



Automation with TCPWave IPAM Plugin for vRA

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VMware recently released their cloud management platform offering with the latest version - vRealize Automation 8.2. This product comes with a complete redesign from their predecessor vRA7 platform. Built on modern container-based microservices architecture, HTML5 user interfaces and new APIs, it offers a new way to integrate core network services from TCPWave, such as DNS and IPAM.

With the advent of latest automation trends, TCPWave introduces a new IPAM plugin for vRA. TCPWave plugin provides integration with vRA8.2 and vRA Cloud and will be made available on [VMware Solution Exchange](#) marketplace. The TCPWave plugin works with vRA Cloud Assembly using Action Based Extensibility (ABX), VMware's serverless function capability. With these extensibility actions, TCPWave plugin allows you to allocate IP space for networks, allocate IP addresses for virtual machines, create DNS records for these new VMs, and cleanup unused resources. TCPWave IPAM's extensible attributes provide additional capabilities to store valuable data about your VMware deployments and resources.

The current 1.1 version of the TCPWave plugin has these actions seamlessly integrated:

<i>Category</i>	<i>Actions</i>
<b>Data Collection</b>	<b>Validate Endpoint</b> This action verifies administrator certificates and availability of services on the TCPWave IPAM endpoint.
	<b>Get IP Ranges</b> This action discovers networks and reserved IP ranges from the TCPWave IPAM which can be used for IP allocation on existing VMware networks.
<b>Resource Creation</b>	<b>Allocate IP</b> This action finds the next available IP address for a virtual machine in a specified network and creates a DNS Host record for the VM in the TCPWave IPAM.
	<b>Update Record</b> This record sends metadata on newly provisioned networks and virtual machines back to TCPWave IPAM, updating extensible attributes and other data.
<b>Resource Cleanup</b>	<b>Deallocate IP</b> This action releases the IPs of virtual machines which are no longer needed and removes their associated host records from TCPWave IPAM.

For detailed, step-by-step guidance on configuring TCPWave IPAM and installing/using the TCPWave plugin in vRealize Automation 8.2, see our deployment guide on [tcpwave.com](http://tcpwave.com).

The TCPWave plugin for vRA 8.2 extends your TCPWave DDI services into the VMware cloud management environment. With TCPWave, you can automate IPAM and DNS services when deploying or tearing down resources in your VMware cloud.