



*faster network,
faster web*

The amount of Web content is increasing, but information technology budgets are not. Companies need to add capacity and quickly deliver content to users while keeping costs down. Until recently, adding capacity and improving performance meant scaling infrastructure—servers, firewalls, caches, and bandwidth. **NetCelerate**, from OptiView Technologies, accelerates all Web content retrieved through your network, delivering files, Web pages, and application data 2-10 times faster. NetCelerate enables you to cost-effectively add scalability, improve performance, and provide consistent quality to all users.

*Don't simply cache or compress content—**optimize it.***

Your network at the speed of light

Don't Just Compress Content... Optimize It

Content optimization is not caching and content redirection, nor is it simply compression. Rather, content optimization has three guiding principles:

- 1 Make content as lightweight as possible
- 2 Get content from the most efficient source possible
- 3 Make many small, incremental size and speed improvements, which add up to substantial performance gains

NetCelerate Accelerates Your Network

NetCelerate enables ISPs and enterprises to speed the delivery of Web content and critical applications to users, regardless of their connection speed or location. The advantage for corporate users is that anyone accessing the network—regardless of whether they sit on the LAN, are a teleworker using broadband, or are a road warrior using dial-up—receives all corporate application and Internet content faster without visual quality degradation. The advantage for ISP customers is a dramatic increase in Web content download speeds.

NetCelerate Appliances:

- ▶ Reduce bandwidth, IT infrastructure, and management costs
- ▶ Deliver optimized and customized content to every user
- ▶ Speed all Web pages to end-users—even over the last mile

These benefits are achieved using a unique mix of technologies including clientless, intelligent, and automatic image and text compression; caching; optimized protocols; and enriched HTTP content headers.

NetCelerate Technology Overview

NetCelerate is implemented similar to caching appliances deployed in a forward proxy configuration. This means that it deploys at the network edge, close to users between Web browser clients and the WAN. NetCelerate uses a combination of technologies to improve network performance by 2 to 10 times. At the same time, NetCelerate frees up capacity on servers, caches, firewalls, and bandwidth, thereby extending the scalability of your existing infrastructure. NetCelerate does not require any changes to either the network architecture or the client-side browser, and is easy to install and manage.

NetCelerate Features

- ▶ The OptiView Acceleration Engine, providing real-time and automatic text and image optimization
- ▶ The HTTP 1.1 Internet protocol, which multiplexes individual client sessions together into a few persistent connections with Web servers, reducing connection management overhead in the server
- ▶ Improved object cache-ability using enriched HTTP content header



The OptiView Acceleration Engine

"The Heart of NetCelerate"

Compressing content while preserving its visual quality is a primary responsibility of the proprietary OptiView Acceleration Engine. Specifically, the Engine:

Performs two types of text optimization

- ▶ Standards-based compression using GZIP algorithms
- ▶ Proprietary text and code optimization to eliminate unnecessary bytes that have no impact on user experience

Compresses most file types, including:

HTML, DHTML, SHTML, XML, JavaScript, PDF, DOC, XLS, and PPT

Performs proprietary image optimization in real-time

- ▶ Customizes each image to the "magic point"—byte size is reduced with no discernible image quality degradation based on access speed and browser type
- ▶ Analyzes image color and composition for each individual image
- ▶ Automatically reduces byte size and color palette, giving preference to dominant color fields in the image such as skin tones, text, edges, and background
- ▶ Detects a user's access line speed and browser type
- ▶ Optimizes the following image types: JPG, GIF, animated GIF, BMP
- ▶ Automatically converts images to the most efficient format (i.e., converts JPG into GIF or vice versa)
- ▶ Easy-to-use, rules-based image manipulation for on-the-fly graphics editing that enables re-formatting to various access devices, such as wireless devices or laptops

Sign up today for a **free trial** of the OptiView consumer service!

www.optiview.com/freetrial/

Through the rich functionality of the OptiView Acceleration Engine, NetCelerate is an ideal solution for content acceleration today, that can grow into the enterprise Content Delivery Network of tomorrow.

How NetCelerate Works

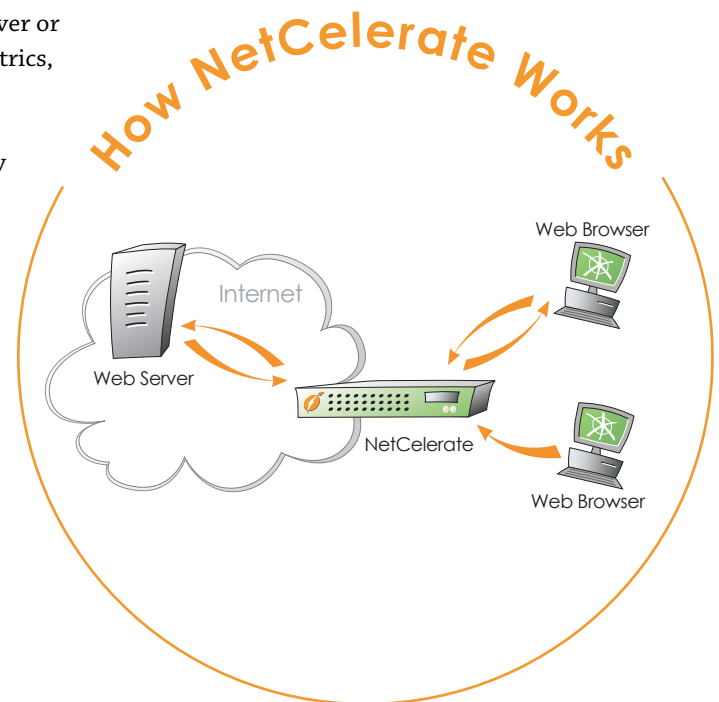
Once content is optimized using the Acceleration Engine, NetCelerate caches these optimized objects. When a user makes a request, NetCelerate retrieves an optimized object cached in its most streamlined form. Because enriched content headers contain detailed information about each object, each is refreshed at its most efficient point.

By applying intelligent, proprietary algorithms, NetCelerate determines the most efficient source for each requested object, whether it is an origin server or upstream cache. Because NetCelerate uses network performance metrics, geographic proximity indicators, and inventories of cached objects, NetCelerate continually adjusts the parameters associated with transport protocols, enabling servers to quickly adapt to the capacity of the network.

The NetCelerate family of appliances is packaged with flexibility in mind. The **NetCelerate 1050**, with a built-in cache, is designed for small to medium-sized organizations. The more robust **NetCelerate 2100** model, aimed at large enterprises and service providers, also comes complete with its own built-in cache. The **NetCelerate 2000**, also a large enterprise or service provider solution, does not contain its own cache and instead integrates with any third-party caching solution in use today.

Additional Features

- ▶ Contains built-in caching
- ▶ Caches compressed objects
- ▶ Provides persistent HTTP 1.1 connections
- ▶ Easily installed and managed
- ▶ Supplies real-time activity logging and event notification
- ▶ Supports failover from the switch or WCCP-enabled router
- ▶ Supplies extensive statistical reporting
- ▶ Enables access from outside network management solutions, such as HP OpenView, for reporting flexibility
- ▶ Facilitates simple configuration and management through a Web-based GUI
- ▶ Reports real-time system vitals on front panel LCD
- ▶ Supports the following protocols: SNMP, WCCP, ICP
- ▶ Provides secure access with Secure Shell (SSH)
- ▶ Does not interfere with security policies and practices currently in place
- ▶ Supports server clusters containing up to 32 Web servers without a load balancer, and more with a load balancer
- ▶ Manages content freshness automatically
- ▶ Accelerates a wide range of file types, including: HTML, SHTML, DHTML, XML, WAV, JPG, GIF, animated GIF, BMP, MPEG, MOV, QT, MP3, TXT, DOC, XLS, PPT, Shockwave, Flash, TIFF, PNG, and PDF—even when generated by CGI, Active Server Pages, JSP, or PHP



Increase the Speed and Efficiency of Your Network

For **Internet Service Providers**, NetCelerate provides a differentiator by improving access speed for customers, and can be offered as a value-added service. By creating access speed similar to broadband at a fraction of the cost, NetCelerate can also slow customer migration. **Corporate IT** groups can use NetCelerate to improve the productivity of employees through faster Web research, more efficient business transactions, quicker information exchange, and accelerated performance of online applications. For all customers, NetCelerate reduces costs by increasing the capacity and extending the life of all existing network infrastructure.

Take Advantage of NetCelerate Today

NetCelerate, by OptiView Technologies, consistently outperforms its competitors in performance, functionality, and price. Furthermore, it delivers the business benefits demanded by enterprises and service providers alike. Deploy NetCelerate today and 1) improve user experience and satisfaction regardless of access method, 2) speed Web site, corporate network, and application delivery to all employees, and 3) extend the life of your existing IT assets and bandwidth.

Configuration and Specification Table

SYSTEM	NC-1050	NC-2000	NC-2100
Description	Small to medium size enterprise network acceleration appliance with built-in caching	Large enterprise/service provider network acceleration appliance for deployment alongside an existing caching appliance	Large enterprise/service provider network acceleration appliance with built-in caching
Performance			
<i>Simultaneous connections</i>	10,000	20,000	20,000
<i>Throughput</i>	100 Mbps	200 Mbps	200 Mbps
<i>Requests/second</i>	900	1800	1800
Hardware Specifications			
<i>Disk drives</i>	60GB long-life IDE	18GB U160 SCSI	2x 73GB U160 SCSI
<i>RAM</i>	512MB	2GB	4GB
<i>Network interfaces</i>	2x 10/100T NIC	2x 10/100/1000T NIC	2x 10/100/1000T NIC
Operating Environment			
<i>Power</i>	100-240V	100-240V	100-240V
<i>Temperature</i>	41-93° F/5-34° C	41-93° F/5-34° C	41-93° F/5-34° C
<i>Humidity</i>	90% non-condensing	90% non-condensing	90% non-condensing
<i>Power supply</i>	200 watts	350 watts	350 watts
<i>Altitude</i>	8200 feet/2500 meters	8200 feet/2500 meters	8200 feet/2500 meters
Dimensions & Weight			
<i>Enclosure</i>	1U 19-inch rack-mountable	1U 19-inch rack-mountable	2U 19-inch rack-mountable
<i>Height</i>	1.7 inches/4.3 centimeters	1.7 inches/4.3 centimeters	3.4 inches/8.6 centimeters
<i>Weight</i>	~ 22 pounds/10 kilograms	~ 22 pounds/10 kilograms	~ 24 pounds/11 kilograms
<i>Width</i>	16.8 inches/42.7 centimeters	16.8 inches/42.7 centimeters	16.8 inches/42.7 centimeters
<i>Depth</i>	25.6 inches/65 centimeters	25.6 inches/65 centimeters	25.6 inches/65 centimeters
Warranty & Support	Standard warranty: 1-year full coverage and replacement with RMA. Extended warranty: upgrade plans available by calling OptiView Customer Support at 703.450.8809.		



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