

License Management on AVX

Kindly follow the below instruction to apply license on AVX and its instance via CLI:

Before applying license to AVX and its instance, please collect the existing license details and save, to collect those detail use below CLI commands on AVX.

```
#show version  
#show license apv  
#show va license apv
```

Applying license to AVX device:

Its very state forward with single command on CLI with key value, PFB command for your reference.

```
#system license <Key>
```

This command is used to import an AVX license to the system. Without a valid AVX license, the AVX appliance does not allow any VA instance to run on it.

Applying License to Virtual Instance on AVX:

vAPV package license:

Please follow below steps to apply vAPV package License.

First we need to import the vAPV package license to AVX, PFB cli command to import the vAPV package license.

```
#license apv < key of the vAPV license package >
```

This command is used to import a vAPV license package.

A vAPV license package authorizes a specific number of vAPVs to share the vAPV license package simultaneously.

Note:

When you want to authorize a vAPV to share the vAPV license package, you need to manually assign the license package. When the vAPV is started up, it can successfully obtain a license from the AVX appliance, also update the vAPV package license manually to particular instance by using below CLI command.

```
#va license apv <va_name>
```

This command is used to assign the vAPV license package or demo license to a specified vAPV. The vAPV license package can be assigned to a vAPV only when it has not been assigned any license.

va_name --> This parameter specifies the name of an existing vAPV

Note:

- The number of vAPVs to which the vAPV license package can be assigned should not be greater than the "Number of Licensed vAPVs" in the imported vAPV license package.
- "Number of Licensed vAPVs" of the vAPV demo license is two. However, different from the vAPV license package, the demo license is one-time license that can only be assigned to two vAPVs for once, which means it cannot be assigned to any other vAPVs even if you delete the demo license assigned to two vAPVs.

Below commands help us to verify the applied vAPV package license:

```
#show license apv
```

This command is used to display the keys, licensed features, number of licensed vAPVs, and expiration date of the current vAPV license package and vAPV demo license.

```
#show va license apv
```

This command is used to display the license type of a specified vAPV.

PFB screenshot for the show command output:

```

AVX2_7600#
AVX2_7600#
AVX2_7600#show license apv
  License Package Key : 3b34a586-e68ba6cb-ee859596-c03176d8-0bb475f4-09000000-1455d8ab-20220127-20220427
  Licensed Features : WebWall Clustering L4SLB L7SLB Caching
                    SSL tProxy SwCompression LLB GSLB
                    QoS Multilang DynRoute IPv6 SWMaintenance
  Expiration Date : Expires on 2022-04-27
Number of Licensed vAPVs : 10(5 used)

  Demo License Key :
!!! Invalid License Key!!!
Please contact Array Networks support for a valid License Key.

AVX2_7600#
AVX2_7600#
AVX2_7600#show va license apv
-----
      Name                License Type
-----
      Ling_APV_1          Package
      Ling_APV_2          Package
      Arun-APV            Package
      Ling_10_APV1        Package
      10x_Pradeep         Package

AVX2_7600#
AVX2_7600#

```

In case you want to delete license package assigned to a specified vAPV, use below command.

```
#no va license apv <va_name>
```

This command is used to delete the vAPV license package assigned to a specified vAPV.

Note:

The assigned vAPV license package can be deleted from a vAPV only when it is shut down.

vxAG package license:

Please follow below steps to apply vxAG package License.

First we need to import the vxAG package license to AVX, PFB cli command to import the vxAG package license.

```
#license ag < key of the AG license package >
```

This command is used to import a vxAG license package, which provides a resource pool of virtual sites, concurrent users and Site2Site tunnels. A vxAG license package authorizes a specific number of vxAGs to share the vxAG license package simultaneously and use a specified number of virtual sites, concurrent users and Site2Site tunnels from the recourse pool.

Note:

If you want to authorize a vxAG to share the imported vxAG license package, you need to manually assign the license package and a specified number of virtual sites, concurrent users and Site2Site tunnels from the resource pool to the vxAG, when the vxAG is started up, it can successfully obtain a license from the AVX appliance, which authorizes it to use the assigned resources.

Also update the vxAG package license manually to particular instance by using below CLI command.

```
#va license ag <va_name><virtual_sites> <concurrent_users> <site2site_tunnels>
```

This command is used to assign the vxAG license package and a specific number of virtual sites, concurrent users and Site2Site tunnels from the resource pool to a specified vxAG. The vxAG license package can be assigned to a vxAG only when it has not been assigned an individual license.

Note:

- The number of vxAGs to which the vxAG license package can be assigned should not be greater than the “Number of Licensed vxAGs” in the imported vxAG license package. Also, the total number of virtual sites, concurrent users, or Site2Site tunnels assigned to all the vxAGs sharing the license package should not be greater than that of virtual sites, concurrent users, or Site2Site tunnels provided by the vxAG license package.
- This command is also used to adjust the number of virtual sites, concurrent users and Site2Site tunnels assigned to the vxAG. You can directly upgrade the number of virtual sites, concurrent users and Site2Site tunnels assigned to a vxAG without shutting it down. However, to downgrade the number of virtual sites, concurrent users and Site2Site tunnels assigned to a vxAG, you need to shut down the vxAG first using the “va shutdown” command.

Below commands help us to verify the applied vxAG package license:

#show va license ag

This command is used to display the license type of a specified vxAG.

Note:

If a vxAG is assigned an individual license, the values of the fields Virtual Sites, Concurrent Users, and Site2Site Tunnels are displayed as 0.

#show license ag

This command is used to display the current vxAG license package key, licensed features, number of licensed vxAGs, expiration date, licensed resource pool (virtual sites, concurrent users and Site2site Tunnels), and the resource assignment.

PFB screenshot for the show command output:

```
AVX2_7600#
AVX2_7600#
AVX2_7600#
AVX2_7600#show license ag
  License Package Key : DxdAtet-u3DRqn5X-Q3kmaign-YAg-#131-4d67d9a8-25cf2324-4d67eaa3-beef03a2-4d#7eba9-edff9#2b-4567d#5
  Licensed Features : WebMail Clustering SSL SwCompression VPNClient
                    HostCheck CacheCleaner WebApps SSF MobileClient
                    DesktopDirect MobileDirect AVX
  Expiration Date : Expires on Jul 08 2022
  Number of Licensed vxAGs : 5 (1 Used)
  Licensed Virtual Sites : 5 (5 Used)
  Licensed Concurrent Users : 1000 (1000 Used)
  Licensed Site2Site Tunnels : 0 (0 Used)

Allocation of Virtual Sites, Concurrent Users and Site2Site Tunnels:
  VA Name | Virtual Sites | Concurrent Users | Site2Site Tunnels
-----|-----|-----|-----
  Ankush_AG      5           1000             0

AVX2_7600#
AVX2_7600#
AVX2_7600#show va license ag
  VA Name | License Type | Virtual Sites | Concurrent Users | Site2Site Tunnels
-----|-----|-----|-----|-----
  Ankush_AG      Package      5           1000             0

AVX2_7600#
```

In case you want to delete license package assigned to a specified vAPV, use below command.

#no va license ag <va_name>

This command is used to delete the assigned vxAG license package and resources (virtual sites, concurrent users and Site2Site tunnels) from a specified vxAG. The assigned vxAG license package as well as resources can be deleted from a vxAG only when it is shut down.

#clear va license ag

This command is used to clear the assigned vxAG license package and resources (virtual sites, concurrent users and Site2Site tunnels) from all vxAGs sharing the vxAG license package. Please shut down all the vxAGs sharing the vxAG license package before executing this command.

vAPV and vxAG Individual License:

In some situation we need to apply individual license directly on virtual instance without importing on AVX.

#va license individual <va_name> <individual_license_key>

This command is used to assign an individual license to a specified vAPV or vxAG. The individual license can be assigned to a vAPV or vxAG only when it is running and has not been assigned a license package.

Note:

- You can assign a new individual license to a vAPV or vxAG to update the individual license that it is using. For a vxAG, you can add an Array Business Continuity (ABC) license to the existing individual license by the individual license updating operation.

- Starting from the latest ArrayOS APV and AG versions, execution of “system license” command in a vAPV or vxAG to import an individual license to it is no longer allowed.

#no va license individual <va_name>

This command is used to delete the individual license assigned to a specified vAPV or vxAG. The assigned individual license can be deleted from a vAPV or vxAG only when it is shut down.