

Cache Installation Guide

Miami-Dade County Public Schools

September 2004



Overview

Your school is receiving a Stratacache caching appliance provided by ITS/Instructional Technology. Stratacache caching devices dramatically reduce Internet bandwidth consumption and will improve the performance of e-learning systems. This Stratacache caching solution is designed to:

- □ Enhance Internet and Intranet Content Delivery
- □ Accelerate web-based applications
- D Minimize Internet bandwidth consumption
- Minimize WAN bandwidth consumption
- □ Improve network performance
- Enable detailed reporting of web use statistics

The Stratacache caching appliance is transparent to the users at the school site, and is completely configured by the vendor. It comes with a complete onsite warranty on all hardware and software upgrades for a period of 5 years.

Using the cache does not require any configuration on your part. The router will be configured with WCCP (Web Cache Communication Protocol), which redirects any http packets reaching the router to the cache. Nothing has to be configured on workstations or servers. It will be invisible to the users.

Installation Instructions

The cache has been preconfigured with an IP address for your network. The address assigned to the cache is within the range of ITS reserved addresses on your subnet. The address is xxx.xxx.50, where xxx.xxx.is the same subnet your default gateway (router) is on. For example:

Oliver Hoover Elementary School IP Network: 10.202.68.0 Subnet Mask: 255.255.252.0 IP Address Range: 10.202.68.1 - 10.202.71.254 Router (default gateway): 10.202.68.1 Cache Engine: 10.202.68.50

If you have used this address on your network for another device, you must release it for the cache.

Connecting the cache to your network

- 1. The cache is to be connected to the same switch as your Cisco router. If this is not possible, contact Information Technology Services, <u>cacheadmins@dadeschools.net</u> to explain and arrive at an alternative location.
- 2. The cache (rack-mount or tower) should be placed where it can get adequate airflow.
- 3. The cache must be plugged into a UPS. (The OS on this server is Linux-based and sudden, unclean shutdowns may corrupt the system). A UPS will be provided by Instructional Technology for the cache. The UPS management cable provided must be connected to the cache to ensure an orderly shutdown in cases of prolonged power outages. If the cache has to shut itself down, due to prolonged power outages, you must press the restart button in order to power on the system.
- 4. Connect the Ethernet 0 port on the cache to the switch with an RJ-45 patch cable. (does not require a cross-over cable)

Rack mount cache: Ethernet 0 is the port closest to the video connector (also closest to the power supply).





Ethernet 0

Tower cache: Ethernet 0 is the port closest to the video connector (also closest to the power supply).



- 5. Please document the Model, IP address, and port number of the switch your cache is plugged into. (You will need this when you contact ITS)
- 6. Power on the cache.
- 7. No monitor, keyboard, or mouse is required at this time. The may be needed if troubleshooting is required in the future.
- 8. Check the link status light on the cache and switch, ping the address of the cache from a workstation on your network to verify connectivity.
- 9. Once you have verified connectivity, you will need to activate the cache. Contact, via email, Information Technology Services at <u>cacheadmins@dadeschools.net</u> and send the following information:
 - a. School Mail Code and Name
 - b. Type of cache tower or rack mount
 - c. Serial number
 - d. PC number (if and when applied)
 - e. Location of cache room number and room type (either IDF, MDF or other-explain)
 - f. Model and IP address of switch the cache and router are plugged into
 - g. Switch port number that the cache is plugged into
 - h. Technical contact for the site with phone number and email address
 - i. Type of UPS the cache is plugged into and what else is plugged into the UPS
- 10. If you are having connectivity problems, contact Information Technology Services at <u>cacheadmins@dadeschools.net</u>.