Sonicwall

This document contains information gathered as notes.

## URLs

The following urls might be helpful.

https://support.software.dell.com/sonicwall-nsa-series/release-notes-guides

https://support.software.dell.com/kb/sw11244

## Address Objects

From its inception, SonicOS Enhanced has used Address Objects (AOs) to represent IP addresses in most areas throughout the user interface. Address Objects come in the following varieties:

• Host – An individual IP address, netmask and Zone association.

• MAC (original) – Media Access Control, or the unique hardware address of an Ethernet host.

MAC AOs were originally introduced in SonicOS 2.5 and were used for:

o Identifying SonicPoints

o Allowing hosts to bypass Wireless Guest Services authentication

o Authorizing the BSSID (Basic Service Set Identifier, or WLAN MAC) of wireless access points detected during wireless scans.

MAC AOs were originally not allowable targets in other areas of the management interface, such as Access Rules, so historically they could not be used to control a host’s access by its hardware address.

• Range – A starting and ending IP address, inclusive of all addresses in between.

• Group – A collection of Address Objects of any assortment of types. Groups may contain other Groups, Host, MAC, Range, or FQDN Address Objects.

SonicOS Enhanced 3.2.5.x redefines the operation of MAC AOs, and introduces Fully Qualified Domain Name (FQDN) AOs:

• MAC (3.2.5.x+) – SonicOS Enhanced 3.2.5.0 and higher will resolve MAC AOs to an IP address by referencing the ARP cache on the SonicWALL.

• FQDN – Fully Qualified Domain Names, such as ‘www.reallybadwebsite.com’, will be resolved to their IP address (or IP addresses) using the DNS server configured on the SonicWALL. Wildcard entries are supported through the gleaning of responses to queries sent to the sanctioned DNS servers.

While more effort is involved in creating an Address Object than in simply entering an IP address, AOs were implemented to complement the management scheme of SonicOS Enhanced, providing the following characteristics:

• Zone Association – When defined, Host, MAC, and FQDN AOs require an explicit Zone designation. In most areas of the interface (such as Access Rules) this is only used referentially. The functional application are the contextually accurate populations of Address Object drop-down lists, and the area of “VPN Access” definitions assigned to Users and Groups; when AOs are used to define VPN Access, the Access Rule auto-creation process refers to the AO’s Zone to determine the correct intersection of VPNÆ[Zone] for rule placement. In other words, if the “192.168.168.200 Host” Host AO, belonging to the LAN Zone was added to “VPN Access” for the “Trusted Users” User Group, the auto-created Access Rule would be assigned to the

VPNÆLAN Zone.

• Management and Handling – The versatilely typed family of Address Objects can be easily used throughout the SonicOS Enhanced interface, allowing for handles (e.g. from Access Rules) to be quickly defined and managed. The ability to simply add or remove members from Address Object Groups effectively enables modifications of referencing rules and policies without requiring direct manipulation.

• Reusability – Objects only need to be defined once, and can then be easily referenced as many times as needed.