

Q&A from the IPAM Automation for Cloud Webinar – Aug 2014

Q: Is this VMware plug-in enhanced for SDDC environment?

A: Yes. This version adds enhancements such as Extensible Attribute support which make it easier to deploy and manage DDI automation for your SDDC environment.

Q: Assume when it provisions the record it is still a dynamic DNS record that the server will be the owner not a static one correct?

A: The IPAM Plug-in by default creates DNS records in Infoblox DNS as part of the workflow using Infoblox APIs. Dynamic DNS was not used as part of the demo. However, it is possible to use Dynamic DNS instead of or in addition to creating DNS records directly using the IPAM Plugin.

Q: So you would either need the plug-in or DDI to automate the IP allocation and DNS record process when a VM is spun-up, correct?

A: The IPAM Plugin contacts the Infoblox DDI appliance in order to allocate IP addresses and create DNS records. Therefore both the Plugin and an Infoblox standalone DDI appliance or Infoblox Grid are required.

Q: How does it know which IP Subnet to consume?

A: You can use Infoblox Extensible Attributes to select the appropriate network along with its configured subnet or this can be specified through configuration as part of the Plugin deployment.

Q: Does the IPAM plugin only create host records, or can it also create an A record?

A: IPAM plug-in version 2.3.0 and above supports the creation of host records or individual Fixed Address, A, AAAA and PTR records.

Q: vCAC built the NIC for the VM, how did it know which port-group corresponded to the IP selection?

A: This is configured in vCAC.

Q: Regarding DHCP options... what if you have multiple domains that live in the same subnet, how would the IPAM plugin handle this? It appears that if using DHCP options, it is a 1:1 relationship (subnet:domain name).

A: To confirm, there is a 1:1 relationship between the subnet and domain name DHCP option configured in Infoblox. If more than one domain name needs to be supported for a given subnet then with the current release of the Infoblox Plugin, customization of the vCO workflow would be required. We are investigating supporting multiple domain names for a given subnet as a standard feature in the next release of the plugin.

Q: We have vCAC 5.2.1. Will this Infoblox vCO plugin functionality work the same with this version (instead of vcac 6.x)?

A: Yes. The IPAM Plug-in supports both vCAC 5.x and 6.x.

Q: Can the IPAM integrate with and update Windows DNS?

A: Yes. Integration with Windows DNS requires an additional product called “Infoblox Trinzic IPAM for Microsoft”

Q: Does extensible attribute support include wildcarding?

A: No.

Q: Are GUI access rights still required for the plug-in?

A: No.

Q: vCAC 6.1 will be released shortly. Will the plugin support 6.1 at time of release?

A: Yes.

Q: Are the vCO plug-ins able to work without vCAC?

A: Yes. The IPAM Plug-in ships with multiple workflows. Some workflows work only with vCAC, other workflows work only with vCD, while others work only with Infoblox DDI appliances.

Q: How is the product priced? By node, addresses?

A: The IPAM plug-in is available at no cost to Infoblox customers.

Q: Can you create just an A record?

A: Yes.

Q: Is it possible to use the new process of creating IP address without using VMware server?

A: Yes. The IPAM Plug-in ships with vCO workflows to create and reserve IP address in Infoblox DDI without using VMware server.

Q: You have been talking about VMware is there a HyperV version as well?

A: Infoblox has a similar solution for Microsoft called “Infoblox IPAM for Microsoft System Center Orchestrator”

Q: This work across our wan? or only locally?

A: The IPAM plugin uses a RESTful API over HTTPS and therefore will work in any networking configuration that supports TCP connectivity between vCO and the Infoblox Grid Master.

Q: Can DNS updates be "scheduled" to go live at a certain time?

A: Yes, it is possible to specify that updates to specific zones/subzones need to be scheduled as opposed to applied immediately in Infoblox.

Q: Can we use the Infoblox plug-in for vCAC, to talk to physical NIOS appliances? or will it only work with Infoblox DDI?

A: The IPAM plug-in for vCO works with both physical and virtual DDI appliances.

Q: For IPV6 what are the feature and support options Infoblox is providing

A: The IPAM plug-in has support for IPv6.

Q: Can you give a summary of how this plugin integrates with NetMRI?

A: There currently is no integration between the IPAM Plugin and NetMRI

Q: great presentation - my question is how robust is the reporting capabilities - in terms of getting IPAM alerts on address space low in subnet

A: The IPAM plugin creates standard Infoblox records and therefore any existing reporting capability within Infoblox can be utilized such as reports on networks over threshold for IPAM utilization and/or DHCP utilization.

Q: In your examples, are the server names that are used the host records coming from vCAC? It dynamically creates them?

A: vCAC Machine Prefix was used to create the host record names then passed to Infoblox DDI.

Q: Is there any integration with existing NetMRI deployments in the Grid?

A: No.

Q: Can you speak a little about your security: can access to various functions be limited to specific individual logon IDs, e.g., based on job function.

A: The IPAM plug-in uses the Infoblox DDI Role Base Access Control (RBAC) in setting the user permissions.

Q: Does the destroy workflow presented work for VMs provisioned not with use of the 1st workflow? I assume Infoblox has all IP data for the VM.

A: It is possible to use the 2nd workflow without invoking the VM with the first workflow as long as the records for that VM existing in Infoblox. If the records (Host or Fixed Address/A/AAAA/PTR) do not exist in Infoblox, the 2nd workflow will fail because it will try to delete records that do not exist.

Q: I have a question on vCO networks with IPAM plugin - don't we need networks to be defined in vCO?

A: No. The networks are defined on the Infoblox DDI appliance.

Q: You had multiple USA networks, if i want to use a specific VLAN within USA network, based on profile of the VM, is it possible?

A: Yes. Extensible Attributes can be created for VLAN, Port Group, etc within Infoblox. If these Extensible Attributes are populated in Infoblox, then they can be utilized instead of or in addition to specifying the location (e.g., USA).

Q: How many IPAM devices are supported with vCO IPAM Plugin?

A: The IPAM device limit is dependent on the type and model of the Infoblox DDI appliance.

Q: IPAM Plug-in is it available for XEN or KVM hypervisor other than vmware?

A: VMware vCAC can be used to manage other hypervisors including XEN and KVM. The plugin when used with vCAC will support these hypervisors in addition to vSphere. In addition, The IPAM plug-in is available for Microsoft and very soon OpenStack. We also have a similar solution through partnership for Cisco, BMC and CA.

Q: How many IPAM Grid Masters are supported with VCO IPAM Plugin?

A: The IPAM plug-in can be configured to connect to any Grid Master.

Q: Just to confirm, you can use these workflows direct from vCO, vCAC is not a prerequisite, just vCO right?

A: Yes. We provide workflows with the plugin that run within vCO standalone as well as workflows that work only with vCAC or with vCD.

Q: Could you bring some light on the HA part of the hardware appliance? Hope i don't have to buy 2.

A: HA is supported for both physical and virtual Infoblox DDI appliances. However, HA deployment is not required in order to use the Infoblox Plugin.

Q: How often do you come out with updates and full version upgrades? Every 6 months? Year?

A: Infoblox NIOS releases are every 6 months. The IPAM Plugin software will be updated on an as needed basis which in general will be 1-2 times per year.

Q: Which kind of software required to establish the whole setup?

A: To use the plugin with vCAC, you need a minimum of an ESXi host, vCenter Server, vCenter Orchestrator, vCAC, Infoblox DDI and the Infoblox IPAM plug-in. The plugin can also be used with vCO standalone in which case vCAC is not needed.

Q: How many vCenters or vCAC instances it can support?

A: There is no limit to the vCenter Server or vCAC instances that can be supported.

Q: How many IPAM Grid Masters are supported with VCO IPAM Plugin?

A: Workflows can be configured to connect to different Grid Masters when they are instantiated. Therefore there is no practical limit on how many Grid Masters can be supported.

Q: Is there a maximum amount of VMs

A: No.

Q: Can you explain the relationship between the port-group assigned to the VM's NIC and the IP subnet?

A: This relationship must be established either by way of configuration in vCAC or vCO as part of the provisioning of the Infoblox IPAM Plugin or by using Extensible Attributes in Infoblox to associate particular networks/subnets to specific port groups.

Q: Hi. Regarding DNS - do you need to set a TTL to zero for an Infoblox deployment? Or is DNS scavenging required?

A: In the example that we demonstrated, DDNS is not being used. DNS records are being created and deleted programmatically (i.e., via a RESTful API) whenever the VM is provisioned/de-provisioned. Therefore it is not necessary to set a TTL to zero or use DNS scavenging in order to delete DNS records for VMs that no longer exist

Q: Is the virtual appliance DDI available to download? Will we need a key if we want to incorporate Infoblox in our labs?

A: Please contact Infoblox sales (sales@infoblox.com) to request access to an Infoblox DDI appliance. The DDI appliance ships with a 60 day eval license.

Q: Will you be able to elaborate on support for overlapping IP addresses? For example, we have "bubbles" of cloned environments where we will have the same IP address for pre-prod and prod.

A: Overlapping IP address support is available using Infoblox Network Views.

Q: oh! it has its own DNS service! Can i not use Bind or similar with IPAM?

A: You can use Infoblox for IPAM, DNS, and/or DHCP. Infoblox supports synchronization of DNS records created through the Infoblox Plugin with Microsoft DNS, but does not support synchronization with other DNS servers (e.g., BIND).

Q: Does the DDI appliance belong to an Infoblox grid? Can it be a member of multiple grids?

A: Yes, the DDI appliance may either be a Grid Master, Standalone Member, or a Grid Member. An Infoblox Grid Member can only be a member of a single Infoblox Grid at a time.

Q: Does the Orchestrator integration with vCAC support an external Orchestrator deployment or does it only use the internal vCO instance?

A: The IPAM Plug-in works with an external vCO appliances as well as the vCO appliance that is built into vCAC.

Q: How suitable is the plug-in for use in a multi-tenant environment? For example I may have multiple customer who share a IaaS platform. The customer may extend their network into my data center and wish to use their own IP address space. These ranges could overlap so there would be a requirement for a customer to have their own IPAM network view.

A: The situation that you described is supported using network views.

Q: For customers that have already deployed the original plug-in, which was dependent upon network profiles, will there be any documentation around migrating to the new plug-in? In essence, how to strip the components out of Design Center, remove the old vCO plug-in, install the new plug-in, and which custom properties they need to implement?

A: Additional content will be developed and posted on Infoblox community in the future that will address this topic.

Q: Can I also assign IPs from different VLANs based on profile of a VM? Ex: - Webserver, DB going into specific VLANs.

A: Yes. This can either be done through static configuration in vCO/vCAC or can be done using Extensible Attributes in Infoblox.

Q: With network views, can you specify IPs on both sides of a firewall that manages a NAT between two networks?

A: Yes. You can use Extensible Attributes to associate NATed IPs in two different Network Views.

Q: Can you elaborate on the Infoblox network view? How does it work in the case of overlapping or duplicate IP address ranges on the client side?

A: Infoblox Network Views provide the ability to support multiple overlapping IP address spaces for IPAM and DHCP. For Static IP deployment scenarios, a Network View can be specified in vCAC/vCO to provide IPAM for a particular set of servers, for example, within a specific tenant. For DHCP deployment

scenarios, an Infoblox DDI appliance can be deployed to serve DHCP to each overlapping network spaces in which case each of those appliances serving DHCP will be assigned to their individual Network View.

Q: Do you have any pre-defined workflows within the IPAM plugin that can be customized through vCO.

A: All the IPAM plug-in vCO workflows can be customized.

Q: Suppose that you have several VLANs or networks (all inside same network view), how DDI will figure it out in which vlan or network will chose to assign some IP address and DNS domain ? What about if my new VM would have 3 different IP addresses and 3 different DNS names ? How do I do that ?

A: VLANs can be defined using an Extensible Attribute (EAs) in Infoblox and assigned to one or more networks. When the VLAN is specified during the workflow, the network associated in Infoblox to that VLAN will be used. Once the network has been determined through the EA lookup, the Network properties for that VM can be used for the corresponding DNS suffix. Each interface on the VM can be mapped to a different network using EAs

Q: you had multiple USA networks, how did it know 10.60.177.x to be used?

A: The IPAM Plug-in picked the 1st network that is tagged with meta data country = USA and had an available IP address to allocate to a VM. If the 1st network doesn't have any available IP addresses, it will automatically go to the next available network and tries to find an IP address on that network. The IPAM plug-in continues with this process till an IP address is provided or fails with an error if no IP addresses available.

Q: Is the plugin also available as an integration pack for MS System Center Orchestrator? If yes, what is the cost of that?

A: Infoblox has a product called "Infoblox IPAM for Microsoft System Center Orchestrator" that is available at no cost to Infoblox customers.

Q: In the demo how was the host name and DNS domain used chosen? What if I want multiple DNS domains to use the same network?

A: The hostnames were used using vCAC Machine Prefix. Each network had a DNS domain associated with it.

Q: The reason why I wanted to attend today's session was to understand how it chooses which port group to use if network profile is not configured.

A: With IPAM plug-in 2.3.0 there is no need to configure a network profile and vCAC configures port group. Port group to networks associations can either be made statically as part of the workflow provisioning or they can be made using Extensible Attributes in Infoblox.

Q: Does the plugin handle concurrent requests? We have had issue where multiple simultaneous request occur at the same time and get the same address. we had to code a serialization function to prevent multiple occurs from running at once.

A: The IPAM Plug-in handles concurrent requests. We have improved to the Infoblox DDI APIs to address this issue.

Q: How do we get a copy of the new plug-in? It would be helpful for those of us with labs to be able to work on this.

A: The IPAM plug-in can be downloaded from Infoblox.com

Q: Is it creating a fixed address or a reservation for the vm?

A: A fixed address.

Q: Does IPAM 2.3.0 support IPV6?

A: Yes.

Q: Is there any new process for name validation (check and error out if name is duplicated)

A: vCAC handles host name creation using Machine Prefix.

Q: Was your demo recorded and be available to review later?

A: Yes. It is available on Infoblox.com at this URL <http://www.infoblox.com/downloads/resources/ipam-automation-cloud-vmware-and-infoblox-solutions/download>

Q: Does the workflow select the port group when you don't configure network profile?

A: You can specify the port group as part of the workflow properties.

Q: Is this Plug-in suitable for upgrade-updates purposes?

A: The plug-in must be uninstalled before a new version can be installed.

Q: Are there any plans to provide a Python API?

A: Not at this time. However, the Infoblox RESTful API is fully documented and could be implemented very easily within Python.

Q: you mentioned that network profile are not required what about when we want to integrated with vcn's or NSX to create on demand edge devices. We usually use network profile such scenario?

A: If you are using vCAC 6.0.1 or before, then a network profile is needed for NSX integration. If you are using vCAC 6.1 or above, further testing is needed before a definite answer can be provided.

Q: When do you choose what site to provision the VM?

A: This is done as part of the vCO workflow or vCAC blueprint configuration.

Q: How well will this work with complex system such as Application name standard and Application specific VLAN

A: The workflows could be extended to support customizations such as corporate naming standards or integration to other systems for determining VLANs.

Q: Does new version 2.3 support auto discovery?

A: vDiscovery is a feature in Infoblox that is not related to the Infoblox IPAM Plugin.

Q: Are there any 'best practice' docs for EAs? E.g. format and max number supported, etc?

A: Further information on this topic will be posted on Infoblox community.

Q: Should we go through any xaml modification like we did for earlier version of plug-in?

A: Version 2.3.0 of the IPAM plug-in requires two XAML files to be imported to vCAC using vCAC Designer. Future versions of the IPAM plug-in will eliminate these steps and using the vCAC plug-in for vCO to automate various configurations.

Q: How about upgrades of DDI software?

A: IPAM plug-in version 2.3.0 requires Infoblox DDI 6.10.2 and above to function.

Q: We have had issue where multiple simultaneous requests occur at the same time and get the same address.

A: IPAM plug-in version 2.3.0 doesn't have this problem.

Q: Is there any specific documentation for Infoblox plugin with NSX?

A: Not yet.