

The sys admin's daily grind: OpenNetAdmin

Hooked on Tables

Last month, the Havege daemon helped organize the chaos in this column. Today, Charly attempts to organize the network – a tale of suffering in three chapters. *By Charly Kühnast*

People who want to keep track of the continually growing number of network objects have a whole world of software products at their disposal. These products are generically referred to as IPAM (IP Address Management) tools, and none of them is really popular. Admins initially resist using them before finally giving in. This process typically takes several years and is divided into three levels.

Level one: The network is still pristine. Administrators have set it up themselves and are familiar with every single server, router, and switch – in fact they are on a first-name basis with everything on the net: They even know the IP addresses by heart.

Level two: The network has grown considerably, and DMZ number seven is planned. Virtual servers are springing up like mushrooms. The administrators – typically several of them at this stage – still painstakingly keep a list in a text file or a spreadsheet to stay on top of everything. Level 2 is normally very tenacious until something important blows up because of an error in the manually main-

tained spreadsheet – say, because you forgot a server and assigned its IP to something else.

Level three: The admin crew finally admits the mission is likely to fail if they stick to the spreadsheet method. Their search for software support might just take them to the OpenNetAdmin (ONA) website [1], which prompts the seeker to “Stop using that spreadsheet!” The program’s authors obviously understand what they are doing.

Web GUI and CLI

ONA has become a very powerful tool in the course of its development; it can manage a more-or-less unlimited number of (sub)networks, including the matching DNS and VLAN information. Even more impressive is the way it helps deal with the daily niggles. The Ajax-based web interface is neat, fast, and nice to use, but nobody forces you to use it. In fact, ONA is quite happy if you feed it at the command line.

That said, the web interface does add some value. When you check out a subnet, it displays a bar that indicates how

many addresses on the subnet are already in use. You can assign roles to network components. This is important for infrastructure components for which many switches handle routing.

IP address to multiple devices at the same time. Many IPAM tools prematurely suspect an absent-minded administrator at this stage, but if you manage a cluster with “migrant” IP addresses, you need this function. You can also assign URLs to any object you create, which is useful if you want to monitor the status in Nagios. ONA can also generate a unique URL for every object if needed. For example, if I create a DNS server with the name *Dns1.example.com* in ONA, I can view its overview page by accessing the following URL (Figure 1):

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http://127.0.0.1/ona/?search=Dns1.example.com
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The ability to enter the eight-digit MAC address in any form is also useful; that is, the separator can be a colon, hyphen, or nothing. ONA’s parser reliably converts your input into a standard format. ONA might not have the most features, but it doesn’t bug you or go on strike while you’re using it, and these are the best prerequisites for its victory in the battle of the spreadsheet. ■■■

INFO

[1] OpenNetAdmin: <http://opennetadmin.com>

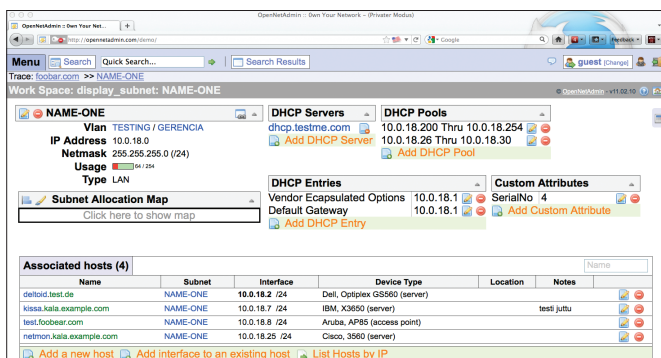


Figure 1: The OpenNetAdmin web GUI offers an attractive host and IP address inventory.

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