

# **vSTA Mirroring in HCI Practice Guidance**

**Document Version**

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This document is intended for:

- Pre-sale
- FAE

## Note Icons

English Icon	Description
	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
	Indicates a hazardous situation, which if not avoided, could result in minor or moderate injury.
	Indicates a hazardous situation, which if not avoided, could result in settings failing to take effect, equipment damage, or data loss. NOTICE addresses practices not related to personal injury.
	Calls attention to important information, best practices, and tips. NOTE addresses information not related to personal injury or equipment damage.

## Change Log

Date	Change Description
2023-04-28	This is the first release of this document.

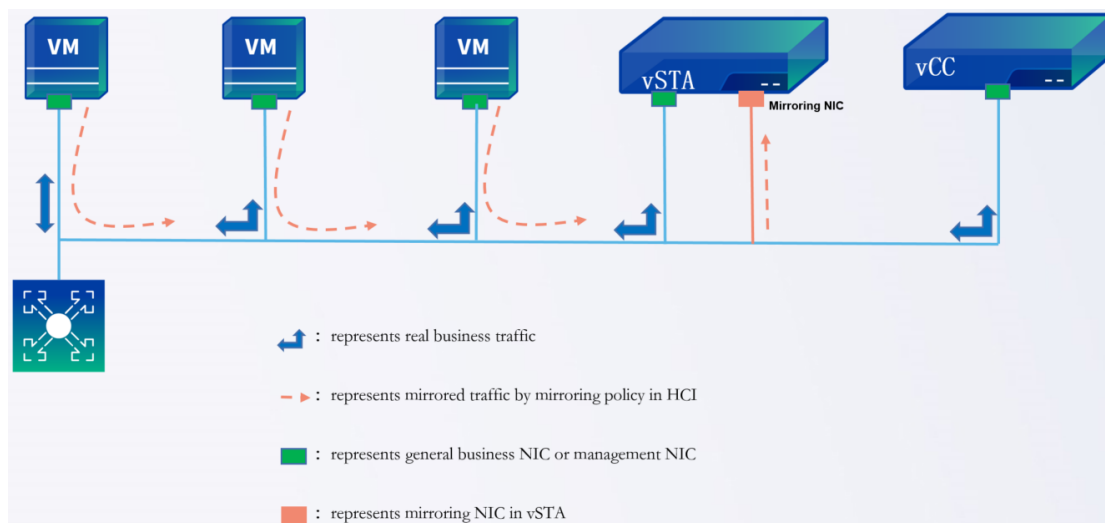
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## 1.1 Solution Description

Currently, as many projects have purchased HCI, vCC and vSTA, compared with opponents, there exists a mature and competitive solution to detect the attacks among VMs in HCI platform. This solution also can be introduced by some POC projects as well.

Based on the technology of mirroring NIC of VMs, you can select any specific VMs flexibly without affecting business at all. Business VMs communicate with others normally, and create an mirroring policy in HCI. It is necessary confirm the source of mirroring traffic which means specific NICs of VMs in this HCI platform, and the destination port must select mirroring NIC of STA, and you will see the incoming traffic immediately. Theory digarm can be viewed as below.



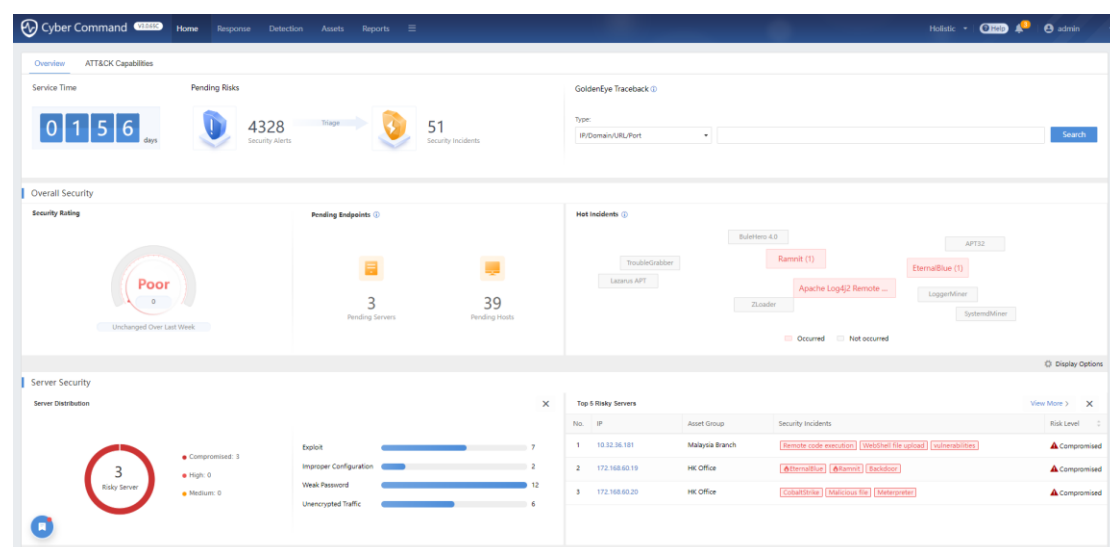
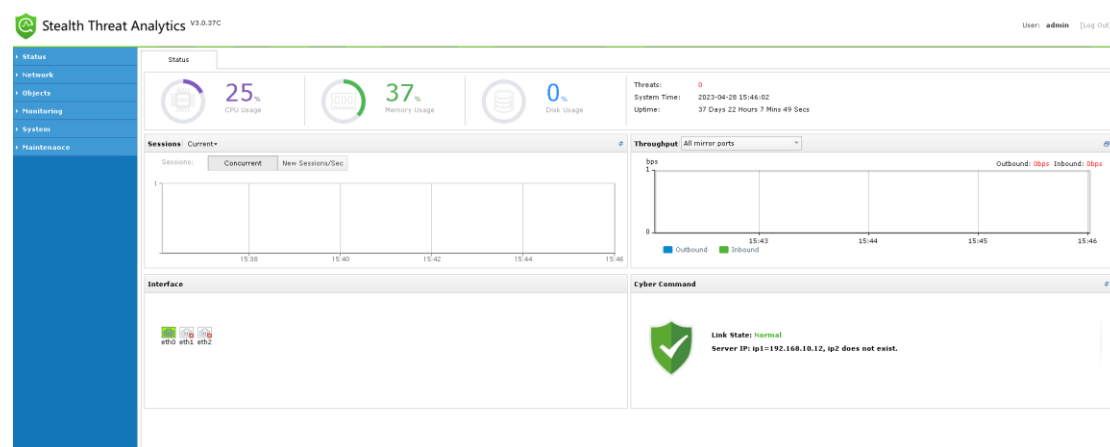
## 1.2 Supported Version

- **HCI:** must be 6.8.0 and above version;
- **vSTA:** recommend 3.0.37C and above version;
- **vCC:** recommend 3.0.64C and above version;

## 1.3 Configuration Guidance

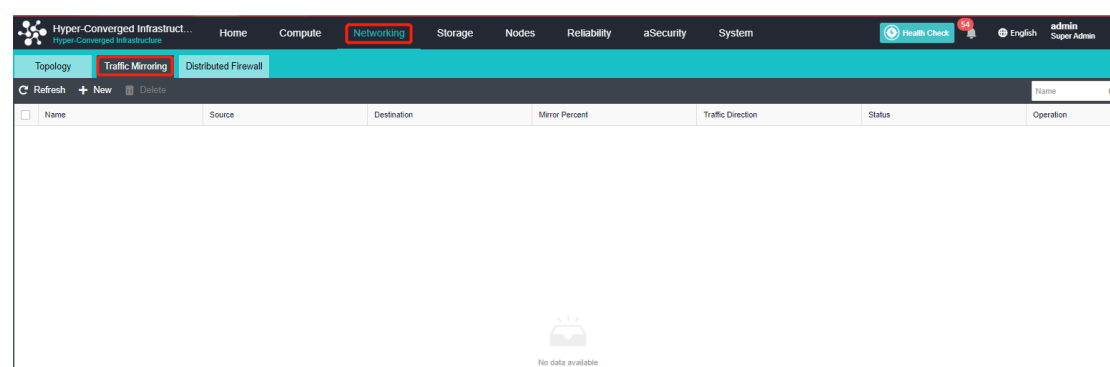
- **Preconditions**

You are required that vSTA and vCC have been installed and configured well (refer to configuration checklist documents) in HCI platform before you create the mirroring policy.



## ● Steps

### Navigate [Networking/Traffic Mirroring]



Click "New" to create a traffic mirroring policy. Fill in the necessary information in the pop-up window

RefreshNewDelete

	Name	Source	Destination	Mirror Percent	Traffic Direction
--	------	--------	-------------	----------------	-------------------

Add Traffic Mirroring Policy

Support traffic mirroring within a virtual network, from a virtual network to physical network, and between physical interfaces. [Configuration Guide](#)

Name:

20230428

Mirror Source:

Select

Mirror Target:

Select

VLAN ID:

Mirror Percent

100

%

Traffic Direction

All

Inbound

Outbound

Policy Status:

Enabled

OK

Cancel

Select the source virtual machine NICs to Mirror Source

Select Mirror Source

Source Type: VM InterfaceNFV Device InterfaceEdge-Connected Interface

Available

Name

VM Interface

All

john

attack\_vm

eth0

target\_svr

eth0

vCC

eth0

Selected (2/1024)

VM Interface

Operation

All

john

attack\_vm

eth0

target\_svr

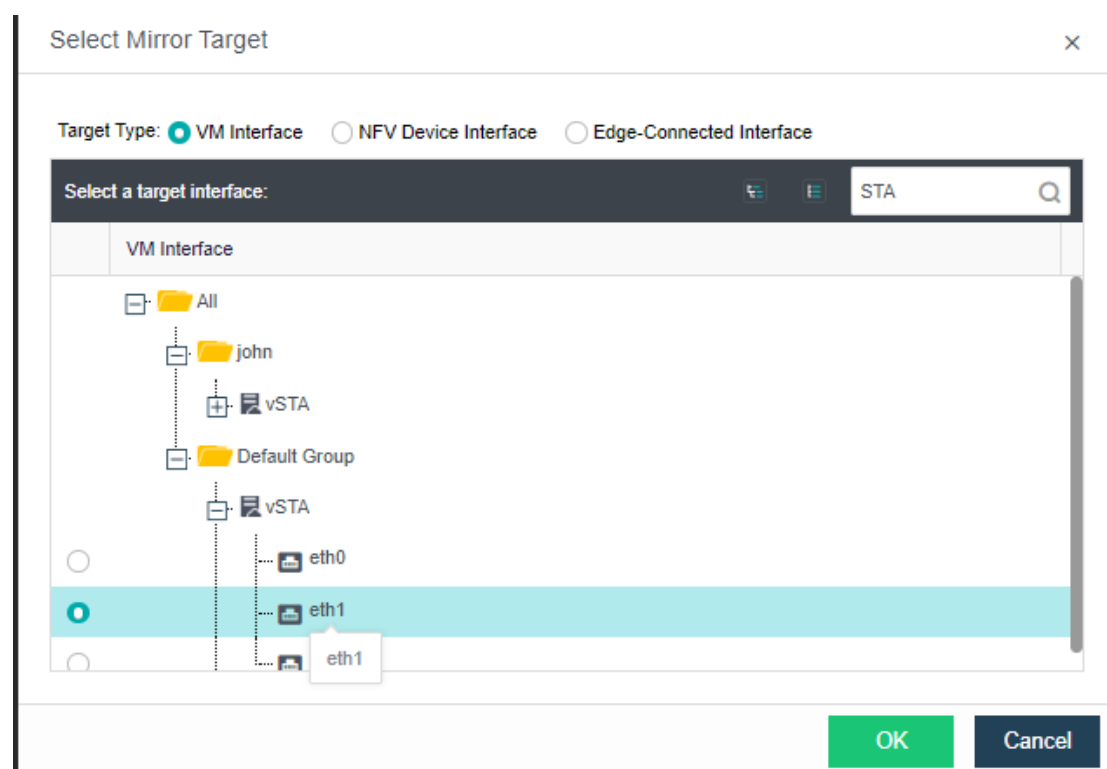
eth0

OK

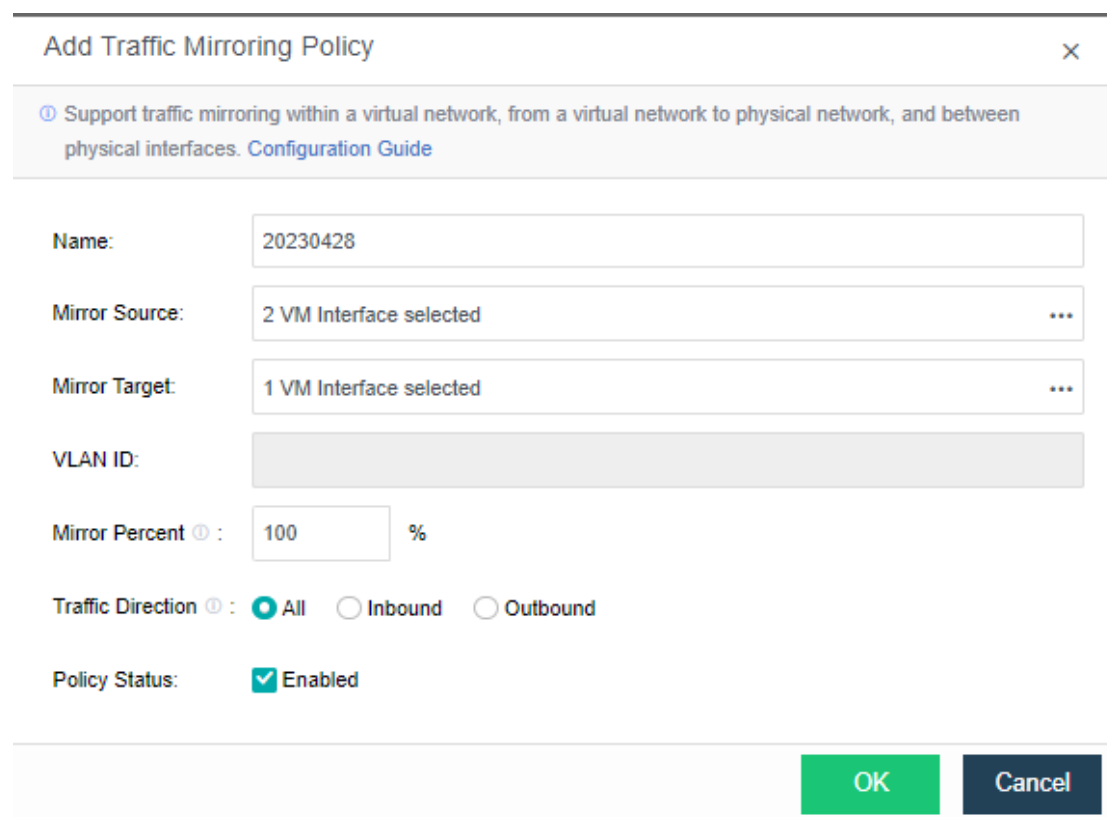
Cancel

Select mirroring NIC of STA to Mirror Target.





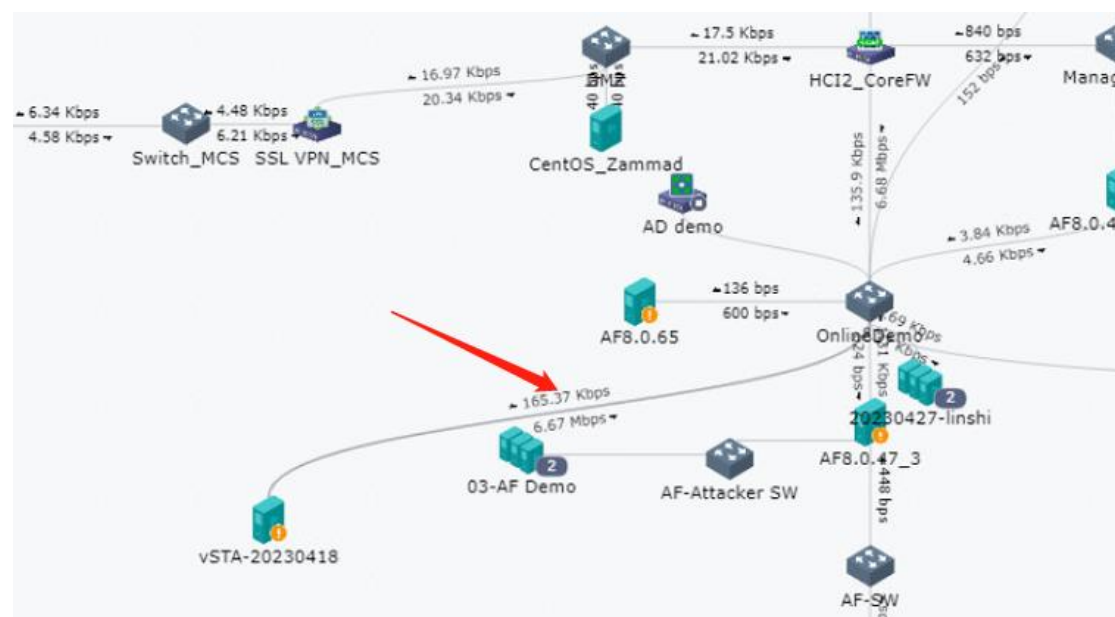
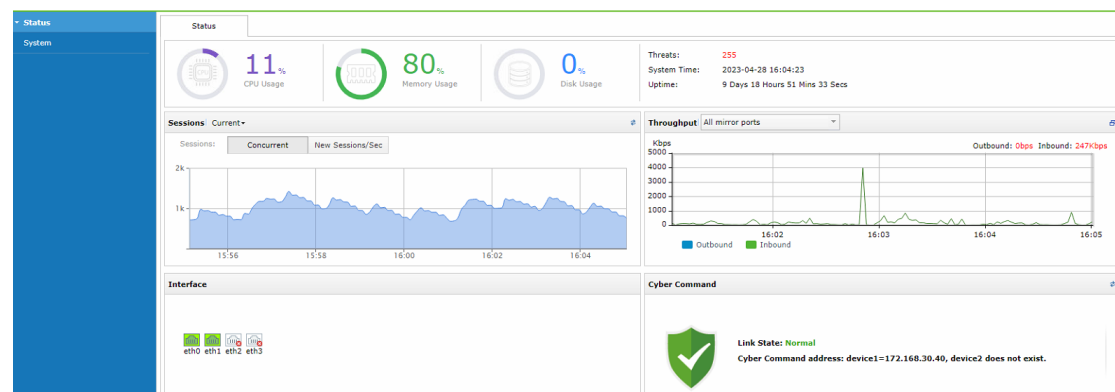
Other settings can keep the default, click OK to complete the configuration.



Topology Traffic Mirroring Distributed Firewall						
Refresh + New Delete						
Name	Source	Destination	Mirror Percent	Traffic Direction	Status	Operation
20230428	VM Interface attack_vm1eth0 target_vx1eth0	VM Interface vSTA1eth1	100%	All	✓	Edit Delete

## 1.4 Validity Verification

You will see the incoming traffic as expected and some analysis in CC platform.



Cyber Command

HomeResponseDetectionAssetsReports

Holistic

admin

Logs

ExportCode ConverterOpen MonitorRefreshRefresh Interval Disabled

2023-04-28 00:00:00 - 2023-04-28 16:06:08All LogsAll Traffic Directions

Filter (1) e.g., src\_ip:1.1.1.1 AND dst\_port:8000 or 1.1.1.1 (use "" for IPv6 address, e.g., "2001:1")

ANDSTA Physical PortAddClear FilterSearch

Total Entities (633482) in Total | [Display Trend Graph](#)

Secure (629418)Other Data Leakage (22)Risky Access (22)Java Deserialization (11)WebShell Scan (11)Web Framework Exploit...Unencrypted Web Traff...

No.	Time	Log Type	Attack Type	Src IP	XFF	Src IP Type	Src Port	Dst IP	Dst IP Type	Dst Port	Severity	Action	Description	Status Code	Data Source	STA Physical
1	2023-04-28 16:04:51	Traffic	-	172.168.70.10	-	Host	55699	217.146.11.105	Internet	5938	-	Allow	Match whitell...	-	SANGFOR ST...	eth1
2	2023-04-28 16:04:50	Traffic	-	172.168.70.10	-	Host	62862	117.48.147.11	Internet	54120	-	Allow	Match whitell...	-	SANGFOR ST...	eth1
3	2023-04-28 16:04:47	Traffic	-	192.168.100.3	-	Server	49669	192.168.200.4	Server	54120	-	Allow	Match whitell...	-	SANGFOR ST...	eth1
4	2023-04-28 16:04:44	Traffic	-	10.70.128.1	-	Host	49356	172.22.127.180	Host	10051	-	Allow	Match whitell...	-	SANGFOR ST...	eth1
5	2023-04-28 16:04:42	Traffic	-	172.168.60.14	-	Server	51848	118.143.86.153	Internet	443	-	Allow	Match whitell...	-	SANGFOR ST...	eth1
6	2023-04-28 16:04:42	Traffic	-	10.70.128.1	-	Host	49350	172.22.127.180	Host	10051	-	Allow	Match whitell...	-	SANGFOR ST...	eth1
7	2023-04-28 16:04:41	Traffic	-	192.168.100.3	-	Server	49682	192.168.200.4	Server	8083	-	Allow	Match whitell...	-	SANGFOR ST...	eth1
8	2023-04-28 16:04:40	Traffic	-	10.70.128.1	-	Host	49348	172.22.127.180	Host	10051	-	Allow	Match whitell...	-	SANGFOR ST...	eth1
9	2023-04-28 16:04:37	Traffic	-	172.168.70.10	-	Host	62092	117.48.147.11	Internet	8083	-	Allow	Match whitell...	-	SANGFOR ST...	eth1
10	2023-04-28 16:04:37	Traffic	-	192.168.100.2	-	Server	49681	192.168.200.4	Server	8083	-	Allow	Match whitell...	-	SANGFOR ST...	eth1
11	2023-04-28 16:04:37	Traffic	-	10.70.128.1	-	Host	49320	172.22.127.180	Host	10051	-	Allow	Match whitell...	-	SANGFOR ST...	eth1
12	2023-04-28 16:04:36	Traffic	-	172.168.70.10	-	Host	53598	108.177.125.1...	Internet	5228	-	Allow	Match whitell...	-	SANGFOR ST...	eth1
13	2023-04-28 16:04:36	Traffic	-	172.168.60.19	-	Server	24040	188.172.201.1...	Internet	5938	-	Allow	Match whitell...	-	SANGFOR ST...	eth1
14	2023-04-28 16:04:36	Traffic	-	10.70.128.1	-	Host	49318	172.22.127.180	Host	10051	-	Allow	Match whitell...	-	SANGFOR ST...	eth1
15	2023-04-28 16:04:34	Traffic	-	10.70.128.1	-	Host	49304	172.22.127.180	Host	10051	-	Allow	Match whitell...	-	SANGFOR ST...	eth1