ONcast will change the way you architect your secure virtual network. ONcast differs from traditional VPN’s in that it does not require a dedicated trusted VPN gateway server; rather, the system provides for encrypting data peer-to-peer.

ONcast is a software package for configuring, managing, and deploying secure virtual networks. ONcast allows network servers and clients to communicate via the internet protocol (IP) as if though they are physically connected on the same network via a virtual Layer 2 across Layer 3 networks.

The ONcast network architecture also allows for traditional Multicast traffic to run over networks that traditionally don’t support Multicast, for example cellular networks, and enables traditional Government Multicast applications to run across cellular networks without any modifications to the applications.
KEY BENEFITS

ONcast implements an encrypted virtualized Ethernet layer on top of a routed end to end network.

Operates as a secure virtualized switch, allowing clients and servers located anywhere on the routed IP network to operate as if they are directly connected while potentially physically being located anywhere in the world.

EASE OF USE

Highly Customizable: Advanced Routing Rules allows you to customize data flow within your network

Fast Access: adding a user or sharing access to other networks is easy.

Intuitive Design: Viewing all available network controllers is available through the web portal and allows for monitoring system up time and license status.

ONCAST FIGURES AND FACTS

KEY COMPONENTS

<table>
<thead>
<tr>
<th>KEY COMPONENTS</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ONCAST CLIENT</td>
<td>Used to connect devices to one or more of the ONcast encrypted networks</td>
</tr>
<tr>
<td>ROOT SERVERS</td>
<td>Simple end-point mappers for the Client ID to the real routable IP address</td>
</tr>
<tr>
<td>CONTROLLERS</td>
<td>Manages access to the network, authorizes certificates, assigns device IP addresses</td>
</tr>
<tr>
<td>CENTRAL</td>
<td>Web-based management interface that sends commands to the controller</td>
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SUPPORTED SOFTWARE

- Android 5 and higher, Linux RPM Distributions, Windows 7 and Windows Server 2012 or higher for the ONcast Client
- Linux system for running server software
- Web-based UI for Management (e.g. Firefox, Edge, Chrome, etc.)

ENCRYPTION/AUTHENTICATION

- Uses asymmetric public key encryption Curve 25519/Ed25519, a 256 elliptic curve variant (NIST whitelisted)
- Packets encrypted end to end using 256-bit Salsa 20 and authenticated using the Poly1305 MAC algorithm.

ONcast Configuration Management: Viewing all available network controllers is available through the web portal and allows for monitoring system up time and license status.