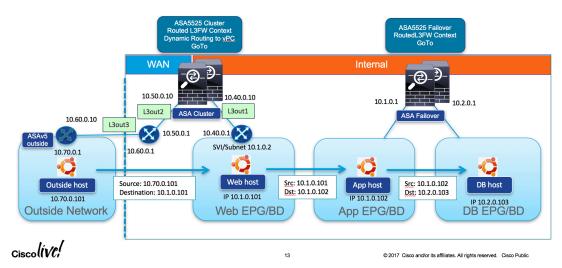
cisco-security/aci-scripts

The package included here allows creation of the following Tenant on APIC and ACI fabric:

ASA Service Graph in ACI - Tenant Diagram



BASH script wrapper for all python scripts is also included to allow step by step creation of Tenant pod1, application profile, bridge domains, EPGs, L4-7 ASA devices, their function profiles (configuration), L3outs in the ACI fabric and those needed for ASA dynamic routing, service graphs for ASAs, and wizard based creation of the contract, filter, and applied service graphs. Left of the WAN portion of the diagram is outside of the ACI fabric and not included in the scripting.

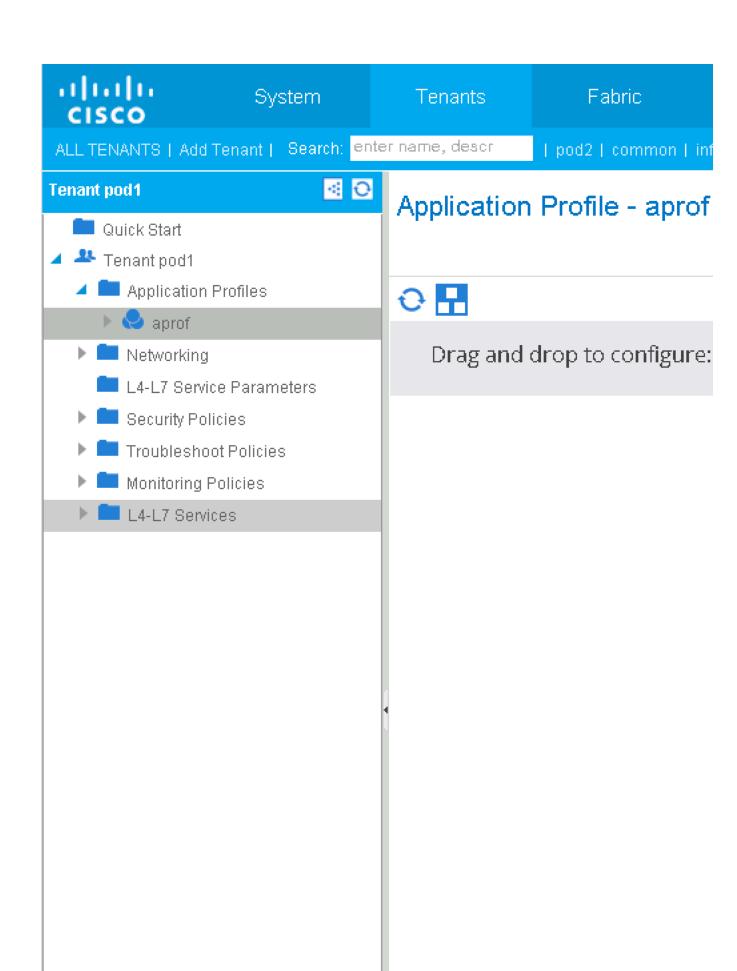
rebuild-my-pod.bash script assumes that the tenant pod1 already exists, and proceeds to delete specific items from this Tenant. To ensure the tenant exists, you may comment out the like so:

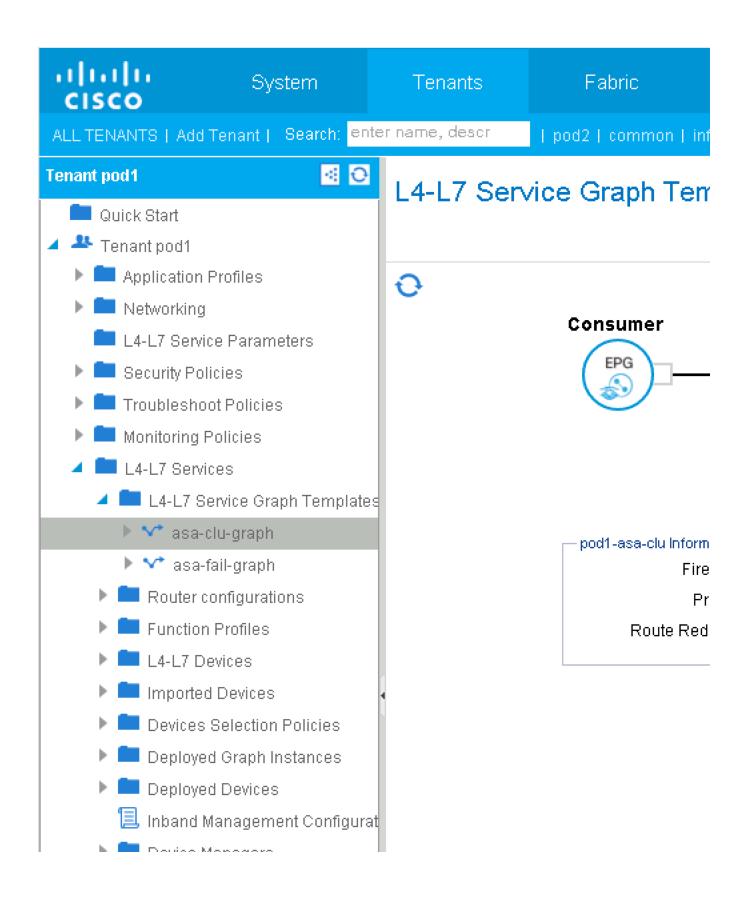
```
...
do
#echo "^@Delete pod$i tenant items (app
profile,EPGs,BDs,contract,l3outs,vrfs,L4-L7 items: [continue]"; read go
#python ${path}faba-tenant-delete.py $i $i
echo "^@Create pod$i tenant app profile, EPGs, vrfs, BDs: [continue]"; read go
...
```

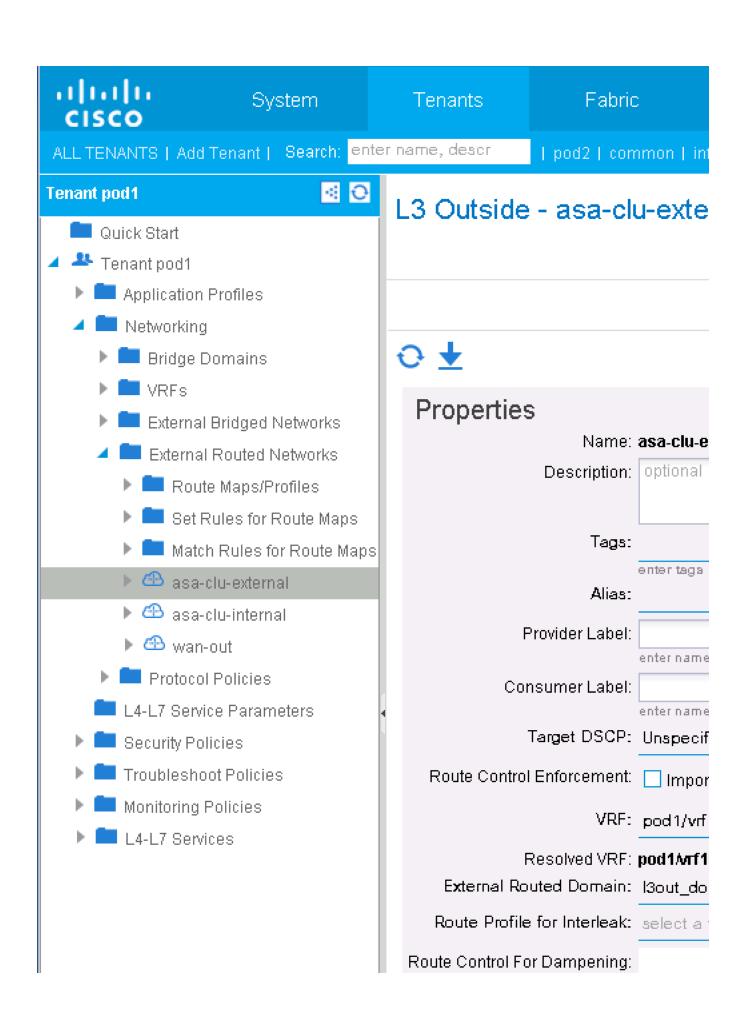
You could certainly delete the tenant through APIC and run the BASH script with commented out *-tenant-delete.py section.

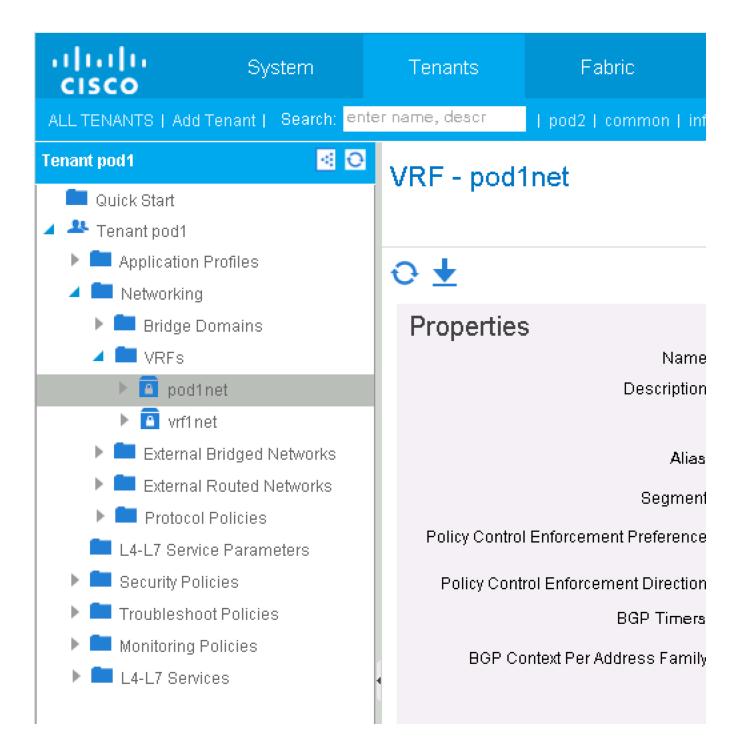
Note that included python scripts are very dependent (refer to pre-configured items) on number of settings to execute properly. Those would have to be either matched by name or updated in the scripts to work properly. These are items like VMM and physical domains, imported ASA device package, pre-configured vPC for ASA data plane (p10), BGP routing backplane in the fabric, etc.

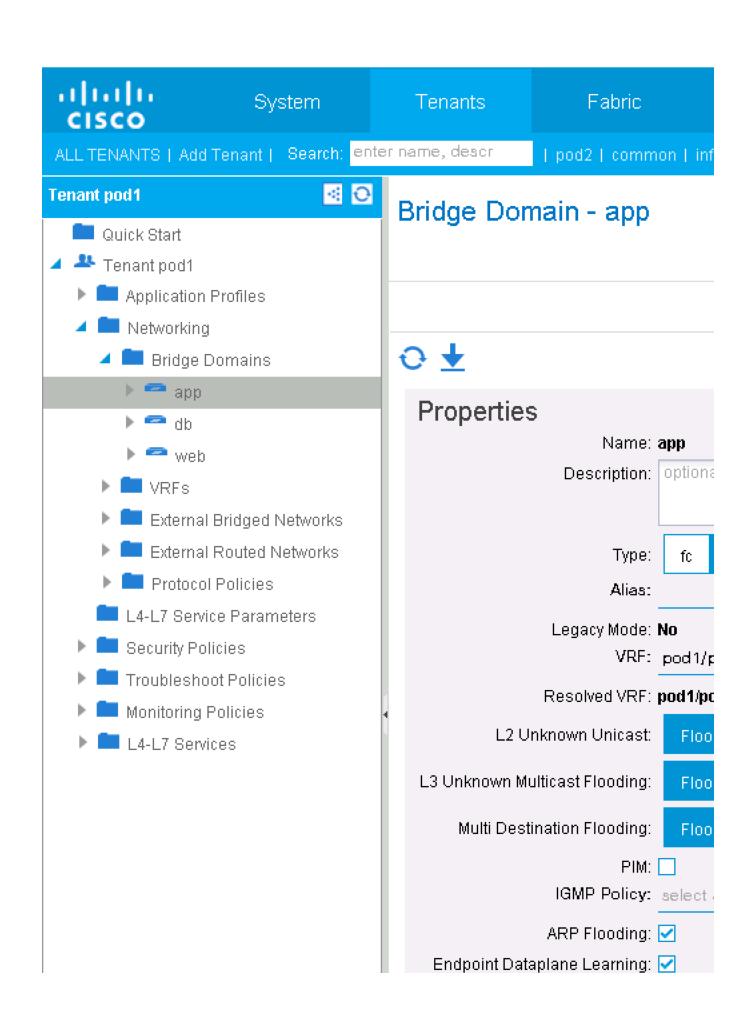
Here are addition screenshots of what this tenant looks like in the fabric:

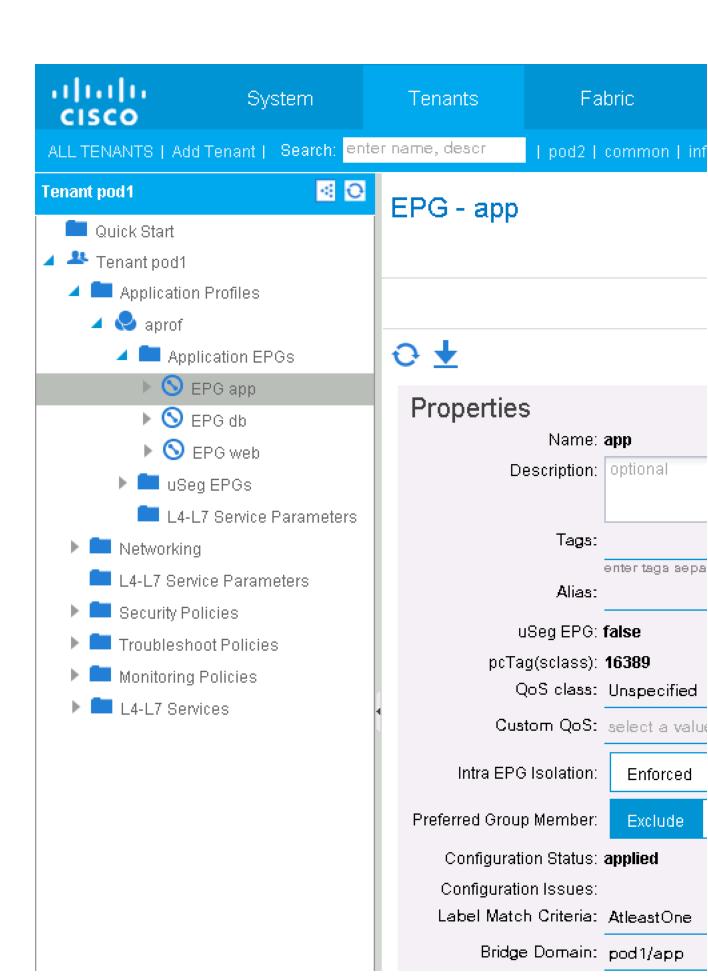


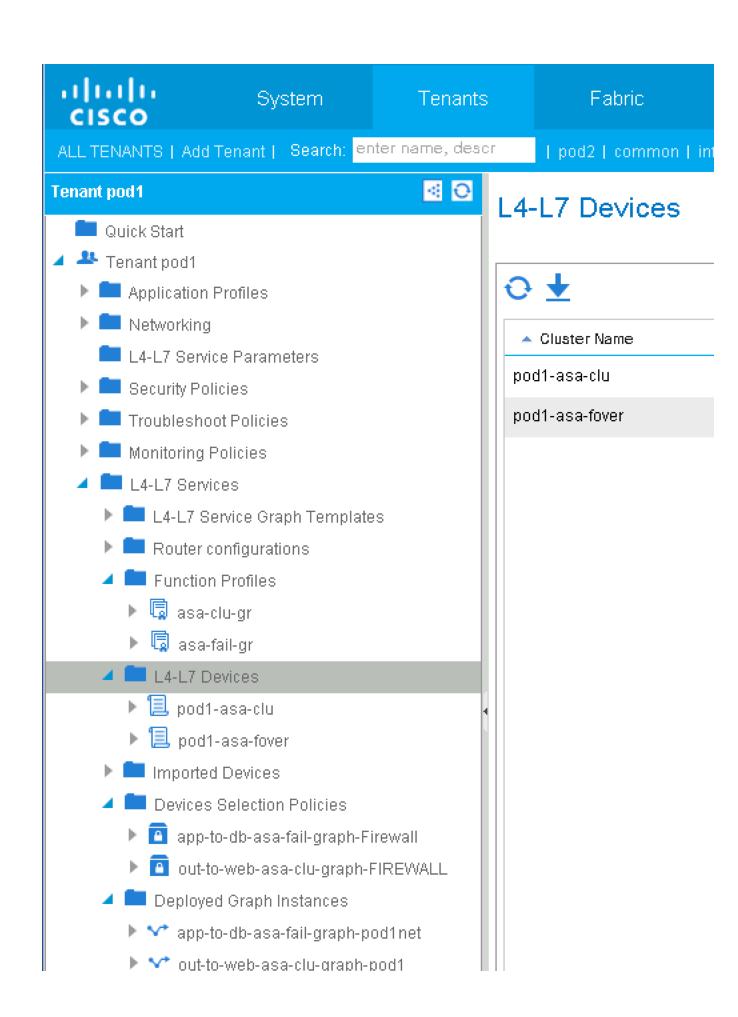












Sample Script Execution

This is a sample output of the script, executed for pod1 tenant (1 can be set inside the BASH script). Each python script requires interaction by the user to continue to the next one:

user@api-client:~/demo\$./rebuild-my-pod.bash

Delete pod1 tenant items (app profile,EPGs,BDs,contract,l3outs,vrfs,L4-L7 items: [continue]

```
<?xml version="1.0" encoding="UTF-8"?>
<vzRsSubiGraphAtt status='deleted'></vzRsSubiGraphAtt>
<?xml version="1.0" encoding="UTF-8"?>
<fvAp name='aprof' status='deleted'></fvAp>
<?xml version="1.0" encoding="UTF-8"?>
<fvCtx name='pod1net' status='deleted'></fvCtx>
<?xml version="1.0" encoding="UTF-8"?>
<fvCtx name='vrf1net' status='deleted'></fvCtx>
<?xml version="1.0" encoding="UTF-8"?>
<l3extOut name='asa-clu-external' status='deleted'></l3extOut>
<?xml version="1.0" encoding="UTF-8"?>
<l3extOut name='asa-clu-internal' status='deleted'></l3extOut>
<?xml version="1.0" encoding="UTF-8"?>
<l3extOut name='wan-out' status='deleted'></l3extOut>
<?xml version="1.0" encoding="UTF-8"?>
<fvBD status='deleted' name='app'></fvBD>
<?xml version="1.0" encoding="UTF-8"?>
<fvBD status='deleted' name='db'></fvBD>
<?xml version="1.0" encoding="UTF-8"?>
<fvBD status='deleted' name='web'></fvBD>
<?xml version="1.0" encoding="UTF-8"?>
<vzBrCP name='app-to-db' status='deleted'></vzBrCP>
<?xml version="1.0" encoding="UTF-8"?>
<vzBrCP name='out-to-web' status='deleted'></vzBrCP>
<?xml version="1.0" encoding="UTF-8"?>
<vnsAbsGraph name='asa-clu-graph' status='deleted'></vnsAbsGraph>
<?xml version="1.0" encoding="UTF-8"?>
<vnsAbsGraph name='asa-fail-graph' status='deleted'></vnsAbsGraph>
<?xml version="1.0" encoding="UTF-8"?>
<vnsAbsFuncProfGrp name='asa-clu-gr' status='deleted'></vnsAbsFuncProfGrp>
<?xml version="1.0" encoding="UTF-8"?>
<vnsAbsFuncProfGrp name='asa-fail-gr' status='deleted'></vnsAbsFuncProfGrp>
<?xml version="1.0" encoding="UTF-8"?>
```

```
<vnsLDevVip name='pod1-asa-clu' status='deleted'></vnsLDevVip>
<?xml version="1.0" encoding="UTF-8"?>
<vnsLDevVip name='pod1-asa-fover' status='deleted'></vnsLDevVip>
Create pod1 tenant app profile, EPGs, vrfs, BDs: [continue]
<?xml version="1.0" encoding="UTF-8"?>
<polUni status='created,modified'><fvTenant ownerKey=" name='pod1' descr="</p>
status='created,modified' ownerTag="><fvBD status='created,modified'
multiDstPktAct='bd-flood' unicastRoute='yes' unkMcastAct='flood' descr=''
llAddr='::' mac='00:22:BD:F8:19:FF' epMoveDetectMode=" ownerTag="
ownerKey=" name='web' unkMacUcastAct='flood' arpFlood='yes'
limitIpLearnToSubnets='no'><fvRsBdToEpRet resolveAct='resolve'
status='created,modified' tnFvEpRetPolName="></fvRsBdToEpRet><fvSubnet
name=" descr=" ctrl=" ip='10.1.0.2/24' preferred='no'
status='created.modified'></fvSubnet><fvRsBDToNdP status='created.modified'
tnNdIfPolName="></fvRsBDToNdP><fvRsCtx status='created,modified'
tnFvCtxName='pod1net'></fvRsCtx><fvRsIgmpsn tnIgmpSnoopPolName="
status='created,modified'></fvRsIgmpsn></fvBD><fvBD status='created,modified'
multiDstPktAct='bd-flood' unicastRoute='yes' unkMcastAct='flood' descr="
llAddr='::' mac='00:22:BD:F8:19:FF' epMoveDetectMode=" ownerTag="
ownerKey=" name='app' unkMacUcastAct='flood' arpFlood='yes'
limitIpLearnToSubnets='no'><fvRsBdToEpRet resolveAct='resolve'
status='created,modified' tnFvEpRetPolName="></fvRsBdToEpRet><fvRsBDToNdP
status='created,modified' tnNdIfPolName="></fvRsBDToNdP><fvRsCtx
status='created,modified' tnFvCtxName='pod1net'></fvRsCtx><fvRsIgmpsn
tnIgmpSnoopPolName=" status='created,modified'></fvRsIgmpsn></fvBD><fvBD
status='created,modified' multiDstPktAct='bd-flood' unicastRoute='yes'
unkMcastAct='flood' descr=" llAddr=":: mac='00:22:BD:F8:19:FF"
epMoveDetectMode="ownerTag="ownerKey="name='db'
unkMacUcastAct='flood' arpFlood='yes'
limitIpLearnToSubnets='no'><fvRsBdToEpRet resolveAct='resolve'
status='created,modified' tnFvEpRetPolName="></fvRsBdToEpRet><fvRsBDToNdP
status='created,modified' tnNdIfPolName="></fvRsBDToNdP><fvRsCtx
status='created,modified' tnFvCtxName='pod1net'></fvRsCtx><fvRsIgmpsn
tnIgmpSnoopPolName="
status='created,modified'></fvRsIgmpsn></fvBD><fvRsTenantMonPol
status='created.modified'
tnMonEPGPolName="></fvRsTenantMonPol><aaaDomainRef ownerKey="
name='pod1' descr=" status='created,modified'
ownerTag="></aaaDomainRef><fvCtx ownerKey=" name='pod1net' descr="
knwMcastAct='permit' status='created,modified' ownerTag="
pcEnfPref='enforced'><fvRsCtxToEpRet status='created,modified'
tnFvEpRetPolName="></fvRsCtxToEpRet><fvRsCtxToExtRouteTagPol
status='created.modified'
tnL3extRouteTagPolName="></fvRsCtxToExtRouteTagPol><vzAny
```

matchT='AtleastOne' name='' descr=''

```
status='created,modified'></vzAny><fvRsOspfCtxPol tnOspfCtxPolName=''
status='created,modified'></fvRsOspfCtxPol><fvRsBgpCtxPol tnBgpCtxPolName="
status='created,modified'></fvRsBgpCtxPol></fvCtx><fvAp ownerKey="
name='aprof' descr=" status='created,modified' ownerTag="
prio='unspecified'><fvAEPg status='created,modified' prio='unspecified'
matchT='AtleastOne' descr='' name='web'><fvRsCustOosPol
tnOosCustomPolName="
status='created,modified'></fvRsCustQosPol><fvRsDomAtt
status='created,modified' tDn='uni/vmmp-VMware/dom-lab vmm1'
instrImedcy='lazy' encap='unknown' resImedcy='lazy'></fvRsDomAtt><fvRsBd
status='created,modified' tnFvBDName='web'></fvRsBd></fvAEPg><fvAEPg
status='created,modified' prio='unspecified' matchT='AtleastOne' descr=''
name='app'><fvRsCustQosPol tnQosCustomPolName="
status='created,modified'></fvRsCustQosPol><fvRsDomAtt
status='created.modified' tDn='uni/vmmp-VMware/dom-lab vmm1'
instrImedcy='lazy' encap='unknown' resImedcy='lazy'></fvRsDomAtt><fvRsBd
status='created,modified' tnFvBDName='app'></fvRsBd></fvAEPg><fvAEPg
status='created,modified' prio='unspecified' matchT='AtleastOne' descr=''
name='db'><fvRsCustOosPol tnOosCustomPolName="
status='created,modified'></fvRsCustQosPol><fvRsDomAtt
status='created,modified' tDn='uni/vmmp-VMware/dom-lab vmm1'
instrImedcy='lazy' encap='unknown' resImedcy='lazy'></fvRsDomAtt><fvRsBd
status='created,modified'
tnFvBDName='db'></fvRsBd></fvAEPg></fvAp></fvTenant></polUni>
Create as a failover context as L4-L7 device: [continue]
```

```
<?xml version="1.0" encoding="UTF-8"?>
<fvTenant name='pod1' status='created,modified'><vnsLDevVip
devtype='PHYSICAL' contextAware='single-Context' name='pod1-asa-fover'
funcType='GoTo' status='created,modified' mode='legacy-Mode'><vnsCCred
name='username' value='aciadmin'
status='created,modified'></vnsCCred><vnsRsALDevToPhysDomPtDn='uni/phys-
asa fover' status='created,modified'></vnsRsALDevToPhysDomP><vnsLIf
name='internal' status='created,modified'><vnsRsCIfAtt tDn='uni/tn-
pod1/lDevVip-pod1-asa-fover/cDev-pod1-asa-fover Device 2/cIf-
[GigabitEthernet0/0]' status='created,modified'></vnsRsCIfAtt><vnsRsCIfAtt
tDn='uni/tn-pod1/lDevVip-pod1-asa-fover/cDev-pod1-asa-fover Device 1/cIf-
[GigabitEthernet0/0]' status='created,modified'></vnsRsCIfAtt><vnsRsMetaIf
tDn='uni/infra/mDev-CISCO-ASA-1.2/mIfLbl-internal'
status='created,modified'></vnsRsMetaIf></vnsLIf><vnsLIf name='external'
status='created,modified'><vnsRsCIfAtt tDn='uni/tn-pod1/lDevVip-pod1-asa-
fover/cDev-pod1-asa-fover Device 2/cIf-[GigabitEthernet0/1]'
status='created,modified'></vnsRsCIfAtt><vnsRsCIfAtt tDn='uni/tn-pod1/lDevVip-
pod1-asa-fover/cDev-pod1-asa-fover Device 1/cIf-[GigabitEthernet0/1]'
status='created,modified'></vnsRsCIfAtt><vnsRsMetaIf tDn='uni/infra/mDev-
CISCO-ASA-1.2/mIfLbl-external'
```

```
status='created,modified'></vnsRsMetaIf></vnsLIf><vnsChkr name="
status='created,modified'></vnsChkr><vnsCCredSecret name='password'
value='cisco' status='created,modified'></vnsCCredSecret><vnsCDev name='pod1-
asa-fover_Device_2' devCtxLbl=" status='created,modified' vcenterName="
vmName="><vnsCCredSecret name='password' value='cisco'
status='created.modified'></vnsCCredSecret><vnsCCred name='username'
value='aciadmin' status='created,modified'></vnsCCred><vnsCMgmt name="
host='10.10.11.81' status='created,modified' port='443'></vnsCMgmt><vnsCIf
name='GigabitEthernet0/1' vnicName="
status='created,modified'><vnsRsCIfPathAtt tDn='topology/pod-1/paths-
101/pathep-[eth1/30]'
status='created,modified'></vnsRsCIfPathAtt></vnsCIf><vnsCIf
name='GigabitEthernet0/0' vnicName=''
status='created,modified'><vnsRsCIfPathAtt tDn='topology/pod-1/paths-
101/pathep-[eth1/29]'
status='created,modified'></vnsRsCIfPathAtt></vnsCIf></vnsCDev><vnsCDev
name='pod1-asa-fover Device 1' devCtxLbl=" status='created,modified'
vcenterName="vmName="><vnsCCredSecret name='password' value='cisco'
status='created,modified'></vnsCCredSecret><vnsCCred name='username'
value='aciadmin' status='created,modified'></vnsCCred><vnsCMgmt name="
host='10.10.10.81' status='created,modified' port='443'></vnsCMgmt><vnsCIf
name='GigabitEthernet0/1' vnicName=''
status='created,modified'><vnsRsClfPathAtt tDn='topology/pod-1/paths-
101/pathep-[eth1/26]'
status='created,modified'></vnsRsCIfPathAtt></vnsCIf><vnsCIf
name='GigabitEthernet0/0' vnicName="
status='created,modified'><vnsRsCIfPathAtt tDn='topology/pod-1/paths-
101/pathep-[eth1/25]'
status='created,modified'></vnsRsCIfPathAtt></vnsCIf></vnsCDev><vnsCMgmt
name="host='10.10.10.22' status='created,modified'
port='443'></vnsCMgmt><vnsRsMDevAtt tDn='uni/infra/mDev-CISCO-ASA-1.2'
status='created,modified'></vnsRsMDevAtt></vnsLDevVip></fvTenant>
Create context config - function profile: [continue]
```

<?xml version="1.0" encoding="UTF-8"?>
 <vnsAbsFuncProfContr status='created,modified'><vnsAbsFuncProfGrp
 ownerKey=" name='asa-fail-gr' descr=" status='created,modified'
 ownerTag="><vnsAbsFuncProf ownerKey=" name='asa-fail-fprof' descr="
 status='created,modified' ownerTag="><vnsAbsDevCfg ownerKey="
 name='devConfig' descr=" status='created,modified' ownerTag="><vnsAbsFolder
 status='created,modified' profileBehaviorShared='yes' key='AccessList'
 cardinality='unspecified' locked='no' name='access-list-inbound' scopedBy='epg'
 devCtxLbl="><vnsAbsFolder status='created,modified' profileBehaviorShared='yes'
 key='AccessControlEntry' cardinality='unspecified' locked='no' name='permit-udp'
 scopedBy='epg' devCtxLbl="><vnsAbsParam status='created,modified'
 mandatory='yes' key='action' cardinality='unspecified' locked='no' name='action'</pre>

value='permit' validation="></vnsAbsParam><vnsAbsParam status='created,modified' mandatory='yes' key='order' cardinality='unspecified' locked='no' name='order' value='40' validation=''></vnsAbsParam><vnsAbsFolder status='created.modified' profileBehaviorShared='yes' key='protocol' cardinality='unspecified' locked='no' name='udp' scopedBy='epg' devCtxLbl="><vnsAbsParam status='created.modified' mandatory='no' key='name_number' cardinality='unspecified' locked='no' name='name_number' value='udp' validation="'></vnsAbsParam></vnsAbsFolder><vnsAbsFolder status='created,modified' profileBehaviorShared='yes' key='source address' cardinality='unspecified' locked='no' name='source address' scopedBy='epg' devCtxLbl="><vnsAbsParam status='created,modified' mandatory='no' key='any' cardinality='unspecified' locked='no' name='any' value='any' validation="></vnsAbsParam></vnsAbsFolder><vnsAbsFolder status='created,modified' profileBehaviorShared='yes' key='destination address' cardinality='unspecified' locked='no' name='destination address' scopedBy='epg' devCtxLbl="'><vnsAbsParam status='created,modified' mandatory='no' key='any' cardinality='unspecified' locked='no' name='any' value='any' validation="'></vnsAbsParam></vnsAbsFolder></vnsAbsFolder status='created,modified' profileBehaviorShared='yes' key='AccessControlEntry' cardinality='unspecified' locked='no' name='permit-icmp' scopedBy='epg' devCtxLbl="><vnsAbsParam status='created,modified' mandatory='yes' key='action' cardinality='unspecified' locked='no' name='action' value='permit' validation="></vnsAbsParam><vnsAbsParam status='created,modified' mandatory='ves' key='order' cardinality='unspecified' locked='no' name='order' value='30' validation="></vnsAbsParam><vnsAbsFolder status='created,modified' profileBehaviorShared='yes' key='destination address' cardinality='unspecified' locked='no' name='destination_address' scopedBy='epg' devCtxLbl="'><vnsAbsParam status='created,modified' mandatory='no' key='any' cardinality='unspecified' locked='no' name='any' value='any' validation="></vnsAbsParam></vnsAbsFolder><vnsAbsFolder status='created.modified' profileBehaviorShared='ves' kev='protocol' cardinality='unspecified' locked='no' name='icmp' scopedBy='epg' devCtxLbl="><vnsAbsParam status='created,modified' mandatory='no' key='name number' cardinality='unspecified' locked='no' name='name number' value='icmp' validation="></vnsAbsParam></vnsAbsFolder><vnsAbsFolder status='created,modified' profileBehaviorShared='yes' key='source_address' cardinality='unspecified' locked='no' name='source address' scopedBy='epg' devCtxLbl="><vnsAbsParam status='created,modified' mandatory='no' key='any' cardinality='unspecified' locked='no' name='any' value='any' validation="></vnsAbsParam></vnsAbsFolder></vnsAbsFolder status='created,modified' profileBehaviorShared='yes' key='AccessControlEntry' cardinality='unspecified' locked='no' name='permit-https' scopedBy='epg' devCtxLbl="><vnsAbsParam status='created,modified' mandatory='yes' key='action' cardinality='unspecified' locked='no' name='action-permit' value='permit' validation="></vnsAbsParam><vnsAbsParam status='created,modified' mandatory='yes' key='order' cardinality='unspecified'

locked='no' name='order1' value='10' validation="></vnsAbsParam><vnsAbsFolder status='created,modified' profileBehaviorShared='yes' key='source address' cardinality='unspecified' locked='no' name='src-address' scopedBv='epg' devCtxLbl=''><vnsAbsParam status='created,modified' mandatory='no' key='any' cardinality='unspecified' locked='no' name='anv' value='anv' validation="></vnsAbsParam></vnsAbsFolder><vnsAbsFolder status='created,modified' profileBehaviorShared='yes' key='destination service' cardinality='unspecified' locked='no' name='dest-service' scopedBy='epg' devCtxLbl="><vnsAbsParam status='created.modified' mandatory='ves' key='low_port' cardinality='unspecified' locked='no' name='port' value='https' validation="></vnsAbsParam><vnsAbsParam status='created,modified' mandatory='yes' key='operator' cardinality='unspecified' locked='no' name='op' value='eg' validation=''></vnsAbsParam></vnsAbsFolder><vnsAbsFolder status='created.modified' profileBehaviorShared='ves' kev='protocol' cardinality='unspecified' locked='no' name='tcp' scopedBy='epg' devCtxLbl="><vnsAbsParam status='created,modified' mandatory='no' key='name number' cardinality='unspecified' locked='no' name='tcp' value='tcp' validation="></vnsAbsParam></vnsAbsFolder><vnsAbsFolder status='created,modified' profileBehaviorShared='yes' key='destination_address' cardinality='unspecified' locked='no' name='dest-address' scopedBy='epg' devCtxLbl="><vnsAbsParam status='created,modified' mandatory='no' key='any' cardinality='unspecified' locked='no' name='any' value='any' validation="></vnsAbsParam></vnsAbsFolder></vnsAbsFolder status='created,modified' profileBehaviorShared='yes' key='AccessControlEntry' cardinality='unspecified' locked='no' name='permit-http' scopedBy='epg' devCtxLbl="><vnsAbsParam status='created,modified' mandatory='yes' key='action' cardinality='unspecified' locked='no' name='action-permit' value='permit' validation="></vnsAbsParam><vnsAbsParam status='created,modified' mandatory='yes' key='order' cardinality='unspecified' locked='no' name='order1' value='10' validation="></vnsAbsParam><vnsAbsFolder status='created,modified' profileBehaviorShared='yes' key='source address' cardinality='unspecified' locked='no' name='src-address' scopedBy='epg' devCtxLbl=''><vnsAbsParam status='created,modified' mandatory='no' key='any' cardinality='unspecified' locked='no' name='any' value='any' validation="></vnsAbsParam></vnsAbsFolder><vnsAbsFolder status='created,modified' profileBehaviorShared='yes' key='destination service' cardinality='unspecified' locked='no' name='dest-service' scopedBy='epg' devCtxLbl="><vnsAbsParam status='created,modified' mandatory='yes' key='low_port' cardinality='unspecified' locked='no' name='port' value='http' validation="></vnsAbsParam><vnsAbsParam status='created,modified' mandatory='yes' key='operator' cardinality='unspecified' locked='no' name='op' value='eg' validation="></vnsAbsParam></vnsAbsFolder><vnsAbsFolder status='created,modified' profileBehaviorShared='yes' key='protocol' cardinality='unspecified' locked='no' name='tcp' scopedBy='epg'

```
devCtxLbl="><vnsAbsParam status='created,modified' mandatory='no'
key='name number' cardinality='unspecified' locked='no' name='tcp' value='tcp'
validation="></vnsAbsParam></vnsAbsFolder><vnsAbsFolder
status='created,modified' profileBehaviorShared='yes' key='destination address'
cardinality='unspecified' locked='no' name='dest-address' scopedBy='epg'
devCtxLbl="'><vnsAbsParam status='created.modified' mandatory='no' key='any'
cardinality='unspecified' locked='no' name='any' value='any'
validation="></vnsAbsParam></vnsAbsFolder></vnsAbsFolder>
<vnsAbsFolder status='created,modified' profileBehaviorShared='yes'</pre>
key='Interface' cardinality='unspecified' locked='no' name='internalIf'
scopedBy='epg' devCtxLbl="><vnsAbsFolder status='created,modified'
profileBehaviorShared='yes' key='InterfaceConfig' cardinality='unspecified'
locked='no' name='internalIfCfg' scopedBy='epg' devCtxLbl=''><vnsAbsParam
status='created,modified' mandatory='no' key='security level'
cardinality='unspecified' locked='no' name='internal security level' value='100'
validation="></vnsAbsParam><vnsAbsFolder status='created,modified'
profileBehaviorShared='yes' key='IPv4Address' cardinality='unspecified'
locked='no' name='IPv4Address' scopedBy='epg' devCtxLbl=''><vnsAbsParam
status='created,modified' mandatory='yes' key='ipv4_address'
cardinality='unspecified' locked='no' name='ipv4_address'
value='10.2.0.1/255.255.255.0'
validation="></vnsAbsParam></vnsAbsFolder></vnsAbsFolder>
<vnsAbsFolder status='created,modified' profileBehaviorShared='yes'</pre>
key='Interface' cardinality='unspecified' locked='no' name='externalIf'
scopedBy='epg' devCtxLbl="><vnsAbsFolder status='created,modified'
profileBehaviorShared='yes' key='InterfaceConfig' cardinality='unspecified'
locked='no' name='externalIfCfg' scopedBy='epg' devCtxLbl=''><vnsAbsParam
status='created,modified' mandatory='no' key='security level'
cardinality='unspecified' locked='no' name='external security level' value='50'
validation="></vnsAbsParam><vnsAbsFolder status='created,modified'
profileBehaviorShared='ves' kev='IPv4Address' cardinality='unspecified'
locked='no' name='IPv4Address' scopedBy='epg' devCtxLbl=''><vnsAbsParam
status='created,modified' mandatory='yes' key='ipy4 address'
cardinality='unspecified' locked='no' name='ipv4 address'
value='10.1.0.1/255.255.255.0'
validation="></vnsAbsParam></vnsAbsFolder></vnsAbsFolder
status='created,modified' profileBehaviorShared='yes' key='AccessGroup'
cardinality='unspecified' locked='no' name='ExtAccessGroup' scopedBy='epg'
devCtxLbl="><vnsAbsCfgRel locked='no' name='name' status='created,modified'
key='inbound access list name' mandatory='no' cardinality='unspecified'
targetName='access-list-
inbound'></vnsAbsCfgRel></vnsAbsFolder></vnsAbsFolder></vnsAbsDevCfg><v
```

inbound'></vnsAbsCfgRel></vnsAbsFolder></vnsAbsFolder></vnsAbsDevCfg><vnsRsProfToMFunc tDn='uni/infra/mDev-CISCO-ASA-1.2/mFunc-Firewall' status='created,modified'></vnsRsProfToMFunc><vnsAbsFuncCfg ownerKey=''name='funcConfig' descr='' status='created,modified' ownerTag=''><vnsAbsFolder status='created,modified' profileBehaviorShared='yes' key='InIntfConfigRelFolder'

```
cardinality='unspecified' locked='no' name='IntConfig' scopedBy='epg'
devCtxLbl="><vnsAbsCfgRel locked='no' name='InConfigrel'
status='created,modified' key='InIntfConfigRel' mandatory='no'
cardinality='unspecified'
targetName='internalIf'></vnsAbsCfgRel></vnsAbsFolder><vnsAbsFolder
status='created.modified' profileBehaviorShared='ves' key='ExIntfConfigRelFolder'
cardinality='unspecified' locked='no' name='ExtConfig' scopedBy='epg'
devCtxLbl="><vnsAbsCfgRel locked='no' name='ExtConfigrel'
status='created,modified' key='ExIntfConfigRel' mandatory='no'
cardinality='unspecified'
targetName='externalIf'></vnsAbsCfgRel></vnsAbsFolder></vnsAbsFuncCfg></vn
sAbsFuncProf></vnsAbsFuncProfGrp></vnsAbsFuncProfContr>
Add service graph: [continue]
<?xml version="1.0" encoding="UTF-8"?>
<fvTenant name='pod1' status='created,modified'><vnsAbsGraph ownerKey="
name='asa-fail-graph' descr=" status='created,modified' ownerTag="
uiTemplateType='ONE NODE FW ROUTED'><vnsAbsTermNodeCon ownerKey="
name='T1' descr=" status='created,modified' ownerTag="><vnsOutTerm
name='output-terminal' descr="
status='created,modified'></vnsOutTerm><vnsInTerm name='input-terminal'
descr=" status='created,modified'></vnsInTerm><vnsAbsTermConn ownerKey="
attNotify='no' name='1' descr=" status='created,modified'
ownerTag="></vnsAbsTermConn></vnsAbsTermNodeCon><vnsAbsNode
status='created,modified' descr=" ownerTag=" ownerKey=" name='Firewall'
funcType='GoTo' shareEncap='no'><vnsAbsFuncConn ownerKey=' attNotify='no'
name='internal' descr=" status='created,modified' ownerTag="><vnsRsMConnAtt
tDn='uni/infra/mDev-CISCO-ASA-1.2/mFunc-Firewall/mConn-internal'
status='created,modified'></vnsRsMConnAtt></vnsAbsFuncConn><vnsAbsFuncCo
nn ownerKey=" attNotify='no' name='external' descr=" status='created,modified'
ownerTag="><vnsRsMConnAtt tDn='uni/infra/mDev-CISCO-ASA-1.2/mFunc-
Firewall/mConn-external'
status='created,modified'></vnsRsMConnAtt></vnsAbsFuncConn><vnsRsNodeTo
MFunc tDn='uni/infra/mDev-CISCO-ASA-1.2/mFunc-Firewall'
status='created,modified'></vnsRsNodeToMFunc><vnsRsNodeToAbsFuncProf
tDn='uni/tn-pod1/absFuncProfContr/absFuncProfGrp-asa-fail-gr/absFuncProf-asa-
fail-fprof'
status='created,modified'></vnsRsNodeToAbsFuncProf></vnsAbsNode><vnsAbsT
ermNodeProv ownerKey=" name='T2' descr=" status='created,modified'
ownerTag="><vnsOutTerm name='output-terminal' descr="
status='created,modified'></vnsOutTerm><vnsInTerm name='input-terminal'
descr=" status='created,modified'></vnsInTerm><vnsAbsTermConn ownerKey="
attNotify='no' name='1' descr=" status='created,modified'
ownerTag="></vnsAbsTermConn></vnsAbsTermNodeProv><vnsAbsConnection
adjType='L2' ownerKey=" name='C2' descr=" connType='external'
```

status='created,modified' ownerTag="

unicastRoute='yes'><vnsRsAbsConnectionConns tDn='uni/tn-pod1/AbsGraph-asa-fail-graph/AbsNode-Firewall/AbsFConn-internal'

status='created,modified'></vnsRsAbsConnectionConns><vnsRsAbsConnectionConns tDn='uni/tn-pod1/AbsGraph-asa-fail-graph/AbsTermNodeProv-T2/AbsTConn' status='created,modified'></vnsRsAbsConnectionConns></vnsAbsConnection><vn sAbsConnection adjType='L2' ownerKey='' name='C1' descr='' connType='external' status='created,modified' ownerTag=''

unicastRoute='yes'><vnsRsAbsConnectionConns tDn='uni/tn-pod1/AbsGraph-asa-fail-graph/AbsNode-Firewall/AbsFConn-external'

status='created,modified'></vnsRsAbsConnectionConns><vnsRsAbsConnectionConns tDn='uni/tn-pod1/AbsGraph-asa-fail-graph/AbsTermNodeCon-T1/AbsTConn' status='created,modified'></vnsRsAbsConnectionConns></vnsAbsConnection></vnsAbsGraph></fvTenant>

Apply asa-fover SG and create app-to-db contract: [continue]

```
<?xml version="1.0" encoding="UTF-8"?>
<fvTenant name='pod1' status='created,modified'><fvAp name='aprof'
status='created,modified' prio='unspecified'><fvAEPg status='created,modified'
matchT='AtleastOne' name='app'><fvRsCons status='created,modified'
tnVzBrCPName='app-to-db'></fvRsCons></fvAEPg><fvAEPg
status='created,modified' matchT='AtleastOne' name='db'><fvRsProv
status='created,modified' tnVzBrCPName='app-to-
db'></fvRsProv></fvAEPg></fvAp><vnsLDevCtx ctrctNameOrLbl='app-to-db'
status='created,modified' graphNameOrLbl='asa-fail-graph'
nodeNameOrLbl='Firewall'><vnsLIfCtx status='created,modified'
connNameOrLbl='internal'><vnsRsLlfCtxToLlf tDn='uni/tn-pod1/lDevVip-pod1-
asa-fover/llf-internal'
status='created,modified'></vnsRsLIfCtxToLIf></vnsLIfCtx><vnsLIfCtx
status='created,modified' connNameOrLbl='external'><vnsRsLIfCtxToLIf
tDn='uni/tn-pod1/lDevVip-pod1-asa-fover/lIf-external'
status='created,modified'></vnsRsLIfCtxToLIf></vnsLIfCtx><vnsRsLDevCtxToLDev
tDn='uni/tn-pod1/lDevVip-pod1-asa-fover'
status='created,modified'></vnsRsLDevCtxToLDev></vnsLDevCtx><vzBrCP
name='app-to-db' status='created,modified'><vzSubj revFltPorts='yes'
name='Subject' descr='' status='created,modified' consMatchT='AtleastOne'
prio='unspecified' provMatchT='AtleastOne'><vzRsSubjGraphAtt
status='created,modified' tnVnsAbsGraphName='asa-fail-
graph'></vzRsSubjGraphAtt><vzRsSubjFiltAtt status='created,modified'
tnVzFilterName='default'></vzRsSubjFiltAtt></vzSubj></vzBrCP></fvTenant>
Create as a cluster context as L4-L7 device: [continue]
```

<?xml version="1.0" encoding="UTF-8"?>
<fvTenant name='pod1' status='created,modified'><vnsLDevVip
devtype='PHYSICAL' contextAware='single-Context' name='pod1-asa-clu'
funcType='GoTo' status='created,modified' mode='legacy-Mode'><vnsCCred
name='username' value='aciadmin'</pre>

```
status='created,modified'></vnsCCred><vnsRsALDevToPhysDomP tDn='uni/phys-
asa phys' status='created,modified'></vnsRsALDevToPhysDomP><vnsLIf
name='internal' status='created,modified'><vnsRsCIfAtt tDn='uni/tn-
pod1/lDevVip-pod1-asa-clu/cDev-pod1-asa-clu Device 1/cIf-[p10]'
status='created,modified'></vnsRsCIfAtt><vnsRsMetaIf tDn='uni/infra/mDev-
CISCO-ASA-1.2/mIfLbl-internal
status='created,modified'></vnsRsMetaIf></vnsLIf><vnsLIf name='external'
status='created,modified'><vnsRsCIfAtt tDn='uni/tn-pod1/lDevVip-pod1-asa-
clu/cDev-pod1-asa-clu Device 1/cIf-[p10]'
status='created,modified'></vnsRsCIfAtt><vnsRsMetaIf tDn='uni/infra/mDev-
CISCO-ASA-1.2/mIfLbl-external'
status='created,modified'></vnsRsMetaIf></vnsLIf><vnsChkr name="
status='created,modified'></vnsChkr><vnsCCredSecret name='password'
value='cisco' status='created,modified'></vnsCCredSecret><vnsCDev name='pod1-
asa-clu Device 1' devCtxLbl=" status='created.modified' vcenterName="
vmName="><vnsCCredSecret name='password' value='cisco'
status='created,modified'></vnsCCredSecret><vnsDevFolder name='ClusterConfig'
status='created,modified' key='ClusterConfig'><vnsDevParam value='in-cluster'
name='cluster role' status='created,modified'
key='cluster_role'></vnsDevParam></vnsDevFolder><vnsCCred name='username'
value='aciadmin' status='created,modified'></vnsCCred><vnsCMgmt name="
host='10.10.10.31' status='created,modified' port='443'></vnsCMgmt><vnsCIf
name='p10' vnicName=" status='created,modified'><vnsRsCIfPathAtt
tDn='topology/pod-1/protpaths-101-102/pathep-[vpc_aaep_asa1-asa2]'
status='created,modified'></vnsRsCIfPathAtt></vnsCIf></vnsCDev><vnsCMgmt
name="host='10.10.10.20' status='created,modified'
port='443'></vnsCMgmt><vnsRsMDevAtt tDn='uni/infra/mDev-CISCO-ASA-1.2'
status='created,modified'></vnsRsMDevAtt></vnsLDevVip></fvTenant>
Create context config - function profile: [continue]
```

<?xml version="1.0" encoding="UTF-8"?> <vnsAbsFuncProfGrp ownerKey=" name='asa-clu-gr' descr="</pre> status='created,modified' ownerTag="><vnsAbsFuncProf ownerKey=" name='asaclu-fprof' descr=" status='created,modified' ownerTag="><vnsAbsDevCfg ownerKey=" name='devConfig' descr=" status='created,modified' ownerTag="><vnsAbsFolder status='created,modified' profileBehaviorShared='yes' key='AccessList' cardinality='unspecified' locked='no' name='access-list-inbound' scopedBy='epg' devCtxLbl="><vnsAbsFolder status='created,modified' profileBehaviorShared='yes' key='AccessControlEntry' cardinality='unspecified' locked='no' name='permit-udp' scopedBv='epg' devCtxLbl=''><vnsAbsParam status='created,modified' mandatory='yes' key='action' cardinality='unspecified' locked='no' name='action' value='permit' validation="></vnsAbsParam><vnsAbsParam status='created,modified' mandatory='yes' key='order' cardinality='unspecified' locked='no' name='order' value='40' validation="></vnsAbsParam><vnsAbsFolder status='created,modified' profileBehaviorShared='yes' key='protocol' cardinality='unspecified' locked='no'

```
name='udp' scopedBy='epg' devCtxLbl="'><vnsAbsParam status='created,modified'
mandatory='no' key='name number' cardinality='unspecified' locked='no'
name='name number' value='udp'
validation="></vnsAbsParam></vnsAbsFolder><vnsAbsFolder
status='created,modified' profileBehaviorShared='yes' key='source address'
cardinality='unspecified' locked='no' name='source address' scopedBy='epg'
devCtxLbl="'><vnsAbsParam status='created,modified' mandatory='no' key='any'
cardinality='unspecified' locked='no' name='any' value='any'
validation="></vnsAbsParam></vnsAbsFolder><vnsAbsFolder
status='created,modified' profileBehaviorShared='yes' key='destination address'
cardinality='unspecified' locked='no' name='destination_address' scopedBy='epg'
devCtxLbl="'><vnsAbsParam status='created,modified' mandatory='no' key='any'
cardinality='unspecified' locked='no' name='any' value='any'
validation="'></vnsAbsParam></vnsAbsFolder></vnsAbsFolder
status='created.modified' profileBehaviorShared='ves' kev='AccessControlEntry'
cardinality='unspecified' locked='no' name='permit-icmp' scopedBy='epg'
devCtxLbl="><vnsAbsParam status='created,modified' mandatory='yes'
key='action' cardinality='unspecified' locked='no' name='action' value='permit'
validation="></vnsAbsParam><vnsAbsParam status='created,modified'
mandatory='yes' key='order' cardinality='unspecified' locked='no' name='order'
value='30' validation="></vnsAbsParam><vnsAbsFolder status='created,modified'
profileBehaviorShared='ves' key='destination address' cardinality='unspecified'
locked='no' name='destination address' scopedBy='epg'
devCtxLbl="'><vnsAbsParam status='created,modified' mandatory='no' key='any'
cardinality='unspecified' locked='no' name='any' value='any'
validation="></vnsAbsParam></vnsAbsFolder><vnsAbsFolder
status='created,modified' profileBehaviorShared='yes' key='protocol'
cardinality='unspecified' locked='no' name='icmp' scopedBy='epg'
devCtxLbl="><vnsAbsParam status='created,modified' mandatory='no'
key='name number' cardinality='unspecified' locked='no' name='name number'
value='icmp' validation="'></vnsAbsParam></vnsAbsFolder><vnsAbsFolder
status='created,modified' profileBehaviorShared='yes' key='source_address'
cardinality='unspecified' locked='no' name='source address' scopedBy='epg'
devCtxLbl="><vnsAbsParam status='created,modified' mandatory='no' key='any'
cardinality='unspecified' locked='no' name='any' value='any'
validation="></vnsAbsParam></vnsAbsFolder></vnsAbsFolder
status='created,modified' profileBehaviorShared='yes' key='AccessControlEntry'
cardinality='unspecified' locked='no' name='permit-https' scopedBy='epg'
devCtxLbl="><vnsAbsParam status='created,modified' mandatory='yes'
key='action' cardinality='unspecified' locked='no' name='action-permit'
value='permit' validation="></vnsAbsParam><vnsAbsParam
status='created,modified' mandatory='yes' key='order' cardinality='unspecified'
locked='no' name='order1' value='10'
validation="></vnsAbsParam><vnsAbsFolder status='created,modified'
profileBehaviorShared='yes' key='source_address' cardinality='unspecified'
locked='no' name='src-address' scopedBy='epg' devCtxLbl=''><vnsAbsParam
```

```
status='created,modified' mandatory='no' key='any' cardinality='unspecified'
locked='no' name='any' value='any'
validation="></vnsAbsParam></vnsAbsFolder><vnsAbsFolder
status='created,modified' profileBehaviorShared='yes' key='destination service'
cardinality='unspecified' locked='no' name='dest-service' scopedBy='epg'
devCtxLbl="><vnsAbsParam status='created.modified' mandatory='ves'
key='low_port' cardinality='unspecified' locked='no' name='port' value='https'
validation="></vnsAbsParam><vnsAbsParam status='created,modified'
mandatory='yes' key='operator' cardinality='unspecified' locked='no' name='op'
value='eg' validation="></vnsAbsParam></vnsAbsFolder><vnsAbsFolder
status='created,modified' profileBehaviorShared='yes' key='protocol'
cardinality='unspecified' locked='no' name='tcp' scopedBy='epg'
devCtxLbl="><vnsAbsParam status='created,modified' mandatorv='no'
key='name number' cardinality='unspecified' locked='no' name='tcp' value='tcp'
validation="></vnsAbsParam></vnsAbsFolder><vnsAbsFolder
status='created,modified' profileBehaviorShared='yes' key='destination_address'
cardinality='unspecified' locked='no' name='dest-address' scopedBy='epg'
devCtxLbl="'><vnsAbsParam status='created,modified' mandatory='no' key='any'
cardinality='unspecified' locked='no' name='any' value='any'
validation="></vnsAbsParam></vnsAbsFolder></vnsAbsFolder
status='created,modified' profileBehaviorShared='yes' key='AccessControlEntry'
cardinality='unspecified' locked='no' name='permit-http' scopedBy='epg'
devCtxLbl="><vnsAbsParam status='created,modified' mandatory='yes'
key='action' cardinality='unspecified' locked='no' name='action-permit'
value='permit' validation="></vnsAbsParam><vnsAbsParam
status='created,modified' mandatory='yes' key='order' cardinality='unspecified'
locked='no' name='order1' value='10'
validation="></vnsAbsParam><vnsAbsFolder status='created,modified'
profileBehaviorShared='yes' key='source_address' cardinality='unspecified'
locked='no' name='src-address' scopedBy='epg' devCtxLbl=''><vnsAbsParam
status='created,modified' mandatory='no' key='any' cardinality='unspecified'
locked='no' name='any' value='any'
validation="></vnsAbsParam></vnsAbsFolder><vnsAbsFolder
status='created,modified' profileBehaviorShared='yes' key='destination service'
cardinality='unspecified' locked='no' name='dest-service' scopedBy='epg'
devCtxLbl="><vnsAbsParam status='created,modified' mandatory='yes'
key='low port' cardinality='unspecified' locked='no' name='port' value='http'
validation="></vnsAbsParam><vnsAbsParam status='created,modified'
mandatory='yes' key='operator' cardinality='unspecified' locked='no' name='op'
value='eg' validation="></vnsAbsParam></vnsAbsFolder><vnsAbsFolder
status='created,modified' profileBehaviorShared='yes' key='protocol'
cardinality='unspecified' locked='no' name='tcp' scopedBy='epg'
devCtxLbl="><vnsAbsParam status='created,modified' mandatory='no'
key='name number' cardinality='unspecified' locked='no' name='tcp' value='tcp'
validation="></vnsAbsParam></vnsAbsFolder><vnsAbsFolder
status='created,modified' profileBehaviorShared='yes' key='destination address'
```

```
cardinality='unspecified' locked='no' name='dest-address' scopedBy='epg'
devCtxLbl="><vnsAbsParam status='created,modified' mandatory='no' key='any'
cardinality='unspecified' locked='no' name='any' value='any'
validation="></vnsAbsParam></vnsAbsFolder></vnsAbsFolder>
<vnsAbsFolder status='created,modified' profileBehaviorShared='yes'</pre>
key='Interface' cardinality='unspecified' locked='no' name='internalIf'
scopedBy='epg' devCtxLbl="><vnsAbsFolder status='created,modified'
profileBehaviorShared='yes' key='InterfaceConfig' cardinality='unspecified'
locked='no' name='internalIfCfg' scopedBy='epg' devCtxLbl=''><vnsAbsParam
status='created.modified' mandatory='no' key='security level'
cardinality='unspecified' locked='no' name='internal_security_level' value='100'
validation="></vnsAbsParam><vnsAbsFolder status='created,modified'
profileBehaviorShared='yes' key='IPv4Address' cardinality='unspecified'
locked='no' name='IPv4Address' scopedBy='epg' devCtxLbl=''><vnsAbsParam
status='created.modified' mandatory='yes' key='ipy4 address'
cardinality='unspecified' locked='no' name='ipv4 address'
value='10.40.0.10/255.255.255.0'
validation="></vnsAbsParam></vnsAbsFolder></vnsAbsFolder>
<vnsAbsFolder status='created,modified' profileBehaviorShared='yes'</pre>
key='Interface' cardinality='unspecified' locked='no' name='externalIf'
scopedBy='epg' devCtxLbl="><vnsAbsFolder status='created,modified'
profileBehaviorShared='yes' key='InterfaceConfig' cardinality='unspecified'
locked='no' name='externalIfCfg' scopedBy='epg' devCtxLbl=''><vnsAbsParam
status='created,modified' mandatory='no' key='security level'
cardinality='unspecified' locked='no' name='external_security_level' value='50'
validation="></vnsAbsParam><vnsAbsFolder status='created,modified'
profileBehaviorShared='yes' key='IPv4Address' cardinality='unspecified'
locked='no' name='IPv4Address' scopedBv='epg' devCtxLbl=''><vnsAbsParam
status='created,modified' mandatory='yes' key='ipv4_address'
cardinality='unspecified' locked='no' name='ipv4 address'
value='10.50.0.10/255.255.255.0'
validation="></vnsAbsParam></vnsAbsFolder></vnsAbsFolder
status='created,modified' profileBehaviorShared='yes' key='AccessGroup'
cardinality='unspecified' locked='no' name='ExtAccessGroup' scopedBy='epg'
devCtxLbl="><vnsAbsCfgRel locked='no' name='name' status='created,modified'
key='inbound_access_list_name' mandatory='no' cardinality='unspecified'
targetName='access-list-
inbound'></vnsAbsCfgRel></vnsAbsFolder></vnsAbsFolder></vnsAbsDevCfg><v
nsRsProfToMFunc tDn='uni/infra/mDev-CISCO-ASA-1.2/mFunc-Firewall'
status='created,modified'></vnsRsProfToMFunc><vnsAbsFuncCfg ownerKey="
name='funcConfig' descr=" status='created,modified' ownerTag="><vnsAbsFolder
status='created,modified' profileBehaviorShared='yes' key='InIntfConfigRelFolder'
cardinality='unspecified' locked='no' name='IntConfig' scopedBy='epg'
devCtxLbl="><vnsAbsCfgRel locked='no' name='InConfigrel'
status='created,modified' key='InIntfConfigRel' mandatory='no'
cardinality='unspecified'
```

targetName='internalIf'></vnsAbsCfgRel></vnsAbsFolder><vnsAbsFolder status='created,modified' profileBehaviorShared='yes' key='ExIntfConfigRelFolder' cardinality='unspecified' locked='no' name='ExtConfig' scopedBy='epg' devCtxLbl="><vnsAbsCfgRel locked='no' name='ExtConfigrel' status='created,modified' key='ExIntfConfigRel' mandatory='no' cardinality='unspecified' targetName='externalIf'></vnsAbsCfgRel></vnsAbsFolder></vnsAbsFuncCfg></vn sAbsFuncProf></vnsAbsFuncProfGrp> Add service graph: [continue] <?xml version="1.0" encoding="UTF-8"?> <fvTenant name='pod1' status='created,modified'><vnsAbsGraph ownerKey=" name='asa-clu-graph' descr=" status='created,modified' ownerTag=" uiTemplateType='UNSPECIFIED'><vnsAbsTermNodeCon ownerKey='' name='T1' descr="status='created.modified' ownerTag="><vnsOutTerm name='outputterminal' descr=" status='created,modified'></vnsOutTerm><vnsInTerm name='input-terminal' descr=" status='created,modified'></vnsInTerm><vnsAbsTermConn ownerKey=" attNotify='no' name='1' descr=" status='created,modified' ownerTag="></vnsAbsTermConn></vnsAbsTermNodeCon><vnsAbsNode status='created,modified' managed='yes' sequenceNumber='0' funcTemplateType='FW ROUTED' descr="ownerTag="ownerKey=" name='FIREWALL' funcType='GoTo' shareEncap='no'><vnsAbsFuncConn ownerKey=" attNotify='no' name='consumer' descr=" status='created,modified' ownerTag="><vnsRsMConnAtt tDn='uni/infra/mDev-CISCO-ASA-1.2/mFunc-Firewall/mConn-external' status='created,modified'></vnsRsMConnAtt></vnsAbsFuncConn><vnsAbsFuncCo nn ownerKey=" attNotify='no' name='provider' descr=" status='created,modified' ownerTag="><vnsRsMConnAtt tDn='uni/infra/mDev-CISCO-ASA-1.2/mFunc-Firewall/mConn-internal' status='created,modified'></vnsRsMConnAtt></vnsAbsFuncConn><vnsRsNodeTo MFunc tDn='uni/infra/mDev-CISCO-ASA-1.2/mFunc-Firewall' status='created.modified'></vnsRsNodeToMFunc><vnsRsNodeToAbsFuncProf tDn='uni/tn-pod1/absFuncProfContr/absFuncProfGrp-asa-clu-gr/absFuncProf-asaclu-fprof' status='created,modified'></vnsRsNodeToAbsFuncProf><vnsRsNodeToLDev tDn='uni/tn-pod1/lDevVip-pod1-asa-clu' status='created,modified'></vnsRsNodeToLDev></vnsAbsNode><vnsAbsTermNod eProv ownerKey=" name='T2' descr=" status='created,modified' ownerTag="><vnsOutTerm name='output-terminal' descr=" status='created,modified'></vnsOutTerm><vnsInTerm name='input-terminal' descr=" status='created,modified'></vnsInTerm><vnsAbsTermConn ownerKey=" attNotify='no' name='1' descr=" status='created,modified' ownerTag="></vnsAbsTermConn></vnsAbsTermNodeProv><vnsAbsConnection adjType='L3' ownerKey='' name='C2' descr='' connDir='provider'

connType='external' status='created,modified' ownerTag="

unicastRoute='yes'><vnsRsAbsConnectionConns tDn='uni/tn-pod1/AbsGraph-asa-clu-graph/AbsTermNodeProv-T2/AbsTConn'
status='created,modified'></vnsRsAbsConnectionConns><vnsRsAbsConnectionCon
ns tDn='uni/tn-pod1/AbsGraph-asa-clu-graph/AbsNode-FIREWALL/AbsFConnprovider'
status='created,modified'></vnsRsAbsConnectionConns></vnsAbsConnection><vn
sAbsConnection adjType='L3' ownerKey='' name='C1' descr='' connDir='provider'
connType='external' status='created,modified' ownerTag=''
unicastRoute='yes'><vnsRsAbsConnectionConns tDn='uni/tn-pod1/AbsGraph-asa-

clu-graph/AbsNode-FIREWALL/AbsFConn-consumer' status='created,modified'></vnsRsAbsConnectionConns><vnsRsAbsConnectionConns tDn='uni/tn-pod1/AbsGraph-asa-clu-graph/AbsTermNodeCon-T1/AbsTConn' status='created,modified'></vnsRsAbsConnectionConns></vnsAbsConnection></vnsAbsGraph></fvTenant>

Create L3outs for fabric and ASA cluster context: [continue]

```
<?xml version="1.0" encoding="UTF-8"?>
<fvTenant name='pod1' status='created,modified'><l3extOut ownerKey="
name='asa-clu-internal' descr=" targetDscp='unspecified' enforceRtctrl='export'
status='created,modified' ownerTag="><l3extRsL3DomAtt tDn='uni/l3dom-
l3out domain' status='created,modified'></l3extRsL3DomAtt><ospfExtP
areaCtrl='redistribute,summary' areaId='backbone' areaType='regular' descr="
status='created,modified' areaCost='1'></ospfExtP><l3extInstP
matchT='AtleastOne' name='l3out1-epg' descr=" targetDscp='unspecified'
status='created,modified' prio='unspecified'><fvRsCustQosPol
tnOosCustomPolName="
status='created,modified'></fvRsCustQosPol><l3extSubnet name=" descr="
ip='10.40.0.0/24' status='created.modified'
aggregate="></l3extSubnet><l3extSubnet name="descr="ip='10.1.0.0/24"
status='created,modified' aggregate=" scope='export-
rtctrl'></l3extSubnet><l3extSubnet name="descr="ip='10.70.0.0/24"
status='created,modified' aggregate="></l3extSubnet></l3extInstP><l3extLNodeP
ownerKey=" name='leafnp' descr=" targetDscp='unspecified' tag='yellow-green'
status='created,modified' ownerTag="><l3extRsNodeL3OutAtt tDn='topology/pod-
1/node-101' status='created,modified' rtrIdLoopBack='yes'
rtrId='111.0.0.1'></l3extRsNodeL3OutAtt><l3extRsNodeL3OutAtt
tDn='topology/pod-1/node-102' status='created,modified' rtrIdLoopBack='yes'
rtrId='112.0.0.1'></l3extRsNodeL3OutAtt><l3extLIfP ownerKey=" descr="
name='leafip' tag='yellow-green' status='created,modified' ownerTag=''><ospfIfP
authType='none' name=" descr=" authKeyId='1'
status='created,modified'><ospfRsIfPol tnOspfIfPolName="
status='created,modified'></ospfRsIfPol></ospfIfP><l3extRsPathL3OutAtt
status='created,modified' encapScope='local' targetDscp='unspecified'
addr='0.0.0.0' descr=" llAddr='::' encap='vlan-3001' ifInstT='ext-svi'
mac='00:22:BD:F8:19:FF' tDn='topology/pod-1/protpaths-101-102/pathep-
[vpc_aaep_asa1-asa2]' mtu='1500' mode='regular'><l3extMember
```

```
addr='10.40.0.1/24' descr=" name=" llAddr='::' status='created,modified'
side='A'></l3extMember><l3extMember addr='10.40.0.2/24' descr=" name="
llAddr='::' status='created,modified'
side='B'></l3extMember></l3extRsPathL3OutAtt><l3extRsNdIfPol
status='created,modified'
tnNdIfPolName="></l3extRsNdIfPol><l3extRsIngressQosDppPol
tnOosDppPolName="
status='created,modified'></l3extRsIngressQosDppPol><l3extRsEgressQosDppPol
tnQosDppPolName="
status='created,modified'></l3extRsEgressQosDppPol></l3extLIfP></l3extLNodeP
><l3extRsEctx status='created,modified'
tnFvCtxName='pod1net'></l3extRsEctx></l3extOut><l3extOut ownerKey="
name='asa-clu-external' descr=" targetDscp='unspecified' enforceRtctrl='export'
status='created,modified' ownerTag="'><l3extRsL3DomAtt tDn='uni/l3dom-
l3out domain' status='created,modified'></l3extRsL3DomAtt><ospfExtP
areaCtrl='redistribute,summary' areaId='backbone' areaType='regular' descr="
status='created,modified' areaCost='1'></ospfExtP><l3extInstP
matchT='AtleastOne' name='13out2-epg' descr='' targetDscp='unspecified'
status='created,modified' prio='unspecified'><fvRsCustQosPol
tnOosCustomPolName="
status='created,modified'></fvRsCustQosPol><l3extSubnet name=" descr="
ip='10.1.0.0/24' status='created,modified'
aggregate="></l3extSubnet><l3extSubnet name="descr="ip='10.70.0.0/24"
status='created,modified' aggregate='' scope='export-
rtctrl'></l3extSubnet></l3extInstP><l3extLNodeP ownerKey=" name='leaf1np'
descr=" targetDscp='unspecified' tag='yellow-green' status='created,modified'
ownerTag="><l3extRsNodeL3OutAtt tDn='topology/pod-1/node-101"
status='created,modified' rtrIdLoopBack='yes'
rtrId='101.0.0.1'></l3extRsNodeL3OutAtt><l3extRsNodeL3OutAtt
tDn='topology/pod-1/node-102' status='created,modified' rtrIdLoopBack='yes'
rtrId='102.0.0.1'></l3extRsNodeL3OutAtt><l3extLIfP ownerKev=" descr="
name='leaf1ip' tag='yellow-green' status='created,modified' ownerTag=''><ospfIfP
authType='none' name=" descr=" authKeyId='1'
status='created,modified'><ospfRsIfPol tnOspfIfPolName="
status='created,modified'></ospfRsIfPol></ospfIfP><l3extRsPathL3OutAtt
status='created,modified' encapScope='local' targetDscp='unspecified'
addr='0.0.0.0' descr=" llAddr='::' encap='vlan-3051' ifInstT='ext-svi'
mac='00:22:BD:F8:19:FF' tDn='topology/pod-1/protpaths-101-102/pathep-
[vpc_aaep_asa1-asa2]' mtu='1500' mode='regular'><l3extMember
addr='10.50.0.1/24' descr=" name=" llAddr='::' status='created,modified'
side='A'></l3extMember><l3extMember addr='10.50.0.2/24' descr=" name="
llAddr='::' status='created,modified'
side='B'></l3extMember></l3extRsPathL3OutAtt><l3extRsNdIfPol
status='created.modified'
tnNdIfPolName="></l3extRsNdIfPol><l3extRsIngressQosDppPol
tnQosDppPolName="
```

```
tnQosDppPolName="
status='created,modified'></l3extRsEgressQosDppPol></l3extLIfP></l3extLNodeP
><l3extRsEctx status='created,modified'
tnFvCtxName='vrf1net'></l3extRsEctx></l3extOut><l3extOut ownerKey="
name='wan-out' descr='' targetDscp='unspecified' enforceRtctrl='export'
status='created,modified' ownerTag="><l3extRsL3DomAtt tDn='uni/l3dom-out-
l3out' status='created,modified'></l3extRsL3DomAtt><ospfExtP
areaCtrl='redistribute,summary' areaId='0.0.0.2' areaType='regular' descr="
status='created,modified' areaCost='1'></ospfExtP><l3extInstP
matchT='AtleastOne' name='out-l3out3' descr=" targetDscp='unspecified'
status='created,modified' prio='unspecified'><fvRsCons status='created,modified'
prio='unspecified' tnVzBrCPName='out-to-web'></fvRsCons><fvRsCustQosPol
tnQosCustomPolName="
status='created,modified'></fvRsCustQosPol><l3extSubnet name=" descr="
ip='10.70.0.0/24' status='created,modified'
aggregate="></l3extSubnet></l3extInstP><l3extLNodeP ownerKey="
name='leafnp' descr=" targetDscp='unspecified' tag='yellow-green'
status='created,modified' ownerTag="><l3extRsNodeL3OutAtt tDn='topology/pod-
1/node-101' status='created,modified' rtrIdLoopBack='no'
rtrId='101.0.0.1'></l3extRsNodeL3OutAtt><l3extLIfP ownerKey=" descr="
name='leafip' tag='yellow-green' status='created,modified' ownerTag=''><ospfIfP
authType='none' name=" descr=" authKeyId='1'
status='created,modified'><ospfRsIfPol tnOspfIfPolName="
status='created,modified'></ospfRsIfPol></ospfIfP><l3extRsPathL3OutAtt
status='created,modified' encapScope='local' targetDscp='unspecified'
addr='10.60.0.1/24' descr=" llAddr='::' encap='vlan-3511' ifInstT='ext-svi"
mac='00:22:BD:F8:19:FF' tDn='topology/pod-1/paths-101/pathep-[eth1/16]'
mtu='1500' mode='regular'></l3extRsPathL3OutAtt><l3extRsNdIfPol
status='created.modified'
tnNdIfPolName="></l3extRsNdIfPol><l3extRsIngressQosDppPol
tnQosDppPolName="
status='created,modified'></l3extRsIngressOosDppPol><l3extRsEgressOosDppPol
tnQosDppPolName="
status='created,modified'></l3extRsEgressQosDppPol></l3extLIfP></l3extLNodeP
><l3extRsEctx status='created,modified'
tnFvCtxName='vrf1net'></l3extRsEctx></l3extOut><fvCtx ownerKey="
name='vrf1net' descr='' knwMcastAct='permit' status='created,modified'
ownerTag="pcEnfPref='enforced'><fvRsCtxToExtRouteTagPol
status='created,modified' tnL3extRouteTagPolName='asa-
outside'></fvRsCtxToExtRouteTagPol></fvCtx><fvCtx ownerKey="
name='pod1net' descr=" knwMcastAct='permit' status='created,modified'
ownerTag="pcEnfPref='enforced'><fvRsCtxToExtRouteTagPol
status='created,modified' tnL3extRouteTagPolName='asa-
inside'></fvRsCtxToExtRouteTagPol></fvCtx><l3extRouteTagPol ownerKey="
name='asa-inside' descr=" tag='1040' status='created,modified'
```

status='created,modified'></l3extRsIngressQosDppPol><l3extRsEgressQosDppPol

```
ownerTag=''></l3extRouteTagPol><l3extRouteTagPol ownerKey=' name='asa-
outside' descr='' tag='1050' status='created,modified'
ownerTag=''></l3extRouteTagPol></fvTenant>
Apply asa-cluster SG and create out-to-web contract: [continue]
```

```
<?xml version="1.0" encoding="UTF-8"?>
<fvTenant name='pod1' status='created,modified'><vnsRtrCfg ownerKey="
name='asa-cluster' descr='ASA cluster routerID' status='created,modified'
ownerTag="rtrId='103.0.0.1'></vnsRtrCfg><fvAp name='aprof'
status='created,modified' prio='unspecified'><fvAEPg status='created,modified'
matchT='AtleastOne' name='web'><fvRsProv status='created,modified'
tnVzBrCPName='out-to-web'></fvRsProv></fvAEPg></fvAp><vnsLDevCtx
ctrctNameOrLbl='out-to-web' status='created,modified' graphNameOrLbl='asa-clu-
graph' nodeNameOrLbl='FIREWALL'><vnsLlfCtx status='created,modified'
connNameOrLbl='consumer'><vnsRsLlfCtxToLlf tDn='uni/tn-pod1/lDevVip-pod1-
asa-clu/llf-external'
status='created,modified'></vnsRsLIfCtxToLIf><vnsRsLIfCtxToInstP tDn='uni/tn-
pod1/out-asa-clu-external/instP-l3out2-epg'
status='created,modified'></vnsRsLIfCtxToInstP></vnsLIfCtx><vnsLIfCtx
status='created,modified' connNameOrLbl='provider'><vnsRsLIfCtxToLIf
tDn='uni/tn-pod1/lDevVip-pod1-asa-clu/lIf-internal'
status='created,modified'></vnsRsLIfCtxToLIf><vnsRsLIfCtxToInstP tDn='uni/tn-
pod1/out-asa-clu-internal/instP-l3out1-epg'
status='created,modified'></vnsRsLIfCtxToInstP></vnsLIfCtx><vnsRsLDevCtxToRt
rCfg status='created,modified' tnVnsRtrCfgName='asa-
cluster'></vnsRsLDevCtxToRtrCfg><vnsRsLDevCtxToLDev tDn='uni/tn-
pod1/lDevVip-pod1-asa-clu'
status='created,modified'></vnsRsLDevCtxToLDev></vnsLDevCtx><vzBrCP
name='out-to-web' status='created,modified' scope='tenant'><vzSubj
name='Subject' status='created,modified'><vzRsSubjGraphAtt
status='created.modified' tnVnsAbsGraphName='asa-clu-
graph'></vzRsSubjGraphAtt><vzRsSubjFiltAtt status='created,modified'
tnVzFilterName='default'></vzRsSubjFiltAtt></vzSubj></vzBrCP><l3extOut
name='wan-out' status='created.modified'><l3extInstP name='out-l3out3'
status='created.modified'><fvRsCons status='created.modified'
tnVzBrCPName='out-to-web'></fvRsCons></l3extInstP></l3extOut></fvTenant>
We are done, now review pod1 tenant and ping out->web and app->db: [continue]
```

Enjoy!