

Mike Nelson – SV article

### **VMware Administration Silly Mistakes**

*“Creativity is allowing yourself to make mistakes. Art is knowing which ones to keep.” - Scott Adams ‘The Dilbert Principle’*

One thing I always mention to people when they talk about mistakes they have made while on the job as a VMware Administrator, is that if you’re *not* making them, you’re *not* learning. Some folks don’t like to admit or much less publicize their mistakes, but we have all made them (and anyone who tells you they haven’t is lying). And, in the end, we all become better at what we do because of them. Some mistakes are due to trial and error, others are from lack of knowledge, while some are just dumb mistakes, and a few are just downright silly. I couldn’t possibly list all of them that I know of, since that could cover an entire book, but I am sure that this is only a very, very small list that many others could add too.

VM Renames – This is a classic one. vCenter makes it very easy to rename virtual guests. We simply right-click on the guest object, select rename, type a new name in, and we are done. But, that just renames the object pointer in the vCenter database. The directories and files associated with that guest are still under the old name. So, surprise, surprise when someone who is quickly trying to go through and clean up the datastores to recover space, without bothering to match up the guests to directories, and they delete the machine directory and all the machine files in one click of the mouse. I’ve seen it happen, and the aftermath isn’t pretty.

Cramming LUNS – I was at a conference many years back and was attending a session on a new feature in ESX 3. The presenter had created a 100GB LUN on a SAN and presented it to the 2 node cluster he was using for his demo machines. He had 3 servers on that LUN, each with 32GB drives and a shared ISO datastore of 2GB. Now, do the math here –  $32\text{GB} \times 3 = 96\text{GB} + 2\text{GB} = 98\text{GB}$ , right? More than enough room with 100GB LUN, right? So, he starts his session and one by one, fires up all 3 machines, and when the 3<sup>rd</sup> one boots, all of them do a PSOD (Purple Screen Of Death) on him. It seems he forgot about the swap files, which are created on boot, and filled the LUN. It was even funnier at the time since he had no idea why it happened and tried to start them again. And, yes, he was a VMware Engineer.

Network Names – I was working as a consultant on a Citrix project for a small organization a few years back and one day I got a call from their storage person, who had been put in charge of their new VM environment. He said he was having problems with vMotion and DRS was generating all kinds of errors he knew nothing about (did I mention he was a storage guy?). So I go into their vCenter and take a look around for him. What I found was that not all the ESX hosts were setup the same for networking, as in each virtual switch had a different name on each host. That was a common mistake if the hosts were not setup at the same time, or no standards were ever followed (or even existed for that matter) for their naming,

since vMotion requires they all be the same on all the hosts in a DRS cluster. Rename the networks, make sure vMotion and DRS are all happy, and get a free lunch from the SAN guy.

Honeymoons & Roles – One Admin I know got caught fixing an issue from his honeymoon in Mexico because, before he left, he decided that he wanted to “lock down” the environment while he was gone. Of course, like other Admins do, he went through and removed people from Roles in vCenter to do this. The problem was, he removed the Roles from the permissions on the VC object itself, not just the VM’s, cluster, or other objects. This will render anyone who had access to be without. And, for the record, I did actually hear this story from his new bride, who was not at all happy about the interruptions.

Host Profiles NIC Wipeout – I could not wait for this feature to finally come out from VMware. I had heard about it for a year before it actually materialized, and was chomping at the bit to be able to deploy standardized hosts quickly in a 500+ host environment. But, with my excitement with the ability to do all this, it all went very wrong, very fast. I generated a new host profile and decided to test it on a lab host. It all went well, and it appeared to have no issues after I tested a few VM’s on it. So I decided to send it on down to a production 16 host cluster. Now, I don’t just mean one host in the cluster, but the *entire* cluster all at once.

Soon after vCenter said that everything had gone well with applying the profiles, I was smiling for about 5 seconds, and then the alarms started going off. All my guests and hosts were inaccessible via the network. One of the issues with Host Profiles in ESX (VMware calls it a “feature” of course) is that no matter what your NIC speed settings are on the host that you profile from, all the hosts that have the profile applied with get a default of “auto-negotiate”. Well, this won’t work on a network that has all switch ports hard-coded to 1000/Full with no failback (the lab network had auto on its ports so it worked there). One setting applied to all the hosts and it brought the whole cluster down. With each host having 14 NICs that had to be manually redone, it made for a very long day.

And lastly, how about the biggie that VMware itself made? Remember ESX 3.5 Update 2? Thousands of hosts all over the world came crashing down after that fiasco got deployed, and I was knee deep into trying to fix them with customers at the time. Although VMware never officially called the release a “mistake” on their part, it really was one of the dumbest I have ever heard of, including how it was handled after the bug was found. And it’s still one that gets the VMware Admin’s laughing today.

Send in your Admin Mistake stories, as we would love to collect and share them.