



## Persistent FCIDs

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## Information About Persistent FCIDs

FC ID persistence improves IVR management by providing the following features:

- Allows you to control and assign a specific virtual domain to use in a native VSAN.
- Allows you to control and assign a specific virtual FC ID for a device.

The benefits of persistent FC IDs for IVR are as follows:

- Host devices always see the same FC ID for targets.
- FC IDs help you plan your SAN layout better by assigning virtual domains for IVR to use.
- FC IDs can make SAN monitoring and management easier. When you see the same domain or FC ID consistently assigned, you can readily determine the native VSAN or device to which it refers.

## Guidelines and Limitations for Persistent FCIDs

You can configure two types of database entries for persistent IVR FC IDs:

- Virtual domain entries
- Virtual FC ID entries

Virtual domain entries contain the virtual domain that should be used to represent a native VSAN in a specific VSAN (current VSAN). Virtual domain entries contain the following information:

- Native AFID
- Native VSAN

- Current AFID
- Current VSAN
- Virtual domain to be used for the native AFID and VSAN in current AFID and VSAN

Virtual FC ID entries contain the virtual FC ID that should be used to represent a device in a specific VSAN (current VSAN). Virtual FC ID entries contain the following information:

- Port WWN
- Current AFID
- Current VSAN
- Virtual FC ID to be used to represent a device for the given pWWN in the current AFID and VSAN

If you use persistent FC IDs for IVR, we recommend that you use them for all the devices in the IVR zone set. We do not recommend using persistent FC IDs for some of the IVR devices while using automatic allocation for other devices.

IVR NAT must be enabled to use IVR persistent FC IDs.

In an IVR NAT configuration, if one VSAN in the IVR topology is configured with static domain IDs, then the IVR domains that can be exported to that VSAN must also be assigned static domains.

## Default Settings

Parameters	Default
IVR feature	Disabled
IVR NAT	Disabled
IVR distribution	Disabled
IVR Autotopology	Disabled
IVR VSANs	Not added to virtual domains
QoS for IVR Zones	Low

## Configuring Persistent FCIDs

### SUMMARY STEPS

1. **ivr fcdomain database autonomous-fabric-num** *fabric-num* **vsan** *vsan-id*
2. **native-autonomous-fabric-num** *fabric-num* **native-vsant** *vsan-id* **domain** *domain-id*
3. **pwwn** *pwwn* **fcd** *fcd*
4. **device-alias** *alias-name* **fcd** *fcd*

## DETAILED STEPS

	Command or Action	Purpose
Step 1	<b>ivr fcdomain database autonomous-fabric-num</b> <i>fabric-num vsan vsan-id</i>  <b>Example:</b> <pre>switch(config)# ivr fcdomain database autonomous-fabric-num 21 vsan 22 switch(config-fcdomain)#</pre>	Enters IVR fcdomain database configuration submode for current AFID and VSAN.
Step 2	<b>native-autonomous-fabric-num</b> <i>fabric-num</i> <b>native-vsan</b> <i>vsan-id domain domain-id</i>  <b>Example:</b> <pre>switch(config-fcdomain)# native-autonomous-fabric-num 20 native-vsan 11 domain 12 switch(config-fcdomain-db)#</pre>	Adds or replaces a database entry for native AFID, native VSAN, and domain, and enters IVR fcdomain FC ID configuration submode. Domains of all the corresponding persistent FC ID entries, if any, are also changed to the configured domain ID.
Step 3	<b>pwwn</b> <i>pwwn fcid fcid</i>  <b>Example:</b> <pre>switch(config-fcdomain-db)# pwwn 11:22:33:44:55:66:77:88 fcid 0x114466</pre>	Adds or replaces a database entry for mapping the pWWN to the FC ID.
Step 4	<b>device-alias</b> <i>alias-name fcid fcid</i>  <b>Example:</b> <pre>switch(config-fcdomain-db)# device-alias SampleName fcid 0x123456</pre>	Adds a database entry for mapping the device alias to the FC ID.

## Verifying IVR Configuration

To display the IVR configuration, perform one of the following tasks:

Command	Purpose
<b>show ivr</b>	Displays the status for the IVR configuration.
<b>show ivr diagnostics</b>	Displays information about IVR diagnostics.
<b>show ivr merge status</b>	Displays information the last IVR merge event.
<b>show ivr pending</b>	Displays information about the IVR pending database.
<b>show ivr pending-diff</b>	Displays the differences between the pending database and the config database.

Command	Purpose
<code>show ivr vsan-topology [active   configured]</code>	Displays the IVR VSAN topology.
<code>show ivr session status</code>	Displays information about IVR CFS session.
<code>show ivr virtual-domains</code>	Displays information about IVR virtual domains for all local VSANs.
<code>show ivr zone</code>	Displays information about IVR zones.
<code>show ivr zoneset</code>	Displays information about IVR zone sets.
<code>show ivr service-group active</code>	Displays information about the active service group.
<code>show ivr service-group configured</code>	Displays information about the configured service group.
<code>show autonomous-fabric-id database</code>	Displays information about the AFIDs.
<code>show ivr virtual-fcdomain-add-status</code>	Displays the status of the IVR virtual domain configuration.

**Related Topics**

[Information about IVR Zones and Zonesets](#)

[Configuring IVR Zones](#)

[Configuring IVR Zone Sets](#)

## Feature History

*Table 1: Feature History IVR*

Feature Name	Releases	Feature Information
IVR	5.2(1)	This feature was introduced.