

# Clarent® Address Server

The Scalable, Easy-to-Deploy Network Address Translation Server

**The Clarent Address Server** is a cost-effective, robust NAT solution for next generation VoIP networks.



#### Direct local network calls.

Phones on protected network communicate directly.

#### Operational cost savings.

Optimize number of public IP addresses.

**Support for IP phones and gateways.** IP phones and customer premises gateways process incoming and outgoing calls behind firewall.

#### Easy, secure management.

SSL-based Web interface provides secure management from anywhere on the network

## Clarent Address Server for the Clarent Local Access Solution

The Clarent Address Server is a highly scalable and robust Network Address Translation (NAT) appliance targeted at service providers and enterprises deploying the Clarent Local Access solution. The Clarent Address Server provides NAT functionality so that IP phones and gateways in the customer network are effectively protected from the public Internet and the number of public IP addresses used can be optimized.

When customer premises media gateways and IP Phones are deployed behind firewalls the standard NAT functions provide the address translation for the control messages between the customer premises media gateways and the Clarent Class 5 Call Manager – but does not provide the address translation for the media stream between the gateways. This is due to the fact that the media stream port number and IP address that need to be translated are in the body of the MGCP message, instead of in the header.

The Clarent Address Server solves this problem elegantly. It is an intelligent NAT device that is “application aware” and knows how to parse the body of the message to translate the IP and UDP port address. This allows Clarent CPG™ gateways to communicate with other gateways and/or IP phones behind the firewall or in the Internet, eliminating the need to put them outside the firewall.

The Clarent Address Server is simple to use and transparent to the Clarent Class 5 Call Manager and media gateways – no configuration changes occur on these devices. Once the appropriate IP address mapping is configured on the Clarent Address Server through an easy-to-use and secure Web interface, the Clarent Class 5 Call Manager automatically learns the IP and port addresses at the time of initial activity. This simplifies overall network management and delivers operational cost savings.

## The Clarent Local Access Solution

The Clarent Local Access Solution shown in the network diagram (on back) is based on the 3-tiered Clarent network architecture, which distributes the transport layer, call control layer and the intelligent network layer in separate servers and gateways, thus eliminating a single point of failure while retaining scalability and ease of management.

The Clarent Command Center™ provides the rating, routing and subscriber management services; the Clarent Class 5 Call Manager provides true Class 5 switch (central or public exchange switch) features and call control; the Clarent Element Management System provides network management and control for all the softswitch elements; Clarent gateways interface with the public switched telephone network (PSTN) while Clarent Connect servers enable connectivity among Clarent-powered networks by providing traffic sharing, real-time account settlement and least cost routing. Clarent's customer premises gateways and IP phones complete this end-to-end VoIP solution by supporting advanced features and services in the network core and extending these to the end-user. The Clarent Local Access Solution delivers the promise of the telecommunications revolution to the residential and business market by facilitating end-to-end access to advanced Internet-based communication services.



**CLARENT®**

## Specifications



### Interfaces

- One (1) RJ-45 10/100 Base-T Ethernet LAN port
- One (1) RJ-45 10/100 Base-T WAN port
- One (1) RJ-45 10/100 Base-T DMZ port

### Features

- Supports 1000 simultaneous calls (or 5000 phones or ports assuming 20% utilization)
- VoIP from inside firewall
- Direct local network calls
- Single Internet IP connection
- Secure Web-based management
- Graphic logging and reporting
- On-line firmware upgrades

### System Requirements

- Operating System - Customized Linux
- CPU - Pentium III 700 MHz
- Memory - 128 MB

### Dependencies

- Clarent Class 5 Call Manager 1.1, 2.0 or newer versions

### Standards Compliance

- Supports Internet protocols: MGCP, RTP/RTCP, TCP/IP, UDP, ICMP
- IEEE 802.3 10/100M Base T Ethernet compliant

### Provisioning

- Keypad/LCD screen, and through Web Browser.

### Power

- 110V/220V AC auto sensing

### Environmental Requirements

- Operating temp: 0-40 °C.
- Storage temp: -20-70 °C
- Humidity: 10-90% non-condensing

### Dimensions

- W 17in (431.8mm) x D 11.5in (292.1mm) x H 1.72in (43.7 mm)
- Weight: 8.5 lbs (3.86 kg)

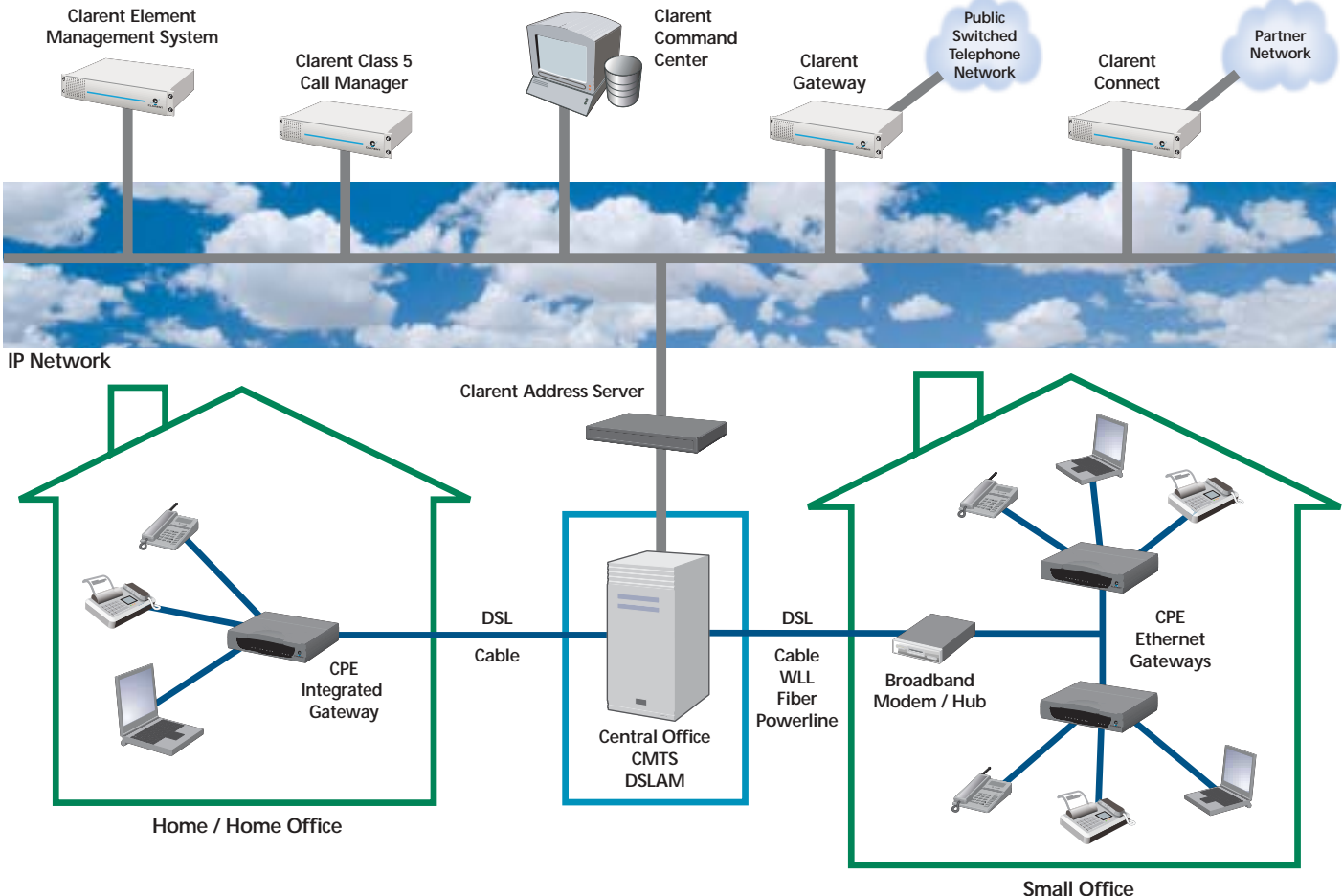
### Regulatory Compliance and Agency Approval

This Clarent Equipment complies with or has obtained regulatory agency approval for at least the following standards:

EMC – Emission FCC CFR 47 Part 15 Class A  
EN 55022 (1998) Class A

EMC – Immunity EN 55024 (1998)

Safety IEC 60950 (1991) + Amendments 1 to 4  
EN 60950 (1992) + Amendments 1 to 4  
UL 1950 3rd Edition  
CSA C22 2 N°950



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