packet filters using a single pair of physical interfaces. WanPath support may require purchase of additional WanPath licenses, please ask your sales contact for more information.
6. Supports routed and bridged mode for more flexibility in how you configure your network and LANforge-ICE.
7. Supports WAN emulation across virtual 802.1Q VLAN interfaces more efficient use of limited physical network interfaces.
8. Supports 'WAN-Playback' allowing one to capture the characteristics of a live WAN and later have LANforge-ICE emulate those captured characteristics. The playback file is in XML format, and can be easily created by hand or with scripts. The free LANforge-ICEcap tool can be used to probe networks and automatically create the XML playback file.
9. Allows packet sniffing and network protocol decoding with the integrated Wireshark protocol sniffer.
10. Includes comprehensive management information detailing all aspects of the LANforge system including processor statistics, test cases, and Ethernet port statistics.
11. GUI runs as Java application on Linux, Solaris and Microsoft Operating Systems (among others).
12. GUI can run remotely, even over low-bandwidth links to accommodate the needs of the users.
13. Central management application can manage multiple units, tests, and testers simultaneously.
14. Includes easy built-in scripting to automatically iterate through bandwidth, latency and other settings. Advanced programatic scripting over a TCP socket also supported and example perl libraries and scripts are included.
15. Automatic discovery of LANforge resources simplifies maintenance and configuration of LANforge test equipment.

**Hardware Specification**

1. Midrange Appliance with no moving parts.
2. Operating System: Fedora Linux with customized Linux kernel.
3. 6 1Gbps Ethernet ports.
4. Supports bypass (fail open) on two Ethernet ports.
5. 1.66 GHz Dual Core Intel Atom D510 processor.
6. RJ45 Serial console (38400 8 N 1) for console management & initial configuration.
7. 2 GB RAM.
8. 16 GB Solid State Hard Drive.
9. Larger storage drive and compact-flash available.
10. +12v 5AMP external power supply (brick).
11. Weight: 3.3 lbs or 1.5 kg.
12. Dimensions: 11 x 6 x 1.6 inches  Metric: 268 x 145 x 40 mm.
13. Operating Temperature: 0 ~ 40°C.
14. Operating Humidity: 5 ~ 95%.

List Price: $1,995  List Price with 1 Year support (17%): $2,334

**Additional Feature Upgrades**

Unless otherwise noted in the product description, these features usually cost extra:

- WanPaths (LANforge-ICE feature set)
- Virtual Interfaces: MAC-VLANs, 802.1Q VLANs, WiFi stations, etc
- LANforge FIRE traffic generation.
- VOIP: Each concurrent call over the included package requires a license.
- Armageddon: Each pair of ports requires a license if not already included.
- External battery pack: 12+ hours for CT521, CT523, CT919, CT92X platforms. Ask for others.