



# Cisco Application Policy Infrastructure Controller Release Notes, Release 5.2(2)

## Introduction

The Cisco Application Centric Infrastructure (ACI) is an architecture that allows the application to define the networking requirements in a programmatic way. This architecture simplifies, optimizes, and accelerates the entire application deployment lifecycle. Cisco Application Policy Infrastructure Controller (APIC) is the software, or operating system, that acts as the controller.

This document describes the features, issues, and limitations for the Cisco APIC software. For the features, issues, and limitations for the Cisco NX-OS software for the Cisco Nexus 9000 series switches, see the [Cisco Nexus 9000 ACI-Mode Switches Release Notes, Release 15.2\(2\)](#).

For more information about this product, see "Related Content."

| Date               | Description  |
|--------------------|--|
| May 6, 2024        | In the Miscellaneous Compatibility Information section, added: <ul style="list-style-type: none"><li>4.3.2.240009 CIMC HUU ISO for UCS C220/C240 M5 (APIC-L3/M3)</li></ul>   |
| November 29, 2022  | In the Known Issues section, added: <ul style="list-style-type: none"><li>If you are upgrading to Cisco APIC release 4.2(6o), 4.2(7l), 5.2(1g), or later, ensure that any VLAN encapsulation blocks that you are explicitly using for leaf switch front panel VLAN programming are set as "external (on the wire)." If these VLAN encapsulation blocks are instead set to "internal," the upgrade causes the front panel port VLAN to be removed, which can result in a datapath outage.</li></ul> |
| November 18, 2022  | In the Open Issues section, added bug CSCwc66053.  |
| September 27, 2022 | In the Open Issues section, added bug CSCwc49449.  |
| August 1, 2022     | In the Miscellaneous Compatibility Information section, added: <ul style="list-style-type: none"><li>4.2(2a) CIMC HUU ISO (recommended) for UCS C220/C240 M5 (APIC-L3/M3)</li><li>4.1(2k) CIMC HUU ISO (recommended) for UCS C220/C240 M4 (APIC-L2/M2)</li></ul>   |
| July 1, 2022       | In the Open Issues section, added bug CSCwb93239.  |
| June 30, 2022      | In the section Miscellaneous Compatibility, added information about Cisco Nexus Dashboard Insights creating the cisco_SN_NI user.  |
| April 12, 2022     | In the Open Issues section, added bug CSCvz94062.  |
| March 21, 2022     | In the Miscellaneous Compatibility Information section, added: <ul style="list-style-type: none"><li>4.1(3f) CIMC HUU ISO (recommended) for UCS C220/C240 M5 (APIC-L3/M3)</li></ul>  |
| February 23, 2022  | In the Miscellaneous Compatibility Information section, added: <ul style="list-style-type: none"><li>4.1(2g) CIMC HUU ISO (recommended) for UCS C220/C240 M4 (APIC-L2/M2)</li></ul>  |
| November 29, 2021  | In the Open Issues section, added bug CSCvz98577.  |
| November 16, 2021  | In the Known Issues section, added bugs CSCvx78018 and CSCvy07935.   |
| November 2, 2021   | In the Miscellaneous Compatibility Information section, added: <ul style="list-style-type: none"><li>4.1(3d) CIMC HUU ISO (recommended) for UCS C220/C240 M5 (APIC-L3/M3)</li></ul>  |
| October 12, 2021   | Release 5.2(2h) became available. Added the resolved bugs for this release.  |
| September 29, 2021 | Release 5.2(2g) became available. Added a resolved bug for this release.   |

| Date            | Description  |
|-----------------|--|
| August 17, 2021 | Release 5.2(2f) became available; there are no changes to this document for this release. See the <a href="#">Cisco Nexus 9000 ACI-Mode Switches Release Notes, Release 15.2(2)</a> for the changes in this release.                       |
| August 9, 2021  | Removed bug CSCvy44014. The information is documented in the <a href="#">Cisco APIC Layer 4 to Layer 7 Services Deployment Guide, Release 5.2(x)</a> . See the "Guidelines and Limitations for Configuring Policy-Based Redirect" section. |
| July 26, 2021   | In the Miscellaneous Compatibility Information section, the CIMC 4.1(3c) release is now recommended for UCS C220/C240 M5 (APIC-L3/M3).   |
| July 9, 2021    | Release 5.2(2e) became available.  |

## New Software Features

| Feature | Description   |
|---------|---|
| N/A     | There are no new software features in this release. |

## New Hardware Features

For the new hardware features, see the [Cisco Nexus 9000 ACI-Mode Switches Release Notes, Release 15.2\(2\)](#).

## Changes in Behavior

For the changes in behavior, see the [Cisco ACI Releases Changes in Behavior](#) document.

## Open Issues

Click the bug ID to access the Bug Search tool and see additional information about the bug. The "Exists In" column of the table specifies the 5.2(2) releases in which the bug exists. A bug might also exist in releases other than the 5.2(2) releases.

| Bug ID                     | Description   | Exists in         |
|----------------------------|---|-------------------|
| <a href="#">CSCvz65560</a> | After upgrading the Cisco APIC to a 5.x release, such as 5.2(2f), while the switches are still running a 14.x or earlier release, contract configuration/update/association with the mixed releases can cause the switch zoning rule to become disabled, which results in network disruption. | 5.2(2f) and later |

| Bug ID                     | Description  | Exists in               |
|----------------------------|--|-------------------------|
| <a href="#">CSCvz65560</a> | <p>In a mixed version fabric in which the Cisco APIC is running a 5.x release and the switches are running a 14.x or earlier release, addition/update/association of a contract with TCP filter that has a port range value of " 22" (that is, the port value for SSH), the following incorrect behavior can be encountered:</p> <ol style="list-style-type: none"> <li>1. If the TCP port filter is defined as a range of x-22, where x is between 1 and 21, then this mixed mode causes the switch's security policy (zoning rule) to become disabled, which causes network disruption.</li> <li>2. If the TCP port range is 22-22 (that is, exactly matching port 22), then this mixed mode causes the switch's security policy (zoning rule) to get incorrectly programmed to allow all TCP traffic instead of permitting SSH only.</li> </ol> <p>Upgrading the Cisco APIC to a 5.x release without making the contract configuration changes does not trigger these problems.</p> | 5.2(2f)                 |
| <a href="#">CSCvy17504</a> | <p>When the OpFlexAgent moved from one vPC pair leaf switches to a new vPC pair, it may take up to 20 minutes for the OpFlexAgent detected the movement, and reconnect the OpFlex channel. Ideally, this should be completed within a few seconds.</p>   | 5.2(2e) through 5.2(2g) |
| <a href="#">CSCvz12372</a> | <p>Endpoints that are shown under an endpoint group created by the OpenStack controller based on the Neutron network configuration are missing information about the Hosting Server as well as the Reporting Controller name.</p> <p>OpenStack topology information is missing for Nova virtual machines.</p>  | 5.2(2e) through 5.2(2g) |
| <a href="#">CSCva81020</a> | <p>For strict security requirements, customers require custom certificates that have RSA key lengths of 3072 and 4096.</p>   | 5.2(2e) and later       |
| <a href="#">CSCvm56946</a> | <p>Support for local user (admin) maximum tries and login delay configuration.</p>   | 5.2(2e) and later       |
| <a href="#">CSCvs97029</a> | <p>All the external prefixes from VRF-A could be leaked to VRF-C even when an inter-VRF ESG leak route is configured for a specific prefix.</p>  | 5.2(2e) and later       |
| <a href="#">CSCvt99966</a> | <p>A SPAN session with the source type set to " Routed-Outside" goes down. The SPAN configuration is pushed to the anchor or non-anchor nodes, but the interfaces are not pushed due to the following fault: " Failed to configure SPAN with source SpanFL3out due to Source fvIfConn not available" .</p>   | 5.2(2e) and later       |
| <a href="#">CSCvx90225</a> | <p>The browser hangs when clicking on the alert bell in the header bar.</p>  | 5.2(2e) and later       |
| <a href="#">CSCvy00746</a> | <p>A breakout parent port shows in the drop-down list for the SPAN source even after the port is broken out.</p>   | 5.2(2e) and later       |
| <a href="#">CSCvy17113</a> | <p>When there are two or more service graph associated contracts between the same pair of consumer and provider EPGs, and each contract is associated to a different Instp (by virtue of service graph configuration), imported/VRF-leaked Instp routes/subnets would not get cleaned up when one of those contracts is deleted from the list of contracts under the EPG. Imported routes /subnets would get cleaned up when the last contract between that EPG pair is deleted. There should be no impact to the traffic forwarding. This issue is about the cleanup of leaked routes.</p>  | 5.2(2e) and later       |
| <a href="#">CSCvy21881</a> | <p>An upgrade fails due to an incompatible target version. The upgradeStatusStr for maintUpgJob is empty, due to which the GUI is not able to show the correct state.</p>  | 5.2(2e) and later       |

| Bug ID                     | Description  | Exists in         |
|----------------------------|--|-------------------|
| <a href="#">CSCvy29992</a> | On the Cisco APIC CLI, the "moconfig commit" command triggers a "No such file or directory" error. The command successfully commits the changes, but the fact that this error shows up results in confusion for the end user.  | 5.2(2e) and later |
| <a href="#">CSCvy33994</a> | On the Cisco APIC CLI, using the "moset" command to set an managed object attribute to the same value results in the following error: [Erno 1] Operation not permitted.  | 5.2(2e) and later |
| <a href="#">CSCvy40511</a> | Traffic from an endpoint under a remote leaf switch to an external node and its attached external networks is dropped. This occurs if the external node is attached to an L3Out with a vPC and there is a redistribution configuration on the L3Out to advertise the reachability of the external nodes as direct-attached hosts.  | 5.2(2e) and later |
| <a href="#">CSCvy85417</a> | The show catalog is empty, which causes all switch discovery to fail because there is no catalog information present.  | 5.2(2e) and later |
| <a href="#">CSCvy95710</a> | The following 2 faults are raised in Cisco APIC when Anycast is configured on a Layer 4 to Layer 7 services device and the consumer/provider EPG of this contract is stretched across sites:<br><br>" Anycast is enabled in SvcRedirectPol but Consumer/Provider EPg is stretched (Multi-site EPg)"<br><br>" Anycast is enabled in LlfCtx but Consumer/Provider EPgs are stretched (Multi-site EPg)" | 5.2(2e) and later |
| <a href="#">CSCvz94062</a> | An SMU's upgrade status shows as "reload pending," but the reload is actually completed and the SMU is activated.  | 5.2(2e) and later |
| <a href="#">CSCvz98577</a> | In an OpenShift on OpenStack setup, after VM migration, and connectivity to the pods inside that VM may be lost when accessed from pods running on other VMs not on that same physical host.   | 5.2(2e) and later |
| <a href="#">CSCwa58709</a> | The GIPO address is only visible on APIC 1 when using the command " cat /data/data_admin/sam_exported.config" . The command output from the other APICs outputs do not show the GIPO address.  | 5.2(2e) and later |
| <a href="#">CSCwb93239</a> | The GUI displays the following error:<br><br>Failed, Local Upload Failure Msg (Request failed with status code 413).   | 5.2(2e) and later |
| <a href="#">CSCwc49449</a> | When a maintenance policy has multiple switch nodes, such as vPC pair nodes, an SMU's uninstallation gets stuck in the "queued" state for one of the nodes.  | 5.2(2e) and later |
| <a href="#">CSCwc66053</a> | Preconfiguration validations for L3Outs that occur whenever a new configuration is pushed to the Cisco APIC might not get triggered.   | 5.2(2e) and later |
| <a href="#">CSCwh98712</a> | When running " show running-config" from API CLI, the command takes several minutes to complete. Several thousand API requests are seen in access.log querying ptpRsProfile on every static path.  | 5.2(2e) and later |
| <a href="#">CSCwi01316</a> | In the following topology:<br><br>Tenant 1:<br><br>VRF 1 > EPG A, EPG B. There is an any-to-any Intra VRF instance contract and EPG A and B are providers for an inter-VRF instance contract.<br><br>VRF 2 > L3Out or EPG. The VRF instance consumes the inter-VRF instance contract.<br><br>Traffic will unexpectedly get sent to the wrong rule when inter-VRF instance traffic is                 | 5.2(2e) and later |

| Bug ID                     | Description   | Exists in         |
|----------------------------|---|-------------------|
|                            | flowing.  |                   |
| <a href="#">CSCwi34095</a> | App installation fails on the Cisco APIC with the error "Unable to add elasticsearch credentials" .<br><br>This is seen for any app making use of Elasticsearch, such as Nexus Insight Cloud Connector. | 5.2(2e) and later |

## Resolved Issues

| Bug ID                     | Description   | Fixed in |
|----------------------------|---|----------|
| <a href="#">CSCvy17504</a> | When the OpFlexAgent moved from one vPC pair leaf switches to a new vPC pair, it may take up to 20 minutes for the OpFlexAgent detected the movement, and reconnect the OpFlex channel. Ideally, this should be completed within a few seconds.   | 5.2(2h)  |
| <a href="#">CSCvz12372</a> | Endpoints that are shown under an endpoint group created by the OpenStack controller based on the Neutron network configuration are missing information about the Hosting Server as well as the Reporting Controller name.<br><br>OpenStack topology information is missing for Nova virtual machines.  | 5.2(2h)  |
| <a href="#">CSCvz17367</a> | The scenario is related to OpenShift nested in OpenStack, where the opflexODev object for OpenShift virtual machines, which were migrated between compute nodes, was pointing to an old compute node from which the virtual machines were migrated.   | 5.2(2h)  |
| <a href="#">CSCvz65560</a> | In a mixed version fabric in which the Cisco APIC is running a 5.x release and the switches are running a 14.x or earlier release, addition/update/association of a contract with TCP filter that has a port range value of "22" (that is, the port value for SSH), the following incorrect behavior can be encountered:<br><br>1. If the TCP port filter is defined as a range of x-22, where x is between 1 and 21, then this mixed mode causes the switch's security policy (zoning rule) to become disabled, which causes network disruption.<br><br>2. If the TCP port range is 22-22 (that is, exactly matching port 22), then this mixed mode causes the switch's security policy (zoning rule) to get incorrectly programmed to allow all TCP traffic instead of permitting SSH only.<br><br>Upgrading the Cisco APIC to a 5.x release without making the contract configuration changes does not trigger these problems. | 5.2(2g)  |
| <a href="#">CSCvy13772</a> | A standby APIC (in Layer 3 standalone mode) will not automatically upgrade along with the active Cisco APICs.   | 5.2(2e)  |
| <a href="#">CSCvy46965</a> | In the 5.2(2) release, an app gets stuck installing or there is fault for some containers not running.  | 5.2(2e)  |

## Known Issues

Click the bug ID to access the Bug Search tool and see additional information about the bug. The "Exists In" column of the table specifies the 5.2(2) releases in which the bug exists. A bug might also exist in releases other than the 5.2(2) releases.

| Bug ID                     | Description  | Exists in         |
|----------------------------|--|-------------------|
| <a href="#">CSCvj26666</a> | The " show run leaf spine <nodeld>" command might produce an error for scaled up configurations.   | 5.2(2e) and later |
| <a href="#">CSCvj90385</a> | With a uniform distribution of EPs and traffic flows, a fabric module in slot 25 sometimes reports far less than 50% of the traffic compared to the traffic on fabric modules in non-FM25 slots.   | 5.2(2e) and later |
| <a href="#">CSCvq39764</a> | When you click Restart for the Microsoft System Center Virtual Machine Manager (SCVMM) agent on a scaled-out setup, the service may stop. You can restart the agent by clicking Start.   | 5.2(2e) and later |
| <a href="#">CSCvq58953</a> | One of the following symptoms occurs:<br>App installation/enable/disable takes a long time and does not complete.<br>Nomad leadership is lost. The output of the acidiag scheduler logs members command contains the following error:<br>Error querying node status: Unexpected response code: 500 (rpc error: No cluster leader)  | 5.2(2e) and later |
| <a href="#">CSCvr89603</a> | The CRC and stomped CRC error values do not match when seen from the APIC CLI compared to the APIC GUI. This is expected behavior. The GUI values are from the history data, whereas the CLI values are from the current data.   | 5.2(2e) and later |
| <a href="#">CSCvs19322</a> | Upgrading Cisco APIC from a 3.x release to a 4.x release causes Smart Licensing to lose its registration. Registering Smart Licensing again will clear the fault.  | 5.2(2e) and later |
| <a href="#">CSCvs77929</a> | In the 4.x and later releases, if a firmware policy is created with different name than the maintenance policy, the firmware policy will be deleted and a new firmware policy gets created with the same name, which causes the upgrade process to fail.   | 5.2(2e) and later |
| <a href="#">CSCvx75380</a> | svcredirDestmon objects get programmed in all of the leaf switches where the service L3Out is deployed, even though the service node may not be connected to some of the leaf switch.<br><br>There is no impact to traffic.  | 5.2(2e) and later |
| <a href="#">CSCvx78018</a> | A remote leaf switch has momentary traffic loss for flushed endpoints as the traffic goes through the tglean path and does not directly go through the spine switch proxy path.  | 5.2(2e) and later |
| <a href="#">CSCvy07935</a> | xR IP flush for all endpoints under the bridge domain subnets of the EPG being migrated to ESG. This will lead to a temporary traffic loss on remote leaf switch for all EPGs in the bridge domain. Traffic is expected to recover.  | 5.2(2e) and later |
| <a href="#">CSCvy34357</a> | Starting with the 5.2(2) release, the following apps built with the following non-compliant Docker versions cannot be installed nor run: <ul style="list-style-type: none"> <li>ConnectivityCompliance 1.2</li> <li>SevOneAciMonitor 1.0</li> </ul>  | 5.2(2e) and later |
| <a href="#">CSCvy45358</a> | The file size mentioned in the status managed object for techsupport "dbgexpTechSupStatus" is wrong if the file size is larger than 4GB.   | 5.2(2e) and later |
| N/A                        | If you are upgrading to Cisco APIC release 4.2(6o), 4.2(7i), 5.2(1g), or later, ensure that any VLAN encapsulation blocks that you are explicitly using for leaf switch front panel VLAN programming are set as " external (on the wire)." If these VLAN encapsulation blocks are instead set to " internal," the upgrade causes the front panel port VLAN to be removed, which can result in a datapath outage. | 5.2(2e) and later |

| Bug ID | Description  | Exists in         |
|--------|--|-------------------|
| N/A    | Beginning in Cisco APIC release 4.1(1), the IP SLA monitor policy validates the IP SLA port value. Because of the validation, when TCP is configured as the IP SLA type, Cisco APIC no longer accepts an IP SLA port value of 0, which was allowed in previous releases. An IP SLA monitor policy from a previous release that has an IP SLA port value of 0 becomes invalid if the Cisco APIC is upgraded to release 4.1(1) or later. This results in a failure for the configuration import or snapshot rollback.<br><br>The workaround is to configure a non-zero IP SLA port value before upgrading the Cisco APIC, and use the snapshot and configuration export that was taken after the IP SLA port change. | 5.2(2e) and later |
| N/A    | If you use the REST API to upgrade an app, you must create a new firmware.OSource to be able to download a new app image.  | 5.2(2e) and later |
| N/A    | In a multipod configuration, before you make any changes to a spine switch, ensure that there is at least one operationally "up" external link that is participating in the multipod topology. Failure to do so could bring down the multipod connectivity. For more information about multipod, see the Cisco Application Centric Infrastructure Fundamentals document and the Cisco APIC Getting Started Guide.  | 5.2(2e) and later |
| N/A    | With a non-english SCVMM 2012 R2 or SCVMM 2016 setup and where the virtual machine names are specified in non-english characters, if the host is removed and re-added to the host group, the GUID for all the virtual machines under that host changes. Therefore, if a user has created a micro segmentation endpoint group using "VM name" attribute specifying the GUID of respective virtual machine, then that micro segmentation endpoint group will not work if the host (hosting the virtual machines) is removed and re-added to the host group, as the GUID for all the virtual machines would have changed. This does not happen if the virtual name has name specified in all english characters.      | 5.2(2e) and later |
| N/A    | A query of a configurable policy that does not have a subscription goes to the policy distributor. However, a query of a configurable policy that has a subscription goes to the policy manager. As a result, if the policy propagation from the policy distributor to the policy manager takes a prolonged amount of time, then in such cases the query with the subscription might not return the policy simply because it has not reached policy manager yet.   | 5.2(2e) and later |
| N/A    | When there are silent hosts across sites, ARP glean messages might not be forwarded to remote sites if a leaf switch without -EX or a later designation in the product ID happens to be in the transit path and the VRF is deployed on that leaf switch, the switch does not forward the ARP glean packet back into the fabric to reach the remote site. This issue is specific to transit leaf switches without -EX or a later designation in the product ID and does not affect leaf switches that have -EX or a later designation in the product ID. This issue breaks the capability of discovering silent hosts.  | 5.2(2e) and later |
| N/A    | Typically, faults are generally raised based on the presence of the BGP route target profile under the VRF table. However, if a BGP route target profile is configured without actual route targets (that is, the profile has empty policies), a fault will not be raised in this situation.   | 5.2(2e) and later |
| N/A    | MPLS interface statistics shown in a switch's CLI get cleared after an admin or operational down event.  | 5.2(2e) and later |
| N/A    | MPLS interface statistics in a switch's CLI are reported every 10 seconds. If, for example, an interface goes down 3 seconds after the collection of the statistics, the CLI reports only 3 seconds of the statistics and clears all of the other statistics.  | 5.2(2e) and later |

## Virtualization Compatibility Information

This section lists virtualization compatibility information for the Cisco APIC software.

- For a table that shows the supported virtualization products, see the [ACI Virtualization Compatibility Matrix](#).
- For information about Cisco APIC compatibility with Cisco UCS Director, see the appropriate [Cisco UCS Director Compatibility Matrix](#) document.
- This release supports the following additional virtualization products:

| Product   | Supported Release  | Information Location   |
|---|--|--|
| Microsoft Hyper-V   | <ul style="list-style-type: none"><li>• SCVMM 2019 RTM (Build 10.19.1013.0) or newer</li><li>• SCVMM 2016 RTM (Build 4.0.1662.0) or newer</li><li>• SCVMM 2012 R2 with Update Rollup 9 (Build 3.2.8145.0) or newer</li></ul> | N/A  |
| VMM Integration and VMware Distributed Virtual Switch (DVS) | 6.5, 6.7, and 7.0  | <a href="#">Cisco ACI Virtualization Guide, Release 5.2(x)</a> |

## Hardware Compatibility Information

This release supports the following Cisco APIC servers:

| Product ID | Description  |
|------------|--|
| APIC-L1    | Cisco APIC with large CPU, hard drive, and memory configurations (more than 1000 edge ports)   |
| APIC-L2    | Cisco APIC with large CPU, hard drive, and memory configurations (more than 1000 edge ports)   |
| APIC-L3    | Cisco APIC with large CPU, hard drive, and memory configurations (more than 1200 edge ports)   |
| APIC-M1    | Cisco APIC with medium-size CPU, hard drive, and memory configurations (up to 1000 edge ports) |
| APIC-M2    | Cisco APIC with medium-size CPU, hard drive, and memory configurations (up to 1000 edge ports) |
| APIC-M3    | Cisco APIC with medium-size CPU, hard drive, and memory configurations (up to 1200 edge ports) |

The following list includes general hardware compatibility information:

- For the supported hardware, see the [Cisco Nexus 9000 ACI-Mode Switches Release Notes, Release 15.2\(2\)](#).
- Contracts using matchDscp filters are only supported on switches with "EX" on the end of the switch name. For example, N9K-93108TC-EX.

- When the fabric node switch (spine or leaf) is out-of-fabric, the environmental sensor values, such as Current Temperature, Power Draw, and Power Consumption, might be reported as "N/A." A status might be reported as "Normal" even when the Current Temperature is "N/A."
- First generation switches (switches without -EX, -FX, -GX, or a later suffix in the product ID) do not support Contract filters with match type "IPv4" or "IPv6." Only match type "IP" is supported. Because of this, a contract will match both IPv4 and IPv6 traffic when the match type of "IP" is used.

The following table provides compatibility information for specific hardware:

| Product ID                    | Description   |
|-------------------------------|---|
| Cisco UCS M4-based Cisco APIC | The Cisco UCS M4-based Cisco APIC and previous versions support only the 10G interface. Connecting the Cisco APIC to the Cisco ACI fabric requires a same speed interface on the Cisco ACI leaf switch. You cannot connect the Cisco APIC directly to the Cisco N9332PQ ACI leaf switch, unless you use a 40G to 10G converter (part number CVR-QSFP-SFP10G), in which case the port on the Cisco N9332PQ switch auto-negotiates to 10G without requiring any manual configuration. |
| Cisco UCS M5-based Cisco APIC | The Cisco UCS M5-based Cisco APIC supports dual speed 10G and 25G interfaces. Connecting the Cisco APIC to the Cisco ACI fabric requires a same speed interface on the Cisco ACI leaf switch. You cannot connect the Cisco APIC directly to the Cisco N9332PQ ACI leaf switch, unless you use a 40G to 10G converter (part number CVR-QSFP-SFP10G), in which case the port on the Cisco N9332PQ switch auto-negotiates to 10G without requiring any manual configuration.           |
| N2348UPQ                      | To connect the N2348UPQ to Cisco ACI leaf switches, the following options are available:<br><br>Directly connect the 40G FEX ports on the N2348UPQ to the 40G switch ports on the Cisco ACI leaf switches<br><br>Break out the 40G FEX ports on the N2348UPQ to 4x10G ports and connect to the 10G ports on all other Cisco ACI leaf switches.<br><br><b>Note:</b> A fabric uplink port cannot be used as a FEX fabric port.  |
| N9K-C9348GC-FXP               | This switch does not read SPROM information if the PSU is in a shut state. You might see an empty string in the Cisco APIC output.  |
| N9K-C9364C-FX                 | Ports 49-64 do not support 1G SFPs with QSA.  |
| N9K-C9508-FM-E                | The Cisco N9K-C9508-FM-E2 and N9K-C9508-FM-E fabric modules in the mixed mode configuration are not supported on the same spine switch.   |
| N9K-C9508-FM-E2               | The Cisco N9K-C9508-FM-E2 and N9K-C9508-FM-E fabric modules in the mixed mode configuration are not supported on the same spine switch.<br><br>The locator LED enable/disable feature is supported in the GUI and not supported in the Cisco ACI NX-OS switch CLI.  |
| N9K-C9508-FM-E2               | This fabric module must be physically removed before downgrading to releases earlier than Cisco APIC 3.0(1).  |
| N9K-X9736C-FX                 | The locator LED enable/disable feature is supported in the GUI and not supported in the Cisco ACI NX-OS Switch CLI.   |
| N9K-X9736C-FX                 | Ports 29 to 36 do not support 1G SFPs with QSA.   |

## Miscellaneous Compatibility Information

This release supports the following products:

| Product   | Supported Release   |
|---|---|
| Cisco NX-OS   | 15.2(2)   |
| Cisco UCS Manager   | 2.2(1c) or later is required for the Cisco UCS Fabric Interconnect and other components, including the BIOS, CIMC, and the adapter.   |
| CIMC HUU ISO  | <ul style="list-style-type: none"> <li>• 4.3.2.240009 CIMC HUU ISO (recommended) for UCS C220/C240 M5 (APIC-L3/M3)</li> <li>• 4.2(3e) CIMC HUU ISO for UCS C220/C240 M5 (APIC-L3/M3)</li> <li>• 4.2(3b) CIMC HUU ISO for UCS C220/C240 M5 (APIC-L3/M3)</li> <li>• 4.2(2a) CIMC HUU ISO for UCS C220/C240 M5 (APIC-L3/M3)</li> <li>• 4.1(3m) CIMC HUU ISO for UCS C220/C240 M5 (APIC-L3/M3)</li> <li>• 4.1(3f) CIMC HUU ISO for UCS C220/C240 M5 (APIC-L3/M3)</li> <li>• 4.1(3d) CIMC HUU ISO for UCS C220/C240 M5 (APIC-L3/M3)</li> <li>• 4.1(3c) CIMC HUU ISO for UCS C220/C240 M5 (APIC-L3/M3)</li> <li>• 4.1(2m) CIMC HUU ISO (recommended) for UCS C220/C240 M4 (APIC-L2/M2)</li> <li>• 4.1(2k) CIMC HUU ISO for UCS C220/C240 M4 (APIC-L2/M2)</li> <li>• 4.1(2g) CIMC HUU ISO for UCS C220/C240 M4 (APIC-L2/M2)</li> <li>• 4.1(2b) CIMC HUU ISO for UCS C220/C240 M4 (APIC-L2/M2)</li> <li>• 4.1(1g) CIMC HUU ISO for UCS C220/C240 M4 (APIC-L2/M2) and M5 (APIC-L3/M3)</li> <li>• 4.1(1f) CIMC HUU ISO for UCS C220 M4 (APIC-L2/M2) (deferred release)</li> <li>• 4.1(1d) CIMC HUU ISO for UCS C220 M5 (APIC-L3/M3)</li> <li>• 4.1(1c) CIMC HUU ISO for UCS C220 M4 (APIC-L2/M2)</li> <li>• 4.0(4e) CIMC HUU ISO for UCS C220 M5 (APIC-L3/M3)</li> <li>• 4.0(2g) CIMC HUU ISO for UCS C220/C240 M4 and M5 (APIC-L2/M2 and APIC-L3/M3)</li> <li>• 4.0(1a) CIMC HUU ISO for UCS C220 M5 (APIC-L3/M3)</li> <li>• 3.0(4d) CIMC HUU ISO for UCS C220/C240 M3 and M4 (APIC-L2/M2)</li> <li>• 3.0(3f) CIMC HUU ISO for UCS C220/C240 M4 (APIC-L2/M2)</li> <li>• 2.0(13i) CIMC HUU ISO</li> <li>• 2.0(9c) CIMC HUU ISO</li> <li>• 2.0(3i) CIMC HUU ISO</li> </ul> |
| Network Insights Base, Network Insights Advisor, and Network Insights for Resources | <p>For the release information, documentation, and download links, see the <a href="#">Cisco Network Insights for Data Center</a> page.</p> <p>For the supported releases, see the <a href="#">Cisco Data Center Networking Applications Compatibility Matrix</a>.</p>  |

- This release supports the partner packages specified in the [L4-L7 Compatibility List Solution Overview](#) document.
- A known issue exists with the Safari browser and unsigned certificates, which applies when connecting to the Cisco APIC GUI. For more information, see the [Cisco APIC Getting Started Guide, Release 5.2\(x\)](#).
- For compatibility with Day-2 Operations apps, see the [Cisco Data Center Networking Applications Compatibility Matrix](#).

- Cisco Nexus Dashboard Insights creates a user in Cisco APIC called cisco\_SN\_NI. This user is used when Nexus Dashboard Insights needs to make any changes or query any information from the Cisco APIC. In the Cisco APIC, navigate to the **Audit Logs** tab of the **System > History** page. The cisco\_SN\_NI user is displayed in the User column.

## Related Content

See the [Cisco Application Policy Infrastructure Controller \(APIC\)](#) page for the documentation.

The documentation includes installation, upgrade, configuration, programming, and troubleshooting guides, technical references, release notes, and knowledge base (KB) articles, as well as other documentation. KB articles provide information about a specific use case or a specific topic.

By using the "Choose a topic" and "Choose a document type" fields of the APIC documentation website, you can narrow down the displayed documentation list to make it easier to find the desired document.

You can watch videos that demonstrate how to perform specific tasks in the Cisco APIC on the [Cisco Data Center Networking](#) YouTube channel.

Temporary licenses with an expiry date are available for evaluation and lab use purposes. They are strictly not allowed to be used in production. Use a permanent or subscription license that has been purchased through Cisco for production purposes. For more information, go to [Cisco Data Center Networking Software Subscriptions](#).

The following table provides links to the release notes, verified scalability documentation, and new documentation:

| Document   | Description  |
|--|--|
| <a href="#">Cisco Nexus 9000 ACI-Mode Switches Release Notes, Release 15.2(2)</a>  | The release notes for Cisco NX-OS for Cisco Nexus 9000 Series ACI-Mode Switches.   |
| <a href="#">Verified Scalability Guide for Cisco APIC, Release 5.2(1) and Cisco Nexus 9000 Series ACI-Mode Switches, Release 15.2(1)</a> | This guide contains the maximum verified scalability limits for Cisco Application Centric Infrastructure (ACI) parameters for Cisco APIC and Cisco Nexus 9000 Series ACI-Mode Switches.<br><br><b>Note:</b> The 5.2(1) release document applies to the 5.2(2) release. |

## Documentation Feedback

To provide technical feedback on this document, or to report an error or omission, send your comments to [apic-docfeedback@cisco.com](mailto:apic-docfeedback@cisco.com). We appreciate your feedback.

## Legal Information

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL:

<http://www.cisco.com/go/trademarks>. Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)

---

Any Internet Protocol (IP) addresses and phone numbers used in this document are not intended to be actual addresses and phone numbers. Any examples, command display output, network topology diagrams, and other figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses or phone numbers in illustrative content is unintentional and coincidental.

© 2021–2024 Cisco Systems, Inc. All rights reserved.