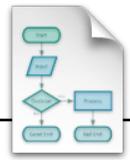




## Differential Content Filtering Using the NewNet 66 Content Filtering Service



Many school districts would like to have differential content filtering capability or the ability to apply different rule sets to the way students are filtered versus staff. This is possible with the NewNet 66 content filter however it is important to understand if your school district is using the NewNet 66 filtering service the content filter is NOT located at your site. It is located at the NewNet 66 Network Operations Center (NOC) thus content filtering is centralized.

NewNet 66 offers this service as a very cost effective way for our schools to afford quality content filtering meeting and exceeding CIPA requirements without the overhead of maintaining or managing a filtering solution.

If your school district requires the ability to use Active Directory with content filtering or manage filtering at the individual user level then it might be time for your district to consider purchasing a content filtering solution of your own. Just remember, quality content filtering is expensive and often times a challenge to manage and maintain.

To implement different levels of content filtering using the NewNet 66 content filter solution may require some restructure of your Local Area Network. Below is an example.

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In the example network drawing the Local Area Network (LAN) is segmented into two groups. Staff and Students.

- ~ All Staff workstations reside on the 192.168.1.0/24 network.
- ~ All Student workstations reside on the 192.186.2.0/24 network.

Since all workstations in this school district have private IP addresses which are not allowed on the Internet the firewall does NAT or Network Address Translation. NAT simply puts a 'Public' IP address on each packet exiting the school network destined for the Internet. Most firewalls are capable of 'Policy Based NAT' in which the firewall looks for specific source address ranges and uses different public IPs when doing the Network Address Translation.

The NewNet 66 content filter looks for these public IP addresses in order to filter the Internet requests. Each school district has a 'Group' in the NewNet 66 content filter which correlates to one public IP address or a range of public IP addresses.

Multiple groups may be created in the NewNet 66 content filter. However, each group must be correlated to a different public IP address in order to apply different content filter rules to the groups. NewNet 66 will create the additional groups for you.

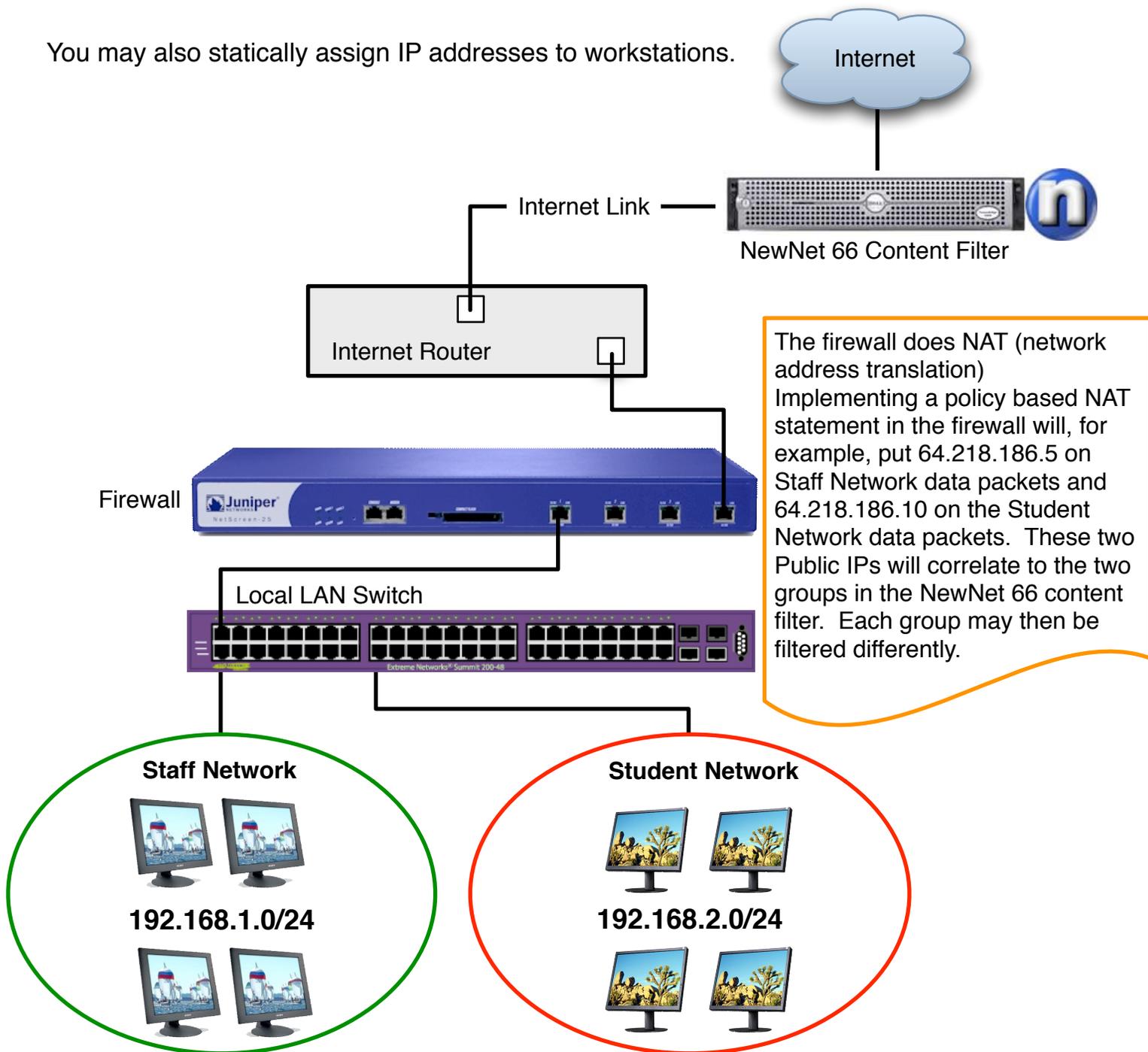
***All of the above is dependent on how the school district's network is structured and the Policy Based NAT statements in the firewall.***

In the example below this school has a public IP address range of **64.218.186.0/25**.

If your school uses DHCP then you will need to do one of the following:

- a. Set up the DHCP servers to assign the appropriate IP subnet to staff and students.
- ~ 192.168.1.0/24 for the staff network.
- ~ 192.168.2.0/24 for the student network.

You may also statically assign IP addresses to workstations.



The firewall does NAT (network address translation) Implementing a policy based NAT statement in the firewall will, for example, put 64.218.186.5 on Staff Network data packets and 64.218.186.10 on the Student Network data packets. These two Public IPs will correlate to the two groups in the NewNet 66 content filter. Each group may then be filtered differently.

Subnetting Help		
CIDR	Subnet	Hosts
/16	255.255.0.0	65,536
/22	255.255.252.0	1,024
/23	255.255.254.0	512
/24	255.255.255.0	256
/25	255.255.255.128	126

For additional help with subnetting go to:  
<http://www.newnet66.org/NetworkStuff/Subnetting>