

Support of KVM Hypervisor Using VCB Customization

The purpose of this chapter is to present a possible solution on how to achieve device and fault management support for the KVM Hypervisor in the Prime Network. This can be accomplished via VCB Customizations.

Topics include:

- Problem Statement, page D-1
- Background, page D-1
- Solution, page D-2
- VCB Customization for Device Type Support, page D-2
- VCB Customization for Supporting Traps, page D-7
- Adding Soft Properties for KVM Hypervisor, page D-16

Problem Statement

- Currently Prime Network does not support KVM Hypervisor. Therefore, when the user models it, Prime Network discovers it as an 'Unsupported' VNE.
- In case Prime Network supports KVM Hypervisor via VCB, then there occurs a problem with unsupported traps. If KVM Hypervisor sends a trap (for example, VM suspend traps), then Prime Network will consider it an unsupported trap and will display it under '*Standard*' traps in Prime Network Events Application.

Background

ſ

Prime Network detects specific device type using its SysOID. Prime Network discovers the KVM Hypervisor as Unsupported because it does not have its SysOID and raises '*Device Unsupported*' ticket.

😂 🔳 • 🔛 •	Tools Network Inventory Beports	Window Help		g <mark>o</mark>				
BO KM Server	(x04) 4==05 (x04)			Chrs-cvg-kvm-06 [1C+]				
nid :	- 開封 文字 調売) (
ind:		Root Cause	Root Event Time	Deciptor	Location	Part Description	Element Type	Acknowle
nd : venty Tideet 10 130001	- 11日 日 マ 平 原 守 N.7. Lat Holfadon Ter 合 055col 315-035	Root Cause	Root Event Time 02-Dec: 18 15-19-34	Decidion VE canol production with the device	Loaten deregion.	Part Description	Element Type Uninpun	Actronole
nd : tventy Tidet 10 130001 30002	・ ■ 副 封 マ 号 調 受 N.2 Lastraditation Time き ¹ 0500er 38 13:49:35 1850er 18 13:49:35	Root Cause	RotEventTime 030ec-3310-034 030ec-3110-034	Description Viet and sand smallers with the device Derive surgarised	Loaton dataga (m. 1) dataga (m. 1)	Port Description	Element Type Orlingum Ublingum	Actroakt No No
nd : cventy Tuliet ID 130001 120001	・ 10 約 文 マ 市 酒 芍 10.7 Last Heidfatain Terr. そう 550er 38 15-035 10.50er 38 15-037 10.50er 38 15-037	Root Cause	RotEventTime 030er-18.3349-34 030er-38.3349-33 030er-38.3349-33	Centreton Vet cannot and version with the device Dense singularized Subtrg down device methorstation aborted	Location description description description	Part Description	Benerit Type Orlinour Ukleann Mit Hyperviso	Acknowle No No No
nd : cvmtv Tolet ID 130001 130001 120001 120001	・ 1日 白 マ 号 画 守 10.2 Lat Malfatan Tere き 10.5 co.1 3 15-0.55 13.5 co.1 3 15-0.55 13.5 co.1 3 15:0.57 0.5 co.2 11 15:1.5.57	Root Cause	Root Event Time 0 Disc 58 31:40-034 0 Disc 58 31:40-034 0 Disc 58 31:51:27 0 Jack 61 31:51:27	Decretors Million and synchronize with the device Device sample showing with the device Device sample showing the device showing the device showing the device Device sample showing the device show	Location des-copilions des-copilions des-copilions Deste unaccopitad (jug down)	Part Description	Element Type Orlingum Unitedum KOM Hypervisor KOM Hypervisor	Acknowle No No No No No No
Ind : Cventy Talet ID 130001 130001 120001 120002 C	■ ■ ■ 11 計 む マ 寺 画 寺 12 See 33 13-953 13 See 33 13-953 13 See 33 15-934 13 See 33 15-937 13 See 33 15-937 13 See 33 15-937	Root Cause	Red Sect The 0-Dec 31 31-0-34 0-Dec 31 31-0-34 0-Dec 31 31-0-32 0-Dec 31 31-0-32 0-Dec 31 31-0-32	Decembers Mic annot andrenize with the decise Deven smagermid Budger gallerg method was selected as a decided Regular gallerg method was selected as a selected as a selected of the selected as a sel	Lacitor deregation deregation deregation Derice unsported ja dere	Port Description	Elment Type Orlenum Uttour KIM Hyperviser KIM Hyperviser	Acknowle No No No

To overcome this problem, user should configure the SysOID of KVM Hypervisor via VCB Customization.

Prime Network needs to know the *snmpTrapOID* of a trap to categorize it. Else, the trap will be shown as unsupported '*Standard*' trap.

VCB allows configuration of end-to-end trap information in order to support it in Prime Network.

Solution

VNE Customization Builder (VCB) Tool of Prime Network provides solutions to overcome both the problems of unsupported device types and unsupported traps via simple customization. KVM Hypervisor will be supported using GenericUVNE template and modeled as a generic device. No virtualization specific inventory will be discovered. KVM-specific traps can then be supported using VCB Events customization.

Let us see about those customizations in detail.

VCB Customization for Device Type Support

Step 1 Login to VCB. Go to VNE Customization Builder > VNE Drivers

Step 2 Click *Configure Device Types*.

alah							root Logout A	bout
cisco Cisco Prim	e Network	Hom	e Network Discovery	VNE Customization Builder				
VNE Customization Bu	ilder							_
VNE Drivers Ma	odules Pluggable Mo	idules Events Ex	port Customization Import Custo	omization				
VNF Drivers			N					
Cisro Drivers			63					
CISCO DRIVERS						Selected	10 Total 601 🚱	
/ Edit 💥 Delete 👷	Add Row // Configure Dev	rice Types			Show	All	- 9	2
SysOID		Sysoid Translation	Device Type	Туре	Cloning Reference	(Overriding System Default	
○ ▶ .1.3.6.1.4.1.595	1.1	System Default		System Default				
○ ▶ .1.3.6.1.4.1.9.1.	.1.3.6.1.4.1.9.1.1880		Cisco Catalyst 38xx 12 Stack	System Default				^
○ ▶ .1.3.6.1.4.1.9.1.	1640	ciscoASR9922 🗑 Cisco ASR 9922 System		System Default				
○ ▶ .1.3.6.1.4.1.9.1.	1.9.1.1521 ciscoASR901		Cisco ASR 901 TDM	System Default				
○ ▶ .1.3.6.1.4.1.9.1.	D ▶ .1.3.6.1.4.1.9.1.1642 cat385024P		Cisco Catalyst 385024P	System Default				
○ ▶ .1.3.6.1.4.1.9.1.	○ ▶ .1.3.6.1.4.1.9.1.1763		2600x	System Default				
○ ▶ .1.3.6.1.4.1.9.1.	C • .1.3.6.1.4.1.9.1.1641 cat385048P		Cisco Catalyst 385048f	System Default				
○ ▶ .1.3.6.1.4.1.9.1.	1762		Gisco ASR 9904	System Default				
○ ▶ .1.3.6.1.4.1.9.1.	1644	cat385024	Cisco Catalyst 385024t	System Default				
○ ▶ .1.3.6.1.4.1.9.1.	1765		Cisco Catalyst 6800	System Default				
○ ▶ .1.3.6.1.4.1.9.1.	1522	ciscoASR901E	Cisco ASR 901	System Default				
○ ▶ .1.3.6.1.4.1.9.1.	1643	cat385048	Cisco Catalyst 385048t	System Default				
○ ▶ .1.3.6.1.4.1.9.1.	1525	ciscoASR1002X	Cisco ASR 1002-X	System Default				V
~	547			Producer Professik			>	

Step 3 Click *Add Row*.

Γ

Step 4 Choose Category as 'Server'. Define Device Type and Device Series. Click Save.

Wild Enrices We Drivers Second 11 Total 407 Intel 407 I	VNE Customization Build	Device Types					x	
E Drivers Show All Image: Control of the state	VNE Drivers Mod	Device Types			N	Selected 1	Total 467 🔮 🖶 🦉 🗸	
Coo Dheer Perice Type Category Device Series Type Coo Dheer © Coc 0.115 Router System Default Image: Coc 0.115 Router System Default Image: Coc 0.115 Router System Default Image: Coc 0.115 Router System Default Image: Coc 0.115 Router System Default Image: Coc 0.115 Router System Default Image: Coc 0.115 Router System Default Image: Coc 0.115 Router System Default Image: Coc 0.115 Router System Default Image: Coc 0.115 Router System Default Image: Coc 0.115 Router System Default Image: Coc 0.115 Router System Default Image: Coc 0.115 Router System Default Image: Coc 0.115 Router System Default Image: Coc 0.115 Router System Default Image: Coc 0.115 Router System Default Image: Coc 0.115 Router System Default Image: Coc 0.115 Router System Default Image: Coc 0.115 Router System Default Image: Coc 0.115 Router System Default Image: Coc 0.115 Router System Default Image: Coc 0.115 Image: Coc 0.115<	IE Drivers	/ Edit X Delete 🤨 Add Row			45	Show All	- 8	
Cuco United Towner ^O So Casto 1105 ^O Roader Roader ^O System Default VNE Driver ^O Coc Catalyst 4510R ^O Eh-Switch ^O Soc Catalyst 4500 Series Switches ^O System Default ^O Coc Catalyst 4510R Spoil ^O Coc Catalyst 4510R ^O Eh-Switch ^O Coc Catalyst 3750X ^O Coc Catalyst 4003 ^O	Cines Dataset	Device Type	Category	Device Series	Туре			
VINE Diversion ¹ Coco Catalyst 4510R Ehr-Switch ¹ Coco Catalyst 4500 Series Switches System Default Spoil ¹ Coco Catalyst 4510R Ehr-Switch Coco Catalyst 4500 Series Switches System Default Spoil ¹ Coco Catalyst 4510R Ehr-Switch Coco Catalyst 4500 Series Switches System Default Spoil ¹ Coco Catalyst 4510R Ehr-Switch Coco Catalyst 3750-X Series Switches System Default ¹ 13.6.1.4.1.5551 ¹ Coco Catalyst 4000 Ehr-Switch Coco Catalyst 4000 Series Switches System Default ¹ 13.6.1.4.1.9.1.1 ¹ Coco Catalyst 4000 Ehr-Switch Coco Catalyst 4000 Series Switches System Default System Default ¹ 13.6.1.4.1.9.1.1 ¹ Coco Catalyst 4000 Ehr-Switch Coco Catalyst 4000 System Default ¹ 13.6.1.4.1.9.1.1 ¹ Coco Catalyst 4000 Ehr-Switch Coco Catalyst 4000 System Default ¹ 13.6.1.4.1.9.1.1 ¹ Coco Catalyst 4000 Enr Vertice System Default ¹ 13.6.1.4.1.9.1.1 ¹ Coco Cata	Cisco Drivers	O 🙆 Cisco 1105	Router		System Default			
Edit Cellet EA O Coco UCS C260 M2S Server Coco UCS C260 M2 Rack Server System Default Syst0D O Coco Catalyst 3750X Elh-Switch Osco UCS C260 M2 Server System Default Default 1.3.6.1.4.1.591.1 O Coco Catalyst 3750X Elh-Switch Osco Catalyst 3750X Server System Default Default 1.3.6.1.4.1.591.1 O Coco Catalyst 4000 Elh-Switch Coco Catalyst 4000 Server Switches System Default System System Default Sy	VNE Drivers	○ Isco Catalyst 4510R	Eth-Switch	Cisco Catalyst 4500 Series Switches	System Default		^	18 0 Total 601 🦉 🔐
SystDD Image: Catalyst 3750X Eth-Switch Geco Catalyst 3750X System Default Default 1.1.6.1.4.1.551 Image: Catalyst 3750X Eth-Switch Geco Catalyst 3750X System Default Default 1.1.6.1.4.1.551 Image: Catalyst 3000 Rotter System Default Sys	Edit 🗙 Delete 💇 Ad	O SICISCO UCS C260 M2S	Server	Cisco UCS C260 M2 Rack Server	System Default			٣
1.3.6.1.4.1.5951 O So Catalyst 4000 Router System Default 1.3.6.1.4.1.9.1.1 Off Coso Catalyst 4000 Elh-Switch Cisco Catalyst 4000 Series Switches System Default 1.3.6.1.4.1.9.1.1 O Coso Catalyst 4000 Elh-Switch Cisco Catalyst 4000 Series Switches System Default 1.3.6.1.4.1.9.1.1 O Coso Catalyst 4000 Elh-Switch Cisco Catalyst 4000 Series Switches System Default 1.3.6.1.4.1.9.1.1 O Coso Bits Router Cisco Bits Routers System Default 1.3.6.1.4.1.9.1.1 O Coso Bits Router Cisco Actalyst 4000 Series Switches System Default 1.3.6.1.4.1.9.1.1 O Coso Bits Router Cisco Acousties Switches System Default 1.3.6.1.4.1.9.1.1 O Coso Bits Router Cisco Acousties Integrated Services Rout. System Default 1.3.6.1.4.1.9.1.1 O Coso Server Elh-Switch Cisco Cisco Server System Default 1.3.6.1.4.1.9.1.1 O Kits Acousties Switches System Default Sistem Default 1.3.6.1.4.1.9.1.1 O Cisco Server Elh-Switch Cisco Cisco Services Rout.	SysOID	○ 🖉 Cisco Catalyst 3750X	Eth-Switch	Cisco Catalyst 3750-X Series Switches	System Default			Overriding System Defau
▶ 1.3.6.1.4.1.9.1.13 ○ ¹ Coco Catalyst 4003 Eth-Switch Coco Catalyst 4003 Eth-Switch Coco Catalyst 4000 Eth-Switch System Default ▶ 1.3.6.1.4.1.9.1.14 ○ ² Coco Catalyst 4000 Eth-Switch Coco Catalyst 4000 Series Switches System Default ▶ 1.3.6.1.4.1.9.1.14 ○ ² Coco Catalyst 4000 Eth-Switch Coco 800 Series Switches System Default ▶ 1.3.6.1.4.1.9.1.14 ○ ² Coco Catalyst 4000 Eth-Switch Coco 800 Series Routers System Default ▶ 1.3.6.1.4.1.9.1.14 ○ ² Coco ISR 4451X Router Coco 4000 Series Integrated Services Rout. System Default ▶ 1.3.6.1.4.1.9.1.14 ○ ² Coco ISR 4451X Router Coco 4000 Series Integrated Services Rout. System Default ▶ 1.3.6.1.4.1.9.1.17 ○ ² Coco ISR 413 Router Coco 2000 Series Rout. System Default ▶ 1.3.6.1.4.1.9.1.17 ○ ² Coco ISR 413 Router Coco 4000 Series Integrated Services Rout. System Default ▶ 1.3.6.1.4.1.9.1.17 ○ ² Coco I	.1.3.6.1.4.1.5951.	O 🙆 Cisco 3640	Router		System Default			
> 1.3.6.1.4.1.9.1.10 ○ ② Caco Catalyst 4000 Eth-Switch Osco Catalyst 4000 Series Switches System Default > 1.3.6.1.4.1.9.1.11 ○ ③ Caco BXX820 Unknown System Default > 1.3.6.1.4.1.9.1.11 ○ ③ Caco BXX820 Unknown System Default > 1.3.6.1.4.1.9.1.11 ○ ③ Caco BXX820 Unknown System Default > 1.3.6.1.4.1.9.1.11 ○ ③ Caco ISR 4451X Router Gaco Mous Series Switches System Default > 1.3.6.1.4.1.9.1.11 ○ ③ Caco ISR 4451X Router Gaco Meus 1000V Series Switches System Default > 1.3.6.1.4.1.9.1.12 ○ ③ Caco ISR 4451X Router Gaco Meus 1000V Series Switches System Default > 1.3.6.1.4.1.9.1.12 ○ ③ Caco ISR 4431 Router Gaco 4000 Series Integrated Services Rout. System Default > 1.3.6.1.4.1.9.1.12 ○ ④ Caco ISR 4431 Router Gaco 4000 Series Integrated Services Rout. System Default > 1.3.6.1.4.1.9.1.11 ○ ▲ Caco ISR 4431 Router Gaco 4000 Series Integrated Services Rout. System Default > 1.3.6.1.4.1.9.1.12 ● KYM Hypervisor Server	• .1.3.6.1.4.1.9.1.18	O Cisco Catalyst 4003	Eth-Switch	Cisco Catalyst 4000 Series Switches	System Default			
1.3.6.1.4.1.9.1.12 O Soco 851 Router Cisco 800 Series Routers System Default 1.3.6.1.4.1.9.1.12 O Cisco 807.962:0 Unknown System Default 1.3.6.1.4.1.9.1.12 O Cisco 15R, 4431X Router Cisco 4000 Series Routers System Default 1.3.6.1.4.1.9.1.12 O Cisco 15R, 4431X Router Cisco 4000 Series Integrated Services Rout. System Default 1.3.6.1.4.1.9.1.12 O Cisco 15R, 4431 Router Cisco 4000 Series Integrated Services Rout. System Default 1.3.6.1.4.1.9.1.17 O Sico 15R, 4431 Router Cisco 4000 Series Integrated Services Rout. System Default 1.3.6.1.4.1.9.1.17 O Sico 15R, 4431 Router Cisco 4000 Series Integrated Services Rout. System Default 1.3.6.1.4.1.9.1.12 O KVM Hypervisor Server User Defned V 1.3.6.1.4.1.9.1.12 Victore Server User Defned V 1.3.6.1.4.1.9.1.12 Victore Server User Defned V	• .1.3.6.1.4.1.9.1.16	○ 🕮 Cisco Catalyst 4000	Eth-Switch	Cisco Catalyst 4000 Series Switches	System Default			
1.3.6.1.4.1.9.1.1 ^O Broso BPX8620 Unknown System Default 1.3.6.1.4.1.9.1.1 ^O Groso BPX.451X Router Cisco 4000 Series Integrated Services Rout. System Default 1.3.6.1.4.1.9.1.1 ^O Cisco SPX.451X Router Cisco 4000 Series Integrated Services Rout. System Default 1.3.6.1.4.1.9.1.1 ^O Cisco SPX.50-165-serc Eth-Switch Cisco 2000 Series Connected ond Switches System Default 1.3.6.1.4.1.9.1.14 ^O Cisco SPX.50-165-serc Eth-Switch Cisco 2000 Series Connected ond Switches System Default 1.3.6.1.4.1.9.1.14 ^O Cisco SPX.16433 Router Cisco 2000 Series Integrated Services Rout. System Default 1.3.6.1.4.1.9.1.13 ^O KVM Hypervisor <u>Server Unix Hypervisor Server User Defined 1.3.6.1.4.1.9.1.13 Cisco Exolut Cisco Cisco Cisco </u>	• .1.3.5.1.4.1.9.1.15	O 🖄 Cisco 851	Router	Cisco 800 Series Routers	System Default			
▶ 1.3.6.1.4.1.9.1.1 ○ [®] Cisco ISR 4451X Router Cisco 4000 Series Integrated Services Rout. System Default ▶ 1.3.6.1.4.1.9.1.1 ○ [®] Cisco ISR 4451X Eth-Switch Cisco 4000 Series Integrated Services Rout. System Default ▶ 1.3.6.1.4.1.9.1.1 ○ [®] Cisco ISR 4431 Router Cisco 4000 Series Integrated Services Rout. System Default ▶ 1.3.6.1.4.1.9.1.1 ○ [®] Cisco ISR 4431 Router Cisco 4000 Series Integrated Services Rout. System Default ▶ 1.3.6.1.4.1.9.1.1 ○ [®] Cisco ISR 4431 Router Cisco 4000 Series Integrated Services Rout. System Default ▶ 1.3.6.1.4.1.9.1.1 ○ [®] Cisco ISR 4431 Router Cisco 4000 Series Integrated Services Rout. System Default ▶ 1.3.6.1.4.1.9.1.1 ○ [®] Cisco ISR 4431 Router Cisco ISR 4451 Cisco ISR 4451 ▶ 1.3.6.1.4.1.9.1.1 ● [®] Cisco ISR 4451 [®] Cisco ISR 4451 [®] Cisco ISR 4451	• .1.3.6.1.4.1.9.1.16	O III Cisco BPX8620	Unknown		System Default			
I.3.6.1.4.1.9.1.16 O @ Cisco Nexus 1000V Switch Eth-Switch Cisco Nexus 1000V Series Switches System Default I.3.6.1.4.1.9.1.17 @ Cisco Series Connected Grid Switches System Default I.3.6.1.4.1.9.1.17 @ Cisco ISR 4431 Router Cisco 4000 Series Integrated Services Rout. System Default I.3.6.1.4.1.9.1.17 (KVM Hypervisor Server V User Defined Integrated Services Rout. System Default I.3.6.1.4.1.9.1.17 (KVM Hypervisor Server V User Defined Integrated Services Rout. Cisco 4000 Series Integrated Services Rout. Cisco 4000 Series Integrated Services Rout. I.3.6.1.4.1.9.1.17 (KVM Hypervisor Server V User Defined (Services Rout. Cisco 4000 Series Integrated Services Rout. Cisco 4000 Series Integrated Services Rout. (Services Rout. Cisco 4000 Series Integrated Services Rout. Cisco 4000 Series Integrated Services Rout. (Services Rout. Cisco 4000 Series Integrated Services Rout. Cisco 4000 Series Integrated Services Rout. (Services Rout. Cisco 4000 Series Integrated Services Rout. Cisco 4000 Series Integrated Services Rout. (Services Rout. Cisco 4000 Series Integrated Services Rout. Cisco 4000 Series Integrated Services Rout. (Services Rout. Cisco 4000 Series Integrated Services Rout. (Ser	• .1.3.6.1.4.1.9.1.17	O 🛎 Cisco ISR 4451X	Router	Cisco 4000 Series Integrated Services Rout	System Default			
1.3.6.1.4.1.9.1.1	• .1.3.6.1.4.1.9.1.16	O Cisco Nexus 1000V Switch	Eth-Switch	Cisco Nexus 1000V Series Switches	System Default			
1.3.6.1.4.1.9.1.16	• .1.3.6.1.4.1.9.1.17	○ @ CGS-2520-16S-8PC	Eth-Switch	Cisco 2500 Series Connected Grid Switches	System Default			
1.3.6.1.4.1.9.1.1: KVM Hypervisor Server Linux Hypervisor Server User Defined Linux Hypervisor Server User Defined Cose	• .1.3.6.1.4.1.9.1.16	O Cisco ISR 4431	Router	Cisco 4000 Series Integrated Services Rout	System Default			
136141311 Sie Care Core	• .1.3.6.1.4.1.9.1.17	KVM Hypervisor	Server 💌	Linux Hypervisor Server	User Defined		~	
Close Close	• .1.3.6.1.4.1.9.1.15			Save Cancel				
	• .1.3.5.1.4.1.9.1.10						Close	

Step 5 Newly added device type appears. Click *close*.

Step 6 Click '*Add Row*' in VNE Drivers.

alu	h.					root Logout About
cisc	o Cisco Prime Netwo	rk Hon	ne Network Discovery •	VNE Customization Builder		
VNE	Customization Builder					
VNE	Drivers Modules	Pluggable Modules Events E	xport Customization Import Custo	mization		
VNE D	rivorc			v9		
VINE	rivers					
Cisc	o Drivers					A
C VN	IE Drivers					Selected 0 Total 601 🥎 🔐 🤮 🖕
/ Edit	X Delete 2 Add Row	A Configure Device Types			Show	All T
	SysOID	Sysoid Translation	Device Type	Туре	Cloning Reference	Overriding System Default
0 1	.1.3.6.1.4.1.5951.1		Netscaler VPX	System Default		
0 .	.1.3.6.1.4.1.9.1.1880		Cisco Catalyst 38xx 12 Stack	System Default		1
0 .	.1.3.6.1.4.1.9.1.1640	ciscoASR9922	Cisco ASR 9922	System Default		
0 1	.1.3.6.1.4.1.9.1.1521	ciscoASR901	Cisco ASR 901 TDM	System Default		
0 1	.1.3.6.1.4.1.9.1.1642	cat385024P	Cisco Catalyst 385024P	System Default		
0 +	.1.3.6.1.4.1.9.1.1763		🕮 ME 2600x	System Default		
0 1	.1.3.6.1.4.1.9.1.1641	cat385048P	Cisco Catalyst 385048f	System Default		
0 .	.1.3.6.1.4.1.9.1.1762		Cisco ASR 9904	System Default		
0 1	.1.3.6.1.4.1.9.1.1644	cat385024	Cisco Catalyst 385024t	System Default		
0 1	.1.3.6.1.4.1.9.1.1765		Cisco Catalyst 6800	System Default		
0 .	.1.3.6.1.4.1.9.1.1522	ciscoASR901E	Cisco ASR 901	System Default		
0 1	.1.3.6.1.4.1.9.1.1643	cat385048	Cisco Catalyst 385048t	System Default		
0 1	.1.3.6.1.4.1.9.1.1525	ciscoASR1002X	Cisco ASR 1002-X	System Default		v
` <`	1001100007			enan entra		>

Step 7 Enter the *device SysOID* under SysOID.

Steps to Get SysOID via PN:

a. Model KVM Server. Choose 'Auto Detect' as Type and 'Product' as Scheme.



In case if multiple IPs are configured in KVM Server, identify the IP address that is used to send traps and add that IP address under Events Tab & Restart VNE. This is required only if the IP used to send traps is different from the management/VNE IP.

ation -	A dvs-cvg-kvm-06 · Properties	_ 🗆 ×					0×
• <i>F</i> A	General SNMP Telest/SSH	32ML HTTP					
ID: 103 Up Shot: 11/29/18 3:32:54 PF Key: 103 (Auto-10.105.3)	Specify the IP addresses for which SHMP trap and systope vents will Enter IP Addresses . Even	regenerated t-Generating IP Addresses: 76.83.180					
Vills Find : D Affects Anne & P P Address discoption 05 10,76.82.10	Amon		Eenent Type KVM Hypervisor	Scheme Product	Poling Group default	Adaptive Poling Device Type Setting	Prim
G							
	Image: Second	Image: State of the s	Image: Second	Addust Addust Image: Constraint of the second	Adden A chose-corp icome 06 - Properties Image: Corp icome 06 - Properties Image: Corp icome 06 - Properties Image: Corp icome 06 - Properties Image: Corp icome 06 - Properties Image: Corp icome 06 - Properties Image: Corp icome 06 - Properties Image: Corp icome 06 - Properties Image: Corp icome 06 - Properties Image: Corp icome 06 - Properties Image: Corp icome 06 - Properties Image: Corp icome 06 - Properties Image: Corp icome 06 - Properties Image: Corp icome 06 - Properties Image: Corp icome 06 - Properties Image: Corp icome 06 - Properties Image: Corp icome 06 - Properties Image: Corp icome 06 - Properties Image: Corp icome 06 - Properties Image: Corp icome 06 - Properties Image: Corp icome 06 - Properties Image: Corp icome 06 - Properties Image: Corp icome 06 - Properties Image: Corp icome 06 - Properties Image: Corp icome 06 - Properties Image: Corp icome 06 - Properties Image: Corp icome 06 - Properties Image: Corp icome 06 - Properties Image: Corp icome 06 - Properties Image: Corp icome 06 - Properties Image: Corp icome 06 - Properties Image: Corp icome 06 - Properties Image: Corp icome 06 - Properties Image: Corp icome 06 - Properties Image: Corp icome 06 - Properties Image: Corp icome 06 - Properties Image: Corp icome 06 - Properties	Image: Section of the cosp kown 06 - Properties X Image: Section of the cosp kown 06 - Properties X Image: Section of the cosp kown 06 - Properties X Image: Section of the cosp kown 06 - Properties X Image: Section of the cosp kown 06 - Properties X Image: Section of the cosp kown 06 - Properties X Image: Section of the cosp kown 06 - Properties X Image: Section of the cosp kown 06 - Properties X Image: Section of the cosp kown 06 - Properties X Image: Section of the cosp kown 06 - Properties X Image: Section of the cosp kown 06 - Properties X Image: Section of the cosp kown 06 - Properties X Image: Section of the cosp kown 06 - Properties X Image: Section of the cosp kown 06 - Properties X Image: Section of the cosp kown 06 - Properties X Image: Section of the cosp kown 06 - Properties X Image: Section of the cosp kown 06 - Properties X Image: Section of the cosp kown 06 - Properties X Image: Section of the cosp kown 06 - Properties X Image: Section of the cosp kown 06 - Propertie	Image: Section 1 Image: Section 1 <td< td=""></td<>

b. Add the VNE to Map. Open the properties for Device Unsupported Ticket to get the SysOID of the device.

1

c. Copy the SysOID from the details section.

Acknowledge	knowledge 🥪 Clear		
licket ID:	130002	Severity:	200630
Description:	Device unsupported	Last Modification Time	03-Dec-18 15:49:34
ocation:	dvs-cvg-kvm-06	Open Alarms:	0/0
lement Type:	Unknown	Acknowledged:	No
loot Event Time:	03-Dec-18 15:49:34	Category:	Processing error
Creation Time:	03-Dec-18 15:49:34	Nature:	ADAC
Details:			
Device Not Supported (Dev	ice type unsupported - <mark>.1.3.6.1.4.1.8072.3.2.1</mark>	<mark>0</mark>)	
Troubleshooting:			
Probable Cause: 1. The Device Type (it's Sys	soid) is not supported by the System.	s Svetam	
2. The VNE is configured in 3. The VNE is using reduce 4. The VNE failed to retrieve	wrong scheme which is not supported by the d polling method, but the VNE does not suppo e the device sysOid or software version.	rt that method.	
2. The VNE is configured in 3. The VNE is using reduce 4. The VNE failed to retrieve Action to be Taken:	wrong scheme which is not supported by the d polling method, but the VNE does not suppo e the device sysOid or software version.	rt that method.	
2. The VNE is configured in 3. The VNE is using reduce 4. The VNE failed to retrieve Action to be Taken: 1. Add the VNE as Generic 2. Consult the Prime Networ 3. For some devices, some This is a special interface th in order to access it, olease	wrong scheme which is not supported by the d polling method, but the VNE does not support the device sysOld or software version. VNE or ICMP VNE. fx manual regarding the correct scheme for th support can be obtained by using the Prime N nat allows the user to manually add SysOld an o open the Cisco Prime Network Web Server o	rt that method. e current device and supported devices in gen etwork VNE Customization Builder. d specify the device type to allow the system n a web browser with address. https://cGW-IF	eral. to work with it. ⊳≈8043
2. The VHE is configured in 3. The VHE is using reduce 4. The VHE failed to retrieve Action to be Taken: 1. Add the VHE as Generic 2. Consult the Prime Networ 3. For some devices, some This is a special interface th in order to access it, please Clear Condition: Verify If the	wrong scheme which is not supported by the d polling method, but the VNE does not support the device sysOld or software version. VNE or ICMP VNE. K manual regarding the correct scheme for th support can be obtained by using the Prime N nat allows the user to manually add SysOld web Server o a SysOID or Device software version and the	e current device and supported devices in gen etwork VNE Customization Builder. id specify the device type to allow the system n a web browser with address: https:// <gw-# scheme used by the VNE is supported.</gw-# 	eral. to work with it. ≫:8043
The VNE is configured in 3. The VNE is using reduce 4. The VNE failed to retrieve Action to be Taken: 1. Add the VNE as Generic 2. Consult the Prime Networ 3. For some devices, some This is a special interface th In order to access it, please Clear Condition: Verify if the devices is in the second second second second second Clear Condition: Verify if the details History Affected	wrong scheme which is not supported by the d polling method, but the VNE does not support the device sysOld or software version. VNE or ICMP VNE. Kr manual regarding the correct scheme for th support can be obtained by using the Prime N nat allows the user to manually add SysOld an e open the Cisco Prime Network Web Server o e SysOID or Device software version and the d Parties Correlation Advanced Not	rt that method. e current device and supported devices in gen etwork VNE Customization Builder. id specify the device type to allow the system n a web browser with address: https:// <gw-if scheme used by the VNE is supported. es User Audit</gw-if 	eral. to work with it. ≫:8043

d. Now Paste the *SysOID* here.

ultulu Cisse Daime Naturali							
CISCO CISCO Prime Network	Home	Network Discovery	VNE Customization Builder				
VNE Customization Builder							
VNE Drivers Modules Pluggab	le Modules Events Exp	ort Customization Import Cu	stomization				
NF Drivers							
Circo Drivero							
VINE Drivers					Se	ected 1 Total 602 🚳 🕼	
Fdit MDelete OF Add Row PConfigu	re Device Types				Show All		1
OwoID	Outsid Translation	Denico Tuno	Tune	Classing Deference	SHOW	Quarridina Durtam Dafa	, li
) .1.3.6.1.4.1.9.1.824	ciscoACE4710K9	Cisro ACE 4710	System Default	Cioning Reference		Overhung system Dela	u
) 1.3.6.1.4.1.9.1.1174	cisco1941WNK9	CISCO 1941W N/K9	System Default				
.1.3.6.1.4.1.9.1.2143		Cisco ASR 1006-X	System Default				
.1.3.6.1.4.1.9.1.822	ciscoCrs14S	Cisco CRS4S	System Default				
▶ .1.3.6.1.4.1.9.1.2264	N	Cisco IOS-XRV 9000	System Default				
▶ .1.3.6.1.4.1.9.1.1055	ciscoSmXd2k48Es2SFP	Cisco SM-D-ES2-48	System Default				
▶ .1.3.6.1.4.1.9.1.1056	ciscoSmXd3k48Es2SFPP	Cisco SM-D-ES3-48-P	System Default				
1.3.6.1.4.1.9.1.821	cisco7201	😂 Cisco 7200	System Default				
1.3.6.1.4.1.9.1.1057	ciscoSmXd3k48Ge2SFP	Cisco SM-D-ES3G-48-P	System Default				
1.3.6.1.4.1.9.1.1178	catalyst4948e10GE	Cisco Catalyst 4948E	System Default				
.1.3.6.1.4.1.9.1.706	catalyst6kMsfc2a	🕮 Cisco Msfc	System Default				
) .1.3.6.1.4.1.9.1.2390		Gisco ASR 9910	System Default				
1.3.6.1.4.1.8072.3.2.10		UNKNOWN	User Defined VNE - by Template	 GenericUVNE 	*		
			Save Cancel				

Step 8 Choose *Server* > *KVM* > *KVM* Hypervisor as Device Type.

Γ

cisco Prime Network	Hama	Network Discovery	WE Outomitation Bui	Ider I 💌			and the state of the
VNE Customization Builder	Tione	Helmork Discovery	VIII. Customization but	uei i v			
VNE Drivers Modules Plugg	able Modules Events Expo	ort Customization Impor	t Customization				
NF Drivers							
NE DIVEIS			Search Results	x			
Cisco Drivers			- Conner				
VNE Drivers			Server	12 0		Sele	ected 1 Total 602 🔮 🕼 🧐
/ Edit 🗙 Delete 👷 Add Row 🖉 Config	gure Device Types			562		Show All	v I
SysOID	Sysoid Translation	Device Type	Access Sequer	11.4	Cloning Reference		Overriding System Default
) 1.3.6.1.4.1.9.1.824	ciscoACE4710K9	Cisco ACE 4710	Carrier Pouting Server				
.1.3.6.1.4.1.9.1.1174	cisco1941WNK9	😂 CISCO 1941W N/K9	Canner Kobbing Server				
.1.3.6.1.4.1.9.1.2143		🛱 Cisco ASR 1006-X	Server	,			
.1.3.6.1.4.1.9.1.822	ciscoCrs14S	Cisco CRS4S	server Farm				
) 1.3.6.1.4.1.9.1.2264		Cisco IOS-XRv 9000	Virtual Server				
.1.3.6.1.4.1.9.1.1055	ciscoSmXd2k48Es2SFP	Cisco SM-D-ES2-48	WWW Server				
.1.3.6.1.4.1.9.1.1056	ciscoSmXd3k48Es2SFPP	Cisco SM-D-ES3-48-P					
.1.3.6.1.4.1.9.1.821	cisco7201	😂 Cisco 7200					
.1.3.6.1.4.1.9.1.1057	ciscoSmXd3k48Ge2SFP	Cisco SM-D-ES3G-48-P					
.1.3.6.1.4.1.9.1.1178	catalyst4948e10GE	Gisco Catalyst 4948E					
.1.3.6.1.4.1.9.1.706	catalyst6kMsfc2a	🗐 Cisco Msfc					
.1.3.6.1.4.1.9.1.2390		Gisco ASR 9910					
.1.3.6.1.4.1.8072.3.2.10			User Defined VNE - by T	remplate	 GenericUVNE 	v	
-16-16-							root Logout
cisco Cisco Prime Network	Home	Network Discovery	 VNE Customization Bui 	lder 🔻			
VNE Customization Builder							
Note Designed Andreas	able Madulas - Durate - Dura	nd Curduminellun Trans	1 Custominetics				
Mie Univers Modules Plugg	able Produces Evenus Exp	ore customization impor	Customization				
/NE Drivers							
Cisco Drivers							
						Sele	eted 1 Total 802 🚳 🚳 🚳
Call Models of Add Dave Model	euro Denito Tunos					ch	
Cont	gure Device Types	12 3 32	128		12111212	Snow All	
SysOID	Sysoid Translation	Device Type	Type System Default		Cloning Reference		Overriding System Default
136141011174	cisco1041WAV0	CISCO ACE 4710	System Default				
136141017143	CI3C0127114/4/2	CISCO 1941W N/K9	System Default				
13614191822	riscoCrs14S	CISCO ASK 1000-X	System Default				
136141012264	00000170	CISCO CR545	System Default				
○ ▶ .1.3.6.1.4.1.9.1.1055	ciscoSmXd2k48Ec2CED	CISCO 105-XRV 9000	System Default	2			
€ 13.6.1.4.1.9.1.1056	risrnSmXd3k48Fe3SEDD	CISCO SM-D-E52-48	System Default				
.1.3.6.1.4.1.9.1.821	cisco7201	Cisco 3700	System Default				
0 1.3.6.1.4.1.9.1.1057	ciscoSmXd3k48Ge2SED	Cisco CM D ECOC 40 D	System Default				
○ ▶ .1.3.6.1.4.1.9.1.1178	catalust4048a10GE		of second period				
-	COLORY STREET LITTLE	Ciero Cataliant A0A0E	System Default				
I.3.6.1.4.1.9.1.706	catalyst6kMsfc2a	Cisco Catalyst 4948E	System Default System Default				

User Defined VNE - by Template

0

GenericUVNE

1

Step 9 Click Save. Newly added SysOID details appears.

• .1.3.6.1.4.1.8072.3.2.10

<

- Step 10 Restart VNE.
- **Step 11** Device is supported and VNE enters into operational state.

KVM Hy



VCB Customization for Supporting Traps

Click Add Row.						
Enton Event Nav						
Enter Event Nan	ne.					
ahaha						root
CISCO CISCO Prime Netw	JFK	Home	Network Discovery	VNE Customization Builder		-
VNE Customization Builder	Add Trap					×
VNE Drivers Modules	Step 1 - Event Definition			Þ		
Evente	Event Name* KVM VM Status	Traps	1	~		
Lvents	Oid*		Ī			
Cisco Events	Category Other					
Syslog	Nature					Selected 0 Total 1002
Trap	Flapping					
Service O 135141						
O + .1.3.6.1.4.1.					Previous Next Finish Cancel	ce
○ ▶ .1.3.6.1.4.1.3	Step 2 - Subtype Definition*				4	7 15
○ ▶ .1.3.6.1.4.1.3	Step 3 - Subtype Identification*					, ce
○ ▶ .1.3.6.1.4.1.	Sten 4 - Association*				e e e e e e e e e e e e e e e e e e e	is
○ ▶ .1.3.6.1.4.1.	Stop 5 Expedito					2
0 136141	Skep 5 - Expense				Ŵ	0
○ ▶ .1.3.6.1.4.1.	Step 0 - Pattern				Ŵ	
○ ▶ .1.3.6.1.4.1.	Required					
○ ▶ .1.3.6.1,4.1.3						
○ ▶ .1.3.6.1.4.1.1						
○ ▶ .1.3.6.1.4.1.3						AIS .

Step 4 Get SNMPTrapOID value from received unsupported traps and map it to Oid:

a. Go to Standard Tab of Event Vision

ſ

b. Double click on any of the received unsupported Traps to see Event Properties.

Memory: 20% Connected

1

c. Go to *Trap* Tab.

- d. Right Click on the snmpTrapOID row and click Properties.
- e. Copy the *SNMP value*.

Location 1 - Tr	ap Value Properties				- 0 ×
Snmp Old:	.1.3.6.1.6.3.1.1.4.1.0	Snmp Value:	.1.3.6.1.4.1.12345.0.1		
Snmp Translated Oid:	. is o. or g. dod. internet. snmpV2. snmpModules. snmpMIB. snmpMIBO bjects. snmpTrap. snmpTrapOID. 0	Snmp Translated Value:	enterprises.12345.0.1	l⊋	

f. Paste the copied SNMP Value in 'Oid'text box. Then click 'Next' button.

altalta cisco	Cisco Prime Netwo	rk Home Network Discovery VINE Customization Builder +	root Logou	t About
VNE OUS	tomization Builder	Add Trap X	-	
VME Driv	ars Modules	Step 1 - Event Definition		
Events Cisco Ev Syslog	ents Trap Edit Delete	Event Name" K/M VIM Status Traps Old* 13.6.1.4.1.12345.0.1 Catepory Other Nature ADAC Fipping	Selected 0 Total 1002 😵 🕢	· 8
Consico	Trap Oid		Natu	re
Jervice	0 1.3.6.1.4.1.3	Previous Next Finish Cancel	re ADA	~ ^
	○ ▶ .1.3.6.1.4.1.:	Step 2 - Subtype Definition*	ADM	ic
	○ ▶ .1.3.6.1.4.1.3	Step 3 - Subtype Identification*	ce ADA	c
	○ ▶ .1.3.6.1.4.1.3	Sten 4 - Association"	ns ADA	c
	○ ▶ .1.3.6.1.4.1.3	Stan 5. Evnarhta	ADA	6
	○ ▶ .1.3.6.1.4.1.1	Stop 5 Explaine	ADA ADA	
	○ ▶ .1.3.6.1.4.1.3	Supple - reaction	ADA	c
	○ ▶ .1.3.6.1.4.1.3	veforen	ADA	с
	○ ▶ .1.3.6.1.4.1.1		ADM	IC
	○ ▶ .1.3.6.1.4.1.3		ADM	C
	○ ▶ .1.3.6.1.4.1.3		ADM ADM	
	< · · · · · · · · · · · · · · · · · · ·			`>

- cisco Cisco Prime Network Add Trap Step 1 - Event Definition **VNE** Drivers Modules Step 2 - Subtype Defini Events Recommended Action Name Description to be Displayed Severity Ticketable Auto Clear Correlate Cisco Ev • Delete * 10 | Totai 1002 🥳 🕼 🖕 💆 Тгар Syslog / Edit 💥 Delete - 8 Trap Oid 2 Nature Add Service () .1.3.6.1.4.1 ADMC Previous Next Finish Cancel ~ ○ ▶ .1.3.6.1.4.1 ADAC ○ ▶ .1.3.6.1.4.1.3 ADMC Step 3 - Subtype Identification 1 ○ ▶ .1.3.6.1.4.1.3 ADAC Step 4 - Association* \checkmark ○ ▶ .1.3.6.1.4.1.3 ADAC Step 5 - Expedite ○ ▶ .1.3.6.1.4.1.3 ADAC ○ ▶ .1.3.6.1.4.1.1 ADMC Step 6 - Pattern S ○ ▶ .1.3.6.1.4.1.3
 ○ ▶ .1.3.6.1.4.1.3 ADAC * Required ADAC ○ ▶ .1.3.6.1.4.1. ADAC ○ ▶ .1.3.6.1.4.1 ADMC ○ ▶ .1.3.6.1.4.1 ADMC ○ ▶ .1.3.6.1.4.1 ADMC े
- **Step 5** Enter the Events details such as description, severity, ticketable or not in Step 2.

a. Determine the event types from libvirt MIB using *libvirtGuestState* property.



b. Configure all the VM status in Step 2 and Click Next.

I

1

altala cisco	Cisco	o Prime I	Netwo	rk			_						root	Logout	About
				Add Trap		N						×			
VNE Cus	tomiza	ation Builde	er	Step 1 - Event Definition	1*	3						1			
VNE Driv	/ers	Modul	les	Step 2 - Subtype Defi	inition#										
Events		_		Name	Description to be Displayed	Severity	Ticketabl	e Auto Clear	Correlate	Recommended Action					I
Cisco Ev	ents			running	running	Cleared	• 🗹				Delete				
Syston	Ŭ	Trap		blocked	blocked	Major	•				Delete		Selected 0 Total 1002	9 0 §	*
Systog	/ E	dit 🗙 De	lete	paused	paused	Minor	•				Delete	~	ł	+ 5	6
Trap		Trap C	Did	Add	-)r			-	-					Nature	
Service	0	.1.3.6.	.1.4.1.3							Previous	Next Finish	Cancel	ce	ADMC	
	0	 .1.3.6. 	.1.4.1.3	ACC. 1933254-544. (2004-1474)									ce	ADAC	2
	0	 .1.3.6. 	.1.4.1.3	Step 3 - Subtype Identif	fication*							s s	1S	ADMC	п
	0	 1.3.6. 	.1.4.1.3	Step 4 - Association*								S	ice:	ADAC	
	0	.1.3.6.	.1.4.1.3	Step 5 - Expedite								A	1S	ADAC	
	0	• .1.3.6.	.1.4.1.3	Step 6 - Pattern*								-12		ADAC	
	0	.1.3.6.	.1.4.1.1	*o								V	15	ADMC	
	0	 .1.3.6. 	.1.4.1.3	Required										ADAC	
	0	 .1.3.6. 	.1.4.1.3										_	ADAC	
	0	· .1.3.0.	1.4.1.											ADAC	
	0	.1.3.0.	1.4.1.1										_	ADMC	V
	~	.1.5.0.	1.4.13			_	_	_	_					ADMC	
															1



Step 6 Select 'value' for Identify subtypes by following the below steps:

Γ

	Add Trap	x	
E Customization Builder	Step 1 - Event Definition*		
IE Drivers Modules	Step 2 - Subtype Definition*		
ts	Step 3 - Subtype Identification		
sco Events	Tdentify subtymes hy* Value		
slop 💆 Trap		Selected 0 1	Total 1002 😽 🕼
/ Edit X Delete	Replacing Rules	E.	*
Trap Oid	Please specify a string that uniquely identifies the required OID in the varbind list.		Nature
rvice 🔿 🕨 .1.3.6.1.4.1.3	and a mapping between each event subtype and the value in the event that indicates the subtype.	ce	ADMC
○ ▶ .1.3.6.1.4.1.3	Varbind Oid*	ce	ADAC
○ ▶ .1.3.6.1.4.1.:	running*	1S	ADMC
○ ▶ .1.3.6.1.4.1.3	blocked*	ce	ADAC
○ ▶ .1.3.6.1.4.1.3	paused*	ns	ADAC
○ ▶ .1.3.6.1.4.1.3			ADAC
0 .1.3.6.1.4.1.	Previous Next Finish Cancel	1S.	ADMC
O . 1.3.6.1.4.1.	Stan 4. Accordition*		ADAC
0 1251413			ADAC
0 1361415	Step 5 - Expedite		ADAC
0 136141	Step 6 - Pattern*	×	ADMC
C I IIIIII			ADHO

- **a.** Get the VM status Varbind Oid and map here. Go to Standard traps of Event Vision. Double click on any of the received unsupported traps. Go to Trap tab.
- b. Right Click on '.1.3.6.1.4.1.12345.1.1.1.3.2' OID which maps to VM status and select properties.
- c. Copy the Snmp Oid and map it to Varbind Oid.

LUCAUUII 4 - ITA	ap Value Properties		
inmp Oid:	.1.3.6.1.4.1.12345.1.1.1.3.2	Snmp Value:	3
inmp Translated Oid:	.iso.org.dod.internet.private.enterprises.12345.1.1.1.3.2	Snmp Translated Value:	3
		€J	

altala cisco - Cisco Prime Netw			root (Logout About
ciper cisco rinne ricci	Add Trap	х		
VNE Customization Builder	Step 1 - Event Definition*			
VNE Drivers Modules	Step 2 - Subtype Definition*			
Events	Step 3 - Subtype Identification			
Cisco Events	Identify subtypes by* Value	l	Selected 0 Total 1002	* *
Syslog	Replacing Rules	l	1	. 2
Service Trap Oid	Please specify a string that uniquely identifies the required OID in the varbind list, and a mapping between each event subtype and the value in the event that indicates the subtype.	L	ce	Nature ADMC
0 136.14.1	Varbind Old ⁺ 1.1.3.6.1.4.1.12345.1.1.1.3.2	l	ce s	ADAC
○ ▶ .1.3.6.1.4.1.	blocked*	L	ce	ADAC
○ ► .1.3.6.1.4.1. ○ ► .1.3.6.1.4.1.	paused*	l	IS	ADAC
○ ► .1.3.6.1.4.1. ○ ► .1.3.6.1.4.1.	Previous Net Finish Cancel		15	ADMC ADAC
○ ▶ .1.3.6.1.4.1.	Step 4 - Association*			ADAC
○ ▶ .1.3.6.1.4.1.	Step 5 - Expedite			ADAC
 ○ ▶ .1.3.6.1.4.1. ○ ▶ .1.3.6.1.4.1. 	Step 6 - Pattern*	~		ADMC V
<				>

d. Map the Snmp Value which will uniquely identify each of the VM status and Click Next.

ajaja	Cisco Prime Netwo			root Logout Abo	
cibee		Add Trap	x		
VNE Cu	stomization Builder	Step 1 - Event Definition*			
VNE Dri	vers Modules	Step 2 - Subtype Definition*			
Events		Step 3 - Subtype Identification			
Cisco E	vents	Ly"	H		
Syslog	💆 Тгар	Yalue		elected 0 Total 1002 🍪 😨 🤹	
oyung	/ Edit 🗙 Delete 🕴	Replacing Rules		* 8	
Trap	Trap Oid	Please specify a string that uniquely identifies the required OID in the varbind list.	11	Nature	
Service	○ ▶ .1.3.6.1.4.1.3	and a mapping between each event subtype and the value in the event that indicates the subtype.	18	e ADMC	
	○ ▶ .1.3.6.1.4.1.3	Varbind Oid* 1.1.3.6.1.4.1.12345.1.1.1.3.2	18	e ADAC	
	○ ▶ .1.3.6.1.4.1.3	running* 1		ADMC	
	○ ▶ .1.3.6.1.4.1.3	blocked* 2	18	e ADAC	
	○ ▶ .1.3.6.1.4.1.3	pured* 2		ADAC	
	0 1.3.6.1.4.1.3	pauleu 3	11	ADAC	
	○ ▶ .1.3.6.1.4.1.1	Previous Next Finish Cancel		ADMC	
	○ ▶ .1.3.6.1.4.1.3		11	ADAC	
	○ ▶ .1.3.6.1.4.1.3	Step 4 - Association*		ADAC	
	○ ▶ .1.3.6.1.4.1.3	Step 5 - Expedite 🔗		ADAC	
	○ ▶ .1.3.6.1.4.1.1	Sten 6 - Dattern*	v	ADMC	
	○ ▶ .1.3.6.1.4.1.3		- J	ADMC	
	<			>	



- **Step 7** Map the Location details in Association Step.
 - a. Choose 'Managedelement Key' as Source Type.

altalta cisco Cisco Prime Netw	ork	root Logou	t About
	Add Trap X		
VNE Customization Builder	Step 1 - Event Definition*		
VNE Drivers Modules	Step 2 - Subtype Definition*		
Events	Step 3 - Subtype Identification*		
Cisco Events	Step 4 - Association*		
Yeldo Edit Yelde Trap Edit Yelde Trap Edit Yelde Service > 1.36.14.1: > 1.36.14.1: O > 1.36.14.1: O D > 1.36.14.1: O O > 1.36.14.1: O D > 1.36.14.1: O D > 1.36.14.1: O D > 1.36.14.1: O D > 1.36.14.1: O	Source Type" Managedelement Key Instance Identifier Prefix Instance Identifier Location Instance Identifier Location Instance Identifier Varbind Old Previous Next Finish Cancel Step 5 - Expedite Step 6 - Pattern * * * * * * * * * * * * * * * * * *	Selected 0 Total 1002 🚱 🖬 I Ce ADM ce ADM ce ADM c ADA s ADA s ADA	
○ ▶ .13.5.141: ○ ▶ .13.6.141: ○ ▶ .13.6.141: ○ ▶ .13.6.141: ○ ▶ .13.6.141: ○ ▶ .13.6.141:	"Regured	ADA ADA ADA ADM ADM	

b. Choose '*Value*' as Instance Identifier Location.

Γ

Cisco Cisco Prime Network Home Network Derrowry WE Circlentization Builder X Vie Customization Builder Add Trap X X X Vie Customization Builder Step 1 - Event Definition* X X X Events Step 1 - Event Definition* X X X X Core Events Step 1 - Event Definition* X X X X X Step 3 - Subtype Identification* X	
WE Customization Builds Add Trap X WE Drivers Modules Sep 1 - Event Definition* Image: Sep 3 - Subtype Identification* Events Sep 3 - Subtype Identification* Image: Sep 3 - Subtype Identification* Image: Sep 3 - Subtype Identification* System Trap 0 Sep 4 - Association* Image: Sep 3 - Subtype Identification* Image: Sep 4 - Association* Service Trap 0 Service Trap 0 Sep 4 - Association* Image: Sep 4 - Association* Image: Sep 4 - Association* Service Trap 0 Instance Identifier Prefix Image: Sep 4 - Association* Image: Sep 4 - Association* Image: Sep 4 - Association* Service Trap 0 Sep 4 - Association* Image: Sep 4 - Association* Service Trap 0 Sep 4 - Association* Image: Sep 4 - Association* Service Trap 0 Trap 0 Image: Sep 4 - Association* Image: Sep 4 - Association* <t< th=""><th></th></t<>	
WE Drives Module Step 1 - Event Definition* Image: Construction of the instance Identifier Variation of the instance Ide	
We brives Module Step 2 - Subtype Definition* Events Step 3 - Subtype Identification* Image: Control of the sector	
Step 3 - Subtype Identification* Set of 3 - Subtype Identification* Step 3 - Subtype Identification* Set of 4 - Association Step 4 - Association Set of 4 - Association Step 4 - Association Set of 4 - Association Step 4 - Association Set of 1 - Association Step 4 - Association Set of 1 - Association Step 4 - Association Instance Identifier Prefix Instance Identifier Variation Od Instance Identifier Variation Od Name Instance Identifier Variation Od Instance Identifier Variation Od ADACC S ADVCC ADACC	
Coro Events Step 4 - Association System Trap Service > 1.3.6.1.4.1 > 1.3.6.1.4.1 Instance Identifier Varbind Od > 1.3.6.1.4.1 Instance Identifier Varbind Od > 1.3.6.1.4.1 Previous Notet Finich Cancel	
System Trap Source Type* Managedelement Key Trap Old Instance Identifier Prefix Instance Identifier Varbind Old in the event location > 1.3.6.1.4.11 Instance Identifier Varbind Old > 1.3.6.1.4.12 Instance Identifier Varbind Old	
Service > 1.3.6.1.4.1: Instance Identifier Verbind Oid > aprefix to add to the Instance Identifier, in the event location > in the event location > in the event location Service >> 1.3.6.1.4.1: Instance Identifier Varbind Oid > ADAC	¥
Trap Od Instance Identifier Perfx a gette state is bendares Identifier, in the event location Instance Identifier Perfx Instance Identifier, in the event location Instance Identifier Perfx Instance Identifier, in the event location	3
Service > 1.3.6.1.4.1 Instance Identifier Location Value r ce ADMC > > 3.3.6.1.4.1 Instance Identifier Varbind Oid > ADAC > > ADAC > > > ADAC > <th></th>	
O 1.3.6.1.4.1. Instance Identifier Varbind Oid ADAC O > 1.3.6.1.4.1. Previous ADAC	
O > 1.3.6.1.4.12 adMc O > 1.3.6.1.4.12 Previous Next Finish Cancel re ADMC	2
O > 1.3.6.1.4.1. Previous Next Finish Cancel e ADAC	
0 1 1251411	
S ADAC	
○ ▶ 1.3.6.1.4.1.1 Step 5 - Expedite	
0 ▶ .13.6.1.4.1. Step 6 - Pattern*	
O F. 1.35.1.41.1 *Required ADAC	
	V
APR.	

- **c.** Get the Location Varbind Oid from received traps and map here. Go to Standard traps of Event Vision. Double click on any of the received unsupported traps. Go to Trap tab.
- d. Right Click on .1.3.6.1.4.1.12345.1.1.1.2.0 Oid which maps to location and click select properties.
- e. Copy the Snmp Oid and map it to Instance Identifier Varbind Oid and Click 'Next'.

ajtaju cisco Cisco Prime Netw	ork Bonn Natural Persons (a 1867 Persons Judge) -	root	Logout Abo	aut
VNE Oustomization Builder VNE Drivers Modules	Home Network Discovery. 1+ Vite Customization Relifier 1+ Add Trap X Step 1 - Event Definition* Image: Customization Relifier 1+ Step 2 - Subtype Definition* Image: Customization Relifier 1+			
Cisco Events	step 4 - Sociation			
Sysion Trap Edit Trap Oid Service > 1.3.6.1.4.1. > 1.3.6.1.4.1. > 1.3.6.1.4.1. > 1.3.6.1.4.1. > 1.3.6.1.4.1. > 1.3.6.1.4.1. > 1.3.6.1.4.1. > 1.3.6.1.4.1. > 1.3.6.1.4.1. > 1.3.6.1.4.1. > 1.3.6.1.4.1. > 1.3.6.1.4.1. > 1.3.6.1.4.1. > 1.3.6.1.4.1. > 1.3.6.1.4.1. > 1.3.6.1.4.1. > 1.3.6.1.4.1. >	Source Type* Managedelement Key Instance Identifier Prefix Instance Identifier Creation Instance Identifier Varbind Old I.3.6.1.4.1.12345.1.1.1.2.0 Previous Net Finish Cancel Step 5 - Expedite	Selected 0 Total 1002 Ce Ce S Ce 15 Ce 15 S	ADMC ADAC ADAC ADAC ADAC ADAC	• • • • • • • • • • • • • • • • • • •
 ○ → 1.36.141. 	Step 6 - Pattern*	5	ADAC ADAC ADAC ADAC ADAC ADAC ADMC	~

- Step 8 Click 'Next' on Expedite Step.
- Step 9 Choose 'Product' as Scheme and 'Generic UVNE Trap Event Group Rules' as Group.

ajaja cisco	Cisco	Prime Netw	ork Hanna Hannah Denman La Mit Contractivita Dalateria		root.	Logout	About
-			Add Trap	x			
VNE Cu	stomizat	ion Builder	Step 1 - Event Definition*	V			
VNE Dri	vers	Modules	Step 2 - Subtype Definition*	s.			
Events			Step 3 - Subtype Identification*	J			
Cisco E	/ents	1	Step 4 - Association*	9			
Curles	1	rap	Step 5 - Expedite	×	Selected 0 Total 1002	😽 🕼 🎡	8.
Sysiog	/ Ed	t 🗙 Delete	s Step 6 - Pattern		L.	* *	8
Trap		Trap Oid				Nature	
Service	0,	.1.3.6.1.4.1.3	Device group determines which VNE drivers will be extended to support this events.		ce	ADMC	
	0,	.1.3.6.1.4.1.3	Please specify one or more groups to include this event in.		ce	ADAC	-
	0,	.1.3.6.1.4.1.3	Scheme Group	-	IS	ADMC	
	0,	.1.3.6.1.4.1.3	Product Generic UVNE Trap Event Group Rules	Delete	ce:	ADAC	
	0,	.1.3.6.1.4.1.3			IS	ADAC	
	0,	.1.3.6.1.4.1.3				ADAC	
	0,	.1.3.6.1.4.1.1	Add		IS	ADMC	
	01	.1.3.6.1.4.1.3				ADAC	
	0,	.1.3.6.1.4.1.3	Previous Next	Finish Cancel		ADAC	
	0,	.1.3.6.1.4.1.3				ADAC	
	0,	.1.3.6.1.4.1.3	Keguned			ADMC	
	0.	.1.3.6.1.4.1.3	and the second second second			ADMC	Y
	<					>	

Step 10 Click 'Finish'.

Γ

Step 11 Newly added trap oid appears.

			Home Network Di	scovery VNE	Customization Builder				
VNE Cus	tomizal	ion Builder							
VNE Driv	ers	Modules Pluggable Modules	s Events Export Customization	Import Customizatio	n				
onte									
aus									
Cisco Ev	ents							A (1)	
Syslog	₫т	rap					Selected 0 To	tal 1003 ⊮	4
	Ed	it XDelete 📴 Add Row 👰 Add I	From MIB 🏲 Modify Inbound Handling 🛛 Test E	ivent			Show All	*	
rap		Trap Oid	Name	Event Id	Inbound Handling	Туре	Category	Nature	
Service	01	.1.3.6.1.4.1.12345.0.1	KVM VM Status Traps	200000005	Parsed	User Defined	Other	ADAC	
	01	.1.3.6.1.4.1.36738.1.2.2.0.24	Link Capacity Threshold	14050048	Parsed	System Default	Quality of service	ADMC	
	01	.1.3.6.1.4.1.36738.1.2.2.0.23	Radio Resource Threshold Clear	14050047	Parsed	System Default	Quality of Service	ADAC	
	01	.1.3.6.1.4.1.36738.1.2.2.0.26	Radio DCA Frequency Jump	14050050	Parsed	System Default	Communications	ADMC	
	01	.1.3.6.1.4.1.36738.1.2.2.0.25	Link Capacity Threshold Clear	14050049	Parsed	System Default	Quality of service	ADAC	
	01	.1.3.6.1.4.1.36738.1.2.2.0.28	Radio DCA No Frequency Clear	14050052	Parsed	System Default	Communications	ADAC	
	01	.1.3.6.1.4.1.36738.2.1.0.12	Config Change Event	14050010	Parsed	System Default	Equipment	ADAC	
	01	.1.3.6.1.4.1.36738.1.2.2.0.27	Radio DCA No Frequency	14050051	Parsed	System Default	Communications	ADMC	
	01	.1.3.6.1.4.1.36738.2.1.0.11	System GPS Sync	14050009	Parsed	System Default	Equipment	ADAC	
	01	1.3.6.1.4.1.36738.1.2.2.0.30	Exceeds Hardware Temperature Clear	14050054	Parsed	System Default	Equipment	ADAC	
	01	.1.3.6.1.4.1.36738.2.1.0.14	PM File Upload Complete	14050012	Parsed	System Default	Equipment	ADAC	
	01	.1.3.6.1.4.1.36738.1.2.2.0.29	Exceeds Hardware Temperature	14050053	Parsed	System Default	Equipment	ADMC	
							and the second sec		ŝ

```
Step 12Generate VM Suspend traps:<br/>[root@clvs-cvg-kvm-06 ~]# virsh suspend cvg-vm07-lnx<br/>Domain cvg-vm07-lnx suspendedStep 13PN receives suspended traps as V2 Trap.
```

Event ID Time	Description	Location	Element Type	Alarm ID	Ticket ID Causing Event ID	Duplication Count	Reduction Count	
13572. * 04-Dec-18 12:54:43	paused	dvs-cvg-kvm-06: cvg-vm074nx	KVM Hypervisor	170009	170009	1	1	
13615 04-Dec-18 12:54:43	paused	dvs-cvg-kvm-06: cvg-vm074nx	KVM Hypervisor	170009	170009	1	1	
13486* 04-Dec-18 12:54:43	paused	dis-cig-kim-06: cig-im074nx	KVM Hypervisor	170009	170009	1	1	
13529 04-Dec-18 12:54:43	paused	dvs-cvg-kvm-06: cvg-vm07-kvx	KVM Hypervisor	170009	170009	1	1	
13400* 04-Dec-18 12:54:43	paused	cha-cvg-kvm-06: cvg-vm074nx	KVM Hypervisor	170009	170009	1	1	
13357* 04-Dec-18 12:54:43	paused	dva-cvg-kvm-06: cvg-vm07-kvx	KVM Hypervisor	170009	170009	1	1	
13314 04-Dec-18 12:54:43	paused	challong ikom -06: ovg vm07 ihox	KVM Hypervisor	170009	170009	1	1	
13443? 04-Dec-18 12:54:43	paused	dvs-cvg-kvm-06: cvg-vm07-kvx	KVM Hypervisor	170009	170009	1	1	
13271 04-Dec-18 12:51:56	running	chrs evg kvm-06: evg vm07-lnx	KVM Hypervisor	170008	170008	1	1	
13228 04-Dec-18 12:51:56	running	chrs-evg-kvm-06: evg-vm07-kvx	KVM Hypervisor	170007	170007	1	1	
131427 04-Dec-18 12:51:56	running	chis-cvg-kvm-06: cvg-vm07-kvx	KVM Hypervisor	170005	170005	1	1	
13185.7 04-Dec-18 12:51:56	running	dvs cvg kvm-06: cvg vm07 kva	KVM Hypervisor	170006	170006	1	1	
12970 04-Dec-18 12:51:56	running	dvs-cvg-kvm-b6: cvg-vm074nx	KVM Hypervisor	170001	170001	1	1	
13099 04-Dec-18 12:51:56	running	dvs-cvg-knm-06: cvg-vm07-knx	KSM Hypervisor	170004	170004	1	1	
13056 04-Dec-18 12:51:56	running	dvs-cvg-kvm-06: cvg-vm074nx	KVM Hypervisor	170003	170003	1	1	
13013? 04-Dec-18 12:51:56	running	dvs-cvg-kum-06: cvg-vm074na	KVM Hypervisor	170002	170002	1	1	

Adding Soft Properties for KVM Hypervisor

Cisco Prime Network enables user to add required soft properties for KVM Hypervisor. Prime Network has provision to display soft properties in both scalar (using snmp or Telnet/SSH) and table format (using snmp).

This feature can be used to enhance the Generic UVNE Model with device specific inventory.

Let us see examples for adding Soft Properties for KVM Hypervisor using above stated methods.

Scalar Type

This topic lists the steps to add soft properties in scalar format using snmp or Telnet/SSH.

Using SNMP

Let us consider host resource mibs *hrSystemNumUsers* and *hrSystemProcesses* as required scalar soft properties for KVM Hypervisor.

Step 1 Right click *Managed Element > Management > Soft Properties Management*.

dvs-cgv-kv	Inventory	1	Pal Now			
Physical	Pol Now					
	1 Attach Business Tag Config Mgmnt Diage Mgmnt		Element Na Communica	ame: stion State:	chvs-cqv-kvm-05 chvs-cqv-kvm-05 Device Reachable Deventional	*
	Tools	•	Vendor: Product:		Server	
	Topology		Element Ty	pe:	KVM Hypervisor	
	Properties		IP Address		chuseum-laum-05 cisco com	
	Management	 Command Build 	er Up Since:	inter.	13-Dec-18 15:23:31	
	VNE Tools	Soft Properties	Management Contact: Location:			
			Virtual Dev	ice:	false	
			Software V System De Sending Al	lension: scription: arms:	Linux chrs-cvg-kvm-05.cisco.com 2.6.32-431.el6x86_64 #1 SMP Sun Nov 10 22:19:54 EST 2013 x86_64 Linux chrs-cvg-kvm-05.cisco.com 2.6.32-431.el6x86_64 #1 SMP Sun Nov 10 22:19:54 EST 2013 x86_64 brue	Ŧ
	Dest F4		Correctal 1	Storage Device	Detais	
1	∰ <u>\$</u> ↓ ⊽ %	首号				
1.	111 M 1 111 14 1 1		***			

Step 2 Click New Element button.

Γ

Polling			
FUIIIIU	Enat	abled Command Line	Local
ty status	true	e .1.3.6.1.2.1.25.1.	. false
ty status	true	e .1.3.6.1.2.1.25.1.	.* false
status	true	e .1.3.6.1.2.1.25.2.	." false
t	y status status	y status tru status tru	y status true .1.3.6.1.2.1.25.1. status true .1.3.6.1.2.1.25.2.

Step 3 In *General* tab, enter *Name* and *Label*. Select '*property*' as Type and '*status*' as Polling Rate.

Name :	NumberofProcess
Label :	Number of Process
Description :	
Type :	Property 👻
Polling Rate :	status 👻
Enabled :	

Step 4 In Parsing Tab, select, use *SNMP get (OID.* Enter *OID for hrSystemProcesses,* and click *OK.*

General Parsing TCA Alarms
Use SNMP get(OID)
.1.3.6.1.2.1.25.1.6.0
Index Operation
Empty
Re-Order
Add Edit Delete Test
OK Cancel Debug

- **Step 5** Repeat Steps 2, 3 and 4 to add *hrSystemNumUsers* soft property.
- **Step 6** Click *Close*, if done with addition of all required soft properties.

Soft Properties Manager - clv	s-cgv-kvm-05				_ 🗆 ×
File Tools					
7 🖹 🖡 🧏 🐙 💽					
Properties Panel : dvs-cgv-kvr	n-05	•			
Element Properties					
Find :	Al 🗸 🐂 🔳 🜄				
	Tune	Polling	Epobled	Command Line	Local
Number of Process	Property	status	true	.1.3.6.1.2.1.25.1.6.0	false
Number of User Sessions	Property	status	true	.1.3.6.1.2.1.25.1.5.0	false
Storage Device Details	Table	status	true	.1.3.6.1.2.1.25.2.3.1	false
					Line 1 (1/3 Selected)
					Close
				Memory: 16%	Connected

Step 7 Close and re-open Inventory Window to see the added soft properties.

dvs-cgv-kvm-05 Logical Inventory	Pat Now		
Physical Enventory	Communication bilate: Investigation State: Vendor: Product:	Device Krachable Operational	
	Device Series: Element Type: IP Address:	Linux KVH Hypervisor KVH Hypervisor	
	System Name: Up Since: Contact: Location:	dvs- cvg- kvm 05.cisco.com 13-0ec-18 15:213:1	
	Virtual Device:	false	
	Software Version: System Description: Sending Alarmis	Limux chvis-cvg-kvm-05.cisco.com 2.6.32-431.el6.x86_64 #1 SHP Sun Nov 10 22:19:54 EST 2013 x86_64 Limux chvis-cvg-kvm 05.cisco.com 2.6.32-431.el6.x86_64 #1 SHP Sun Nov 10 22:19:54 EST 2013 x86_64 true	
	Tiumber of Process:	836	
evice Zeem C Best Fe		ordal j	
====================================			
History Events II Brainson Events	المراجبين المراجب	e na la la la secona de caso dans dans se	

Using Telnet/SSH

I

Prerequisites

To enable Telnet/SSH protocol for KVM Hypervisor Server, update the device avm registry with below configuration using runneg tool command and restart the VNE.

runRegTool.sh -gs localhost set 127.0.0.1 <DeviceAVM>/agents/da/<VNE Name>/ips/<VNEIP>/protocols/telnet/connection/class "com.sheer.net.protocols.telnet.SocketConnection"

```
runRegTool.sh -gs localhost set 127.0.0.1 <DeviceAVM>/agents/da/<VNE
Name>/ips/<VNEIP>/protocols/telnet/connection/explicitly-ask-for-pty "true"
```

```
runRegTool.sh -gs localhost add 127.0.0.1 <DeviceAVM>/agents/da/<VNE
Name>/ips/<VNEIP>/protocols/telnet/connection/transport
```

runRegTool.sh -gs localhost set 127.0.0.1 <DeviceAVM>/agents/da/<VNE Name>/ips/<VNEIP>/protocols/telnet/connection/transport/pty-support enable

```
runRegTool.sh -gs localhost set 127.0.0.1 <DeviceAVM>/agents/da/<VNE
Name>/ips/<VNEIP>/protocols/telnet/connection/transport/pty-type xterm
```

For instance, if vne is modelled under *avm666* with VNE name *-clvs-cvg-kvm-06* and device IP *-10.76.82.103*, then update avm666.xml file with the below commands:

```
runRegTool.sh -gs localhost set 127.0.0.1
avm666/agents/da/clvs-cvg-kvm-06/ips/10.76.82.103/protocols/telnet/connection/class
"com.sheer.net.protocols.telnet.SocketConnection"
runRegTool.sh -gs localhost set 127.0.0.1
avm666/agents/da/clvs-cvg-kvm-06/ips/10.76.82.103/protocols/telnet/connection/explicitly-a
sk-for-pty "true"
runRegTool.sh -gs localhost add 127.0.0.1
avm666/agents/da/clvs-cvg-kvm-06/ips/10.76.82.103/protocols/telnet/connection/transport
```

```
runRegTool.sh -gs localhost set 127.0.0.1
avm666/agents/da/clvs-cvg-kvm-06/ips/10.76.82.103/protocols/telnet/connection/transport/pt
y-support enable
```

```
runRegTool.sh -gs localhost set 127.0.0.1
avm666/agents/da/clvs-cvg-kvm-06/ips/10.76.82.103/protocols/telnet/connection/transport/pt
y-type xterm
```

After running the above commands, the corresponding registry should have the following entries:

Procedure

Let us consider *Libvirt Version Info* as required scalar soft property to be displayed for KVM Hypervisor using Telnet/SSH:

Step 1 Right-click Managed Element > Management > Soft Properties Management.

Step 2 Click *New Element* button.

Step 3 In General tab, enter Name and Label. Select 'property' as Type and 'System' as Polling Rate.

Name :	LibvirtVersionInfo
Label :	Libvirt Version Info
Description :	
Type :	Property 🔻
Polling Rate :	system 💌
Enabled :	

Step 4 In Parsing tab, select Use Telnet/SSH. Enter the Telnet command and click OK.

 Use Tr 	elnet/SSH
virab u	
VIISH-V	
Index	
an resource	Operation
0	Operation Header And Footer
0	Operation Header And Footer Line 0 (Size 1
0	Operation Header And Footer Line 0 (Size 1
0	Operation Header And Footer Line 0 (Size 1 Re-Order

Γ

Step 5 Click *Close*, if done with addition of all required soft properties.

Soft Properties Ma Tools 💌 🕞 🤰 🤹 🐙	nager - clvs-cv	/g-kvm-06 [1W]			_		_ 0 :
Properties Panel : Element Properties	dvs-cvg-kvm-06 (1W]	¥				
Label	Type Property	Polling system	Enabled	Command Line virsh -v	Local true		
						Line 1 (1 / 1 Se	lected)
				Memory:	13%	Connected	Close

Step 6 Close and re-open Inventory Window to see the added soft properties.

dvs-cvg-kvm-06 [1W]	C Post Now	
Physical Inventory	chos-cog-born 06 [1W] Element Name: chos-cog-born 06 Comunication State: Operational Emergingtion State: Operational	
	Vendor: Product: Server Device Server: Benerit Type: KVH Hypervisor Products: Products:	
	System Itame: clus-cug-kum-06 Up Sine: 11-Dec-18 1650:19 Contact: Locator:	
	VPtual Device: false Software Version: Linux clvs-cvg-lcvm: 06 2.6.32-431.cl6.x86_64 #1 5HP Sun Nov 10 22:19:54 EST 2013 x86_64 System Decorpton: Linux clvs-cvg-lcvm: 06 2.6.32-431.cl6.x86_64 #1 5HP Sun Nov 10 22:19:54 EST 2013 x86_64 Sending Alorma: true	
Device Zoom 🗱 Beat Fit	Libert Version Info: 0.1942 48 VHE Dataka 12 VHE Status	
nd: 11 約 文 字 再 10	Ports	

Table Type

This topic lists steps to add soft properties in table format using snmp.

Add 'Storage Device Details' Soft Properties for KVM Hypervisor

Step 1 Right click *Managed Element > Management > Soft Properties Management*.

Step 2 Click New Element button.

Step 3 In General tab, enter Name and Label. Select 'Table' as Type and 'status' as Polling Rate.

General Parsing	
Name :	StorageDeviceDetails
Label :	Storage Device Details
Description :	
Type :	Table 👻
Polling Rate :	status 💌
Enabled :	
	OK Cancel Debug

Step 4 In Parsing tab, select Use SNMP get (OID). Enter Parent OID. In this case, hrStorageEntry OID.

General Parsing	
Lise SNMP get(OID)	
O use renet/ssn	
.1.3.6.1.2.1.25.2.3.1	
Title OID	
	Empty
Re-Order	
Add Edit Delete	
	Debug
UK Cancel	Debug
J	I

Step 5 Click Add.

ſ

Step 6 Enter *Column Title* and sub oid as *Column Data*. In this case, Enter 'Name' as column title and '3' as Column Data. Click *OK*.

Column Title	Name	
Column Data	3	
	C3	

- **Step 7** Repeat Steps 5 and 6 to add required Storage Soft Properties.
- **Step 8** Click *OK*, if all the required soft properties added.

S Ose Shirle get(OI	D)
Use Telnet/SSH	
13612125231	
Title	OID
Name	3
Capacity	5
Allocation Units	4
	Line 0 (Size 3)
Ad	Line 0 (Size 3) Re-Order

Step 9 Close and Re-open Inventory Window to see the added Soft Properties.

thes.equi4sm-65 Logical Inventory Physical Inventory	C Pet New	C Fel line			
	Find :	目的マキ目	6		
	Name 🔁/	Capacity	Alocation Units		
	1	\$152240	4296		
	Inet	(05844	3024		
	/dev/shm	33049039	4096		
	/var/lb/lbvirt/inages/CVG-178	B-SAND1 264222170	4296		
	Cached memory	10008524	3024		
	Nensry buffers	264092112	1024		
	Physical memory	264392332	1024		
	Swap space	62914552	2024		
	Virtual menory	327306864	1024		
Device Zoon 🔀 Beal Fa	Corrent Constitution of the States			• Line 0 (See 9)	
	General Ports				

Add 'VM Details' Soft Properties for KVM Hypervisor

ſ

- **Step 1** Right Click on *Physical Inventory > Management > Soft Properties Management*.
- **Step 2** Click *New Element* button.
- **Step 3** In General tab, enter *Name* and *Label*. Select '*Table*' as Type and '*status*' as Polling Rate.
- **Step 4** In Parsing tab, select *Use SNMP get(OID)*. Enter Parent *OID*. In this case, *libvirtMIB OID*. Click *New Element* button.

Aud Solt Property	~
At least one parsing rule must be defined!	
General Parsing	
Use SNMP get(OID)	
Use Telnet/SSH	
	וור
Title OID	
Emoty	
Re-Order	-
Add Edit Delete	
OK Cancel Debug	
	I

Step 5 Add all the required VM Soft Properties using *Add* option. Click *OK*.

Use SNMP get(OID)	
Use Telnet/SSH		
1361411234511	1	
Title	OID	
VM Name	2	
VM State	3	
VM Cpu Count	4	
VM Memory Current	5	
VM Memory Limit	6	
		63
		Line 0 (Size 5
	Re-Order	
Add	Edit	Delete

Step 6 Close and Re-open Inventory Window to see the added VM Details Soft Properties.

dirscop-kom-05 Logial Enventory Physical Inventory	(Pak Naw						
	Chassis VH Details			1	440-4		
	Find :	腔 24 マキ 専号					
	VM Name 😌 /	VM State	VM Cpu Count	VM Memory Current	VM Memory Limit		
	cvg-vm05-lma	i.	20	98344	98344		
	cig-vm06-linx	I	20	98384	98384		
				93384			
incing Zoon 20 Rest Fe	_						
	<u> </u>						Line 0
	· .						
	•		2414412				
6)			24042				-

Applying Soft Properties to all KVM Hypervisor VNEs

Step 1 Right click added *Soft Properties > Hierarchy Manager*.

Soft Properties Mana e Tools E 💽 🔐 💃 💤 💽	ager - ch	vs-cvg-kvm-06 [1m]		_ 0
Properties Panel : [Element Properties	dvs-cvg-kvi	n-06 [1m] 2↓ ▽ 🔻 🐺 🀺	•	
Label 🔁 🛆	Туре	Polling	Enabled	Command Line
Number of Process	Property	status	true	.1.3.6.1.2.1.25.1
Number of User Sessi.	Property	status	true	.1.3.6.1.2.1.25.1
Storage Device Details	Table	status	true	.1.3.6.1.2.1.25.2.
4		Export Element Hierarchy Manager Show Only Selected Rows Show All Rows	18%	Close

Step 2 Copy the Existing Hierarchy using *Copy* option.

Γ

Step 3 Select the New Hierarchy Location for which the Soft Property needs to be applied. Paste using *Paste* Icon.

Hierarchy M Hierarchy M Hierarchy M The followin	anager ×
(Note: pleas before perfo	e wait for publish operation to be completed rming other tasks.)
Exist	VNE Hierarchy Location
	agentdefaults/da/imo/registrations/com.sheer.imo.IManagedElement/StorageDeviceDetails
	uvne/genericda/imo/registrations/com.sheer.imo.IManagedElement/StorageDeviceDetails
	uvne-category/genericda-default/default-scheme/software versions/default version/imo/registrations/com.sheer.imo.IManagedElement/Stora
	uvne-category/GenericUVNE/product/software versions/default version/imo/registrations/com.sheer.imo.IManagedElement/StorageDeviceDe
	uvne/GenericUVNE/product/software versions/default version/imo/registrations/com.sheer.imo.IManagedElement/StorageDeviceDetails
4	vcb-uvne/. 1.3.6.1.4.1.8072, 3.2.10/product/software versions/default version/imo/registrations/com.sheer.imo.IManagedElement/StorageDu
~	VNE.dvs-cvg-kvm-06
•	Line 7 (1 / 7 Selected)
	Close

- Step 4 Click Close.
- **Step 5** Restart all affected VNE'S for which the soft properties are applied.