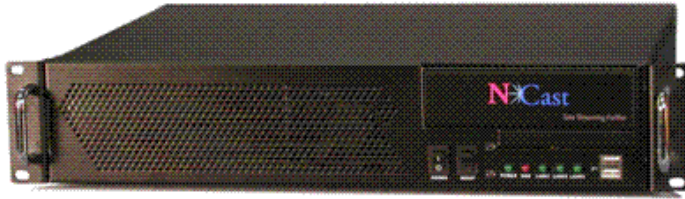


N-Way™ Server

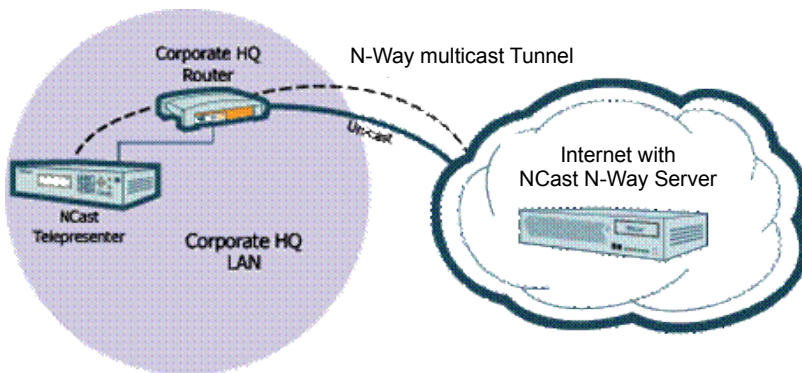


The NCast N-Way server is a powerful adjunct to the Telepresenter™ family of Multimedia Production Appliances. By offering three key services to Telepresenter users, the N-Way Server allows you to scale your live streaming presentation capability, provide on-demand services for delivering your previously recorded presentations, and/or facilitate multi-participant conferences.

The N-Way server is typically located on the corporate backbone, or housed at the facilities of a third-party Internet Service Provider.

Live Streaming Server

Using a unicast or multicast source stream, the N-Way server allows you to rebroadcast a session as many unicast streams, so you can deliver your Telepresentation to hundreds of viewers cost effectively using industry standard streaming protocols (RTSP or RTMP with the Flash option).



When multicast is not available between the presenter and a large audience, the NCast N-Way Server provides full connectivity by rebroadcasting over unicast internet connections.

On Demand Server

The N-Way Server can be configured as an 'On-Demand' server, collecting recordings from one or more Telepresenter and making them available to your audience, either as streamed MPEG-4 or H.264 feeds or as downloadable podcast files. The server can automatically generate RSS feeds allowing clients to be informed of the most recent archives.

Multimedia Conference Bridge

Finally, the N-Way server can be configured to allow three or more Telepresenter to create a fully interactive presentation or meeting session. Using multicast tunneling, full-duplex communications, picture-in-picture, and floor-control, the N-Way server gives geographically dispersed collaborators the sense of presence of videoconferencing with the Hi-resolution 'video plus graphics' of a Telepresenter.

FEATURE HIGHLIGHTS

FUNCTIONALITY

Provides enhanced Multimedia Delivery services to Telepresenter Users, including live Presentation Streaming, Content-on-Demand capabilities, and Multi-user Bridging.

STREAMING CAPACITY

Stream to audiences of up to 350 users per N-Way Server. Streams utilize industry standard MPEG-4 or H.264 content and broadcast via RTSP or optionally RTMP protocols.

ARCHIVE CAPABILITIES

Start with the capacity you need and add capacity later by adding N-Way servers to your Network. You can store about 1 hr of Telepresenter-generated content per Gigabyte of storage.

SCALABILITY

When grouped in clusters, allows Enterprises, Schools, Municipal or State Governments, or any other content provider to expand capacity by simply adding new N-Ways servers to the Backbone.

CENTRAL MANAGEMENT

Simple Graphical user interface allows for browser-based management from anywhere on the network.

REBROADCAST FEATURES

Multicast Tunnel from one or more Telepresenter to an N-Way Server and amplify the available user population and maximize broadcast quality for geographically dispersed audiences.

COLLABORATION FEATURES

Simplifies collaboration by passing floor control and audio mixing control packets among Telepresenter participating in collaborative groupings.

FLASH™ STREAMING

The Flash server option provides for live and on-demand playback to Flash Media Player clients, which are widely installed on virtually all desktop, laptop and notebook PCs and other mobile players.

DESKTOP PLAYERS

Anyone connected to the network can view a Telepresentation via a web browser and media player (Flash, Quicktime, Real, Windows 7 Media Player)

TECHNICAL SPECIFICATIONS

SERVER CPU

Intel Core 2 Quad Processor 2.4 GHz, 8 MB L2 Cache,
1066 MHz FSB
2 GB DDR 400MHz RAM

STORAGE SYSTEM

1 TB Serial ATA Hard Drive option
2 TB Serial ATA Hard Drive option
4 TB Serial ATA Hard Drive option

EXTERNAL INTERFACES

Serial RS-232 port on DB-9 connector

NETWORK INTERFACE

Dual RJ-45 (LAN, DSL, Cable Modem),
Gigabit Ethernet 10/100/1000 Mbps

COMMUNICATION PROTOCOLS

Multicast, Unicast RTSP and optionally RTMP,
NCast NCCP, HTTP, HTTPS, TCP/IP, SSH,
UDP, RTP, RTCP, FTP, SFTP

SYSTEM SERVICES

Apache Web server, (S)FTP server
Darwin Streaming Server
Flash Server optional
NCast Bridging Server

AUTOMATIC FAILOVER/REDUNDANCY

Telepresenter users may set Primary and Failover N-Way Server
Addresses for automatic failover while bridging

MULTICAST REBROADCASTING FEATURES

N-Way Multicast Tunneling Service

COLLABORATIVE FEATURES

Interactive floor control during session
Audio mixing from all sites to talk simultaneously

LOGGING AND REPORTING

Telepresenter Access logging and control
Bridging & Conference reports with statistics
Reports automatically e-mailed to administrator
Server usage reports, daily or monthly

SECURITY

Automatic updates, Telepresenter Authentication
Viewer classifications and Passwords

PORTS UTILIZED

80 (HTTP), 554 (RSTP), 1220 (Streaming Server Admin), 6970-6999
(Dynamic UDP), 7070 (RSTP), 10201 (Initial TCP), 32000—32999
(UDP Traffic), 1935 (RTMP with Flash server option)



STREAMING CAPABILITIES

RTSP Streaming Server, RTMP streaming optional
Supported by Quicktime, Real, DivX, VLC, Windows 7 Media
Player, video iPods, most set top boxes and more.

STREAMING CAPACITY TABLE

Media	Size	Recommended bitrate	Viewers
VGA	640 x 480	500 kbps	350
XGA	1024 x 768	1250 kbps	300
UXGA	1600 x 1200	3.5 Mbps	225

ARCHIVE FEATURES

Archives stored as MPEG-4 files
Customizable .mp4 files by title, author, and subject
(S)FTP Push from Telepresenter

ARCHIVE CAPACITY

About 1 GB per hour of storage, depends on encoded bit-rate.

LANGUAGES

English

ENVIRONMENTAL

Temperature: Operating 0-35 C (32-95 F)
Humidity: 5% to 95% RH, Non-Condensing

DIMENSIONS

19" (380mm) x 3.46" (68.58mm) x 13.9" (254mm)

WEIGHT

23 lbs. (10 kg)

POWER SUPPLY

Universal 100-240V 50/60 Hz 350W power supply

ORDERABLE PARTS LIST

NWS-1T20: 1 TB Serial ATA Hard Drive — 2 GB RAM
NWS-2T20: 2 TB Serial ATA Hard Drive — 2 GB RAM
NWS-4T20: 4 TB Serial ATA Hard Drive — 2 GB RAM

Call NCast for additional customizations

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