🗩 通过SNMPv3修改系统时间

SNMP zhiliao_DIs4O5 2023-08-18 发表

组网及说明

本次实验使用MIB Browser_v8作为管理软件, 被管理设备MS4520 PC与设备之间直连

配置步骤

首先正常配置SNMPv3 (PC与交换机之间已经互通)

snmp-agent

snmp-agent local-engineid 800063A203002389296A08

snmp-agent sys-info version v3

snmp-agent group v3 zabbixgroup privacy read-view zabbix write-view zabbix

snmp-agent target-host trap address udp-domain 192.168.10.1 params securityname zabbix v3 priva cy

snmp-agent mib-view included zabbix iso

snmp-agent usm-user v3 zabbix zabbixgroup simple authentication-mode md5 123456 privacy-mode des56 123456

配置完成后,使用MIB Browser进行连接 (MIB Browser开局以及MIB库导入略)

SNMP Protocol Preference	es 🛛 🕹				
SNMP protocol version		SNMPv3 Security Par	ameters	×	
⊂ SNMPv1 ⊂ SN	MPv2c	User profile name	zabbix		
General	Get-Bulk settings	Security user name	zabbix		
Read community	Use Get-Bulk	Context name			
public _	0 Non repeaters	Conterrengine ID	#		
Set community	10 Max repetitions	□ JNMP port number	161	*	
private _	SNMPv3 security	Authentication protocol	HMAC-MD5		
Timeout [s] 5	User profile name	Privacy protocol	CBC-DES	✓ Change Password	
Retransmits 4	I zabbix	Do not localize Authe	entication and Privacy keys		
Port number 161 -	t number 161		🗖 Diffie-Hellman key exchange		
		Manager Random	#		
Add User	. <u>E</u> dit User <u>D</u> elete User			OK Cancel	
	OK Cancel				

如上图,首先添加用户,根据配置填入用户名、安全用户名以及加密/认证算法和对应的密码



之后点OK即可成功连接交换机SNMP

查询得知系统时间的OID为1.3.6.1.4.1.25506.2.3.1.1.1

Response binding: User profile name: zabbix	Prompt For OID - 192.168.10.2:hh3cSysLocalCloc	k ×
Context name: [zero/ength] Context engine [ID: 80.00.63.24.03.00.23.89.29.64.08 (hex) Security user name: zabbix Security engine [ID: 80.00.63.24.03.00.23.89.29.64.08 (hex)	Bemote SNMP agent 19216810.2	⊅ ∎ <u>G</u> et
Authentication protocol: HMAC MD5 Privacy protocol: CBC DES Security level: Authentication And Privacy Security model: USM	QID 1.3.6.1.4.1.25506.2.3.1.1.1	다. Get <u>N</u> ext
1: hh3c5ycl.coalClock.0 (octet string) 2019-1-1,322-47.1,+0.0 [07.E3.01.01.03.16.2F.01.28.00.00 (hex)] SNMF PHOMF FOR 010-FESTORES 51AF1 1: hh3c5ycl.coalCock (nouchinesce) no such instance ***** SNMP PROMPT FOR 0ID-RESPONSE END ****	✓ Log only responses ✓ Log response marker ← Reuse result OID	(2) Abort Close

通过OID得知节点名为hh3cSysLocalClock,使用Ctrl + F搜索,即可找到对应节点的位置

hh⊰cHroductid hh3cCommon ⊇hh3cFtm ≟hh3cUlMgt ⊉hh3cSystemMan ç=-; hh3cSystemManMlBObjects	Find Object In Mib Tree 查找内容(A) hh3cSysLocalClock		× 查找下一个(E)
hh3cSysClock hh3cSysLocalClock hh3cSysLocalClock hh3cSysLocalClockString hh3cSysLocalClockString hh3cSysLocalClockString	□ 全字匹配(W) □ 区分大小写(C)	方向 C 向上(U) ⓒ 向下(D)	取消
 hh3cSysClockProtocol hh3cSysClockProtocolSrcMdd hh3cSysClockProtocolSrcCon hh3cSysLocalClockString2 	text		

接下来开始修改时间,就像我们正常配置时一样,首先需要将Clock协议从默认的ntp改为none。修改 上图hh3cSysClockProtocol即可

	tinocoyscieck →	alClock	_
		Set - hh3cSysClockProtoco none(1)	$\langle $
			<u>_</u>
1			•
		Remote SNMP agent	
<u>}</u> :	L思修成之刖要把Clock协议成为none,修成的节点。		
	hh3cSvsLoc	OID to Set	=
		1.3.6.1.4.1.25506.2.3.1.1.4.1.0	1
			-
	Quero results	Value to Set	
		J 🔄 🗹 🖉 🕻	2
	***** SNMP QUERY STARTED ****	Syntax	=
	1: hh3c5ysLlockProtocol.0 (integer) htp(2)	Integer32 C Timeticks C Counter64	
	***** SNMP SET-RESPONSE START ****	OUInteger32 OIP address O Opaque	
	1: hh3cSysClockProtocol.0 (integer) none(1)	Counter32 COID CNsapaddr	
	SNMF SEI-RESPONSE END	C Gauge32 C Octets C Bits	
	-	@@@ 🤮 SNMPv3 Success.	-

ntp对应的value为2,改为none对应的值1

接着修改时间,这里有两个代表系统时间的节点:hh3cSysLocalClock和hh3cSysLocalClockString

我们最开始使用OID定位到的节点就是hh3cSysLocalClock,这个节点可以修改,但是格式要求为16进制,不太好操作

而hh3cSysLocalClockString是很明确的时间格式,修改起来很方便,所以这里使用hh3cSysLocalClockString

ystemMan	Set - hh3cSysLocalClockString.0	\times
3cSystemManMIBObjects		1
hh3cSysClock	No. 100 (1998)	2
hh3cSysLocalClock	Bemote SNMP agent	
- 💼 hh3cSysSummerTime	192 169 10 2	
hh3cSysLocalClockString	1132.100.10.2	
hh3cSysClockProtocolGroup hh3cSysClockProtocol hh3cSysClockProtocol hh3cSysClockProtocolSrcMdc hh3cSysClockProtocolSrcContext hh3cSysLocalClockString2	OID to Set	
	1.3.6.1.4.1.25506.2.3.1.1.3.0	7 🔲
	Value to Set	1
	2019-1-1T3:32:48.4Z	
hh3cSysCurrent	- Cumbru	
hh3cSysReload	Syntax	
	 O Integer32 O Timeticks O Counter 	64
	— C UInteger32 C IP address C Opaque	
	C Counter32 C OID C Nsapad	dr
	C Gauge32 C Octets C Bits	
	Current value retrie	ved suc

右击节点,点击Set。弹出窗口后点Value to Set 框最右边的感叹号,当前节点的格式就会被填充上去然后修改为我们想要的值,发送即可。(这里我修改为2023-08-18)

hh3c5ysClockProtocolS hh3c5ysClockProtocolS hh3c5ysClockProtocolS hh3c5ysLocalClockString2	s Set - hh3cSysLocalClockString.0	<
	emote SNMP agent	_
hh3cSysReload	92.168.10.2	Ł
Query results	DID to Set	
REGERN SNMP QUERY STARTED REGERN	1.3.6.1.4.1.25506.2.3.1.1.3.0]
1: hh3cSysLocalClockString.0 (octet string) 2023-8-18T3:36:7.8Z	Value to Set	
	2023-08-18T 3:36:1.52	7
	Syntax	
	C Integer32 C Timeticks C Counter64	
	C UInteger32 C IP address C Opaque	
	C Counter32 C OID C Nsapaddr	

Walk可以看到修改成功

以上就是使用MIB Browser + SNMPv3修改设备系统时间的方法