配置ISE 3.2为被动ID会话分配安全组标记

目录		
<u>先决条件</u>		
<u>要求</u>		
使用的组件		
<u>背景信息</u>		
<u>配置</u>		
<u>流程图</u>		
<u>配置</u>		
<u>验证</u>		
<u>ISE验证</u>		
<u>PxGrid用户验证</u>		
<u>TrustSec SXP对等体验证</u>		
<u>故障排除</u>		
<u>在ISE上启用调试</u>		
<u>日志片段</u>		

简介

本文档介绍如何通过ISE 3.2中的授权策略配置安全组标记(SGT)并将其分配到被动ID会话。

先决条件

要求

Cisco 建议您了解以下主题:

- 思科ISE 3.2
- 被动ID、TrustSec和PxGrid

使用的组件

本文档中的信息基于以下软件和硬件版本:

- 思科ISE 3.2
- FMC 7.0.1
- 运行16.12.1的WS-C3850-24P

本文档中的信息都是基于特定实验室环境中的设备编写的。本文档中使用的所有设备最初均采用原 始(默认)配置。如果您的网络处于活动状态,请确保您了解所有命令的潜在影响。

背景信息

思科身份服务引擎(ISE)3.2是支持此功能的最低版本。 本文档不介绍PassiveID、PxGrid和SXP配置 。有关详细信息,请参阅<u>管理员指南</u>。

在ISE 3.1或更早版本中,安全组标记(SGT)只能分配到Radius会话或主动身份验证(例如802.1x和 MAB)。使用ISE 3.2,我们可以为PassiveID会话配置授权策略,以便当身份服务引擎(ISE)从提供 程序(例如Active Directory域控制器(AD DC)WMI或AD代理)接收用户登录事件时,它根据用户 Active Directory(AD)组成员身份向PassiveID会话分配安全组标记(SGT)。PassiveID的IP-SGT映射 和AD组详细信息可以通过SGT交换协议(SXP)发布到TrustSec域和/或发布到Cisco Firepower管理 中心(FMC)和思科安全网络分析(Stealthwatch)等Platform Exchange Grid(pxGrid)用户。

配置

流程图



流程图

配置

启用授权流程:

导航至 Active Directory > Advanced Settings > PassiveID Settings 并查看 Authorization Flow 复选框,以便为 PassiveID登录用户配置授权策略。默认情况下该选项处于禁用状态。

~	PassiveID Settings
	The PassiveID settings that are configured in this section are applied to all the join points in Cisco ISE.
	History interval*
	Domain Controller event inactivity time*
	(monitored by Agent)
	Latency interval of events from agent*
	User session aging time*
	Authorization Flow (i)

启用授权流

◆ 注:要使此功能正常工作,请确保在部署中运行PassiveID、PxGrid和SXP服务。您可以在以下位置进行验证 Administration > System > Deployment.

策略集配置:

- 1. 为PassiveID创建单独的策略集(推荐)。
- 2. 对于Conditions,请使用属性 PassiveID-PassiveID_Provider 并选择提供商类型。

Policy	Sets					Reset	Reset	Policyset Hit	counts		Save
Ð	Status	Policy Set Name	Descriptio	on	Conditions	Allowed Protocols	Server	Sequence	Hits	Actions	View
Q	Search										
	0	PassiveID_Sessions	(ŧ	PassivelD-PassivelD_Provider EQUALS Agent	Default Network	Access	∞ ~+		ŝ	>
	0	Default	Default policy set			Default Network	Access			ŝ	>

策略集

- 3. 为步骤1中创建的策略集配置授权规则。
- 为每个规则创建一个条件,并根据AD组、用户名或两者使用PassivelD词典。
- 为每个规则分配一个安全组标记并保存配置。

0	PassiveID_S	ession	\$	۴	Passivel	D-PassiveID_Provider EQUALS Agent		1	Default Netwo	rk Access		<u>~</u> +	5
> Authenticati	ion Policy (1)												
> Authorizatio	on Policy - Lo	cal E	cceptions										
> Authorizatio	on Policy - Gl	obal E	xceptions										
Authorizatio	on Policy (3)												
						Results							
+ Status	s Rule Nam	ne	Conditions			Profiles		Security Grou	ps		Hits	Ac	tions
Q Searc													
0	Employees	R	PassiveID-PassiveID_Groups EQUALS Lfc_AD /Domain Users	D:Lfc.la	b/Users	PermitAccess ×	_~+	Employee	s			ł	ŝ
0	Domain Admins	æ	PassivelD-PassivelD_Groups EQUALS Lfc_AC /Domain Admins	D:Lfc.la	b/Users	Admin access ×	~+	Admin_Te	am			{	ŝ
0	Default					DenyAccess ×		Select fro	m list			ł	ŝ

授权策略



注:您可以使用 PassiveID_Username, PassiveID_Groups,或 PassiveID_Provider 属性以创建授权规则。

4.导航至 Work Centers > TrustSec > Settings > SXP Settings 启用 Publish SXP bindings on pxGrid 和 Add RADIUS and PassiveID Mappings into SXP IP SGT Mapping Table 与PxGrid用户共享PassiveID映射,并将它们包含在ISE上的SXP映射表中。

≡ Cisco	ISE						Work Centers	s · TrustSec	
Overview	Components	TrustSec Policy	Policy Sets	SXP	ACI	Troubleshoot	Reports	Settings	
General TrustSec So TrustSec Matrix Set	ettings ttings	SXP Settings							
Work Process Settings SXP Settings ACI Settings		🕑 Publish SXP bindings on pxGrid 🛃 Add Radius and PassivelD mappings into SXP IP SGT mapping table							
		Global Password	d						
		Global Password							
		This global password the device specific p	d will be overrider bassword	ו by					

SXP设置

验证

使用本部分可确认配置能否正常运行。

ISE验证

用户登录事件从提供商(例如Active Directory域控制器(AD DC)WMI或AD代理)发送到ISE后,继续检 查实时日志。导航至 Operations > Radius > Live Logs.

Ø	Seset Repeat Counts	1 Export To	~								
	Time	Status	1	Details	Repea	Identity	IP Address	Authentication Policy	Authorization Policy	Authorization Profiles	Security Group
×				~ ~			x IP Address 🗸		_		
	Sep 06, 2022 08:28:31.4	٠		6	•	smith	10.10.10.10		PassiveID_Sessions >> Employees	PermitAccess	Employees
	Sep 06, 2022 08:28:31.4			•			10.10.10.10	PassiveID_Sessions	PassiveID_Sessions >> Employees	PermitAccess	

Radius实时日志

点击"详细信息"(Details)列中的放大镜图标,以查看用户的详细报告,在此示例中为smith(域用户),如下所示。

Cisco ISE

Overview	
Event	5235 Authorize-Only succeeded
Username	smith
Endpoint Id	10.10.10.10 🖷
Endpoint Profile	
Authentication Policy	PassiveID_Sessions
Authorization Policy	PassiveID_Sessions >> Employees
Authorization Result	PermitAccess

Authentication Details

Source Timestamp	2022-09-06 20:28:31.393
Received Timestamp	2022-09-06 20:28:31.393
Policy Server	ise-3-2
Event	5236 Authorize-Only succeeded
Username	smith
Endpoint Id	10.10.10.10
Calling Station Id	10.10.10.10
IPv4 Address	10.10.10.10
Authorization Profile	PermitAccess

Other Attributes

ConfigVersionId	108
AuthorizationPolicyMatched	Employees
ISEPolicySetName	PassiveID_Sessions
AD-User-Resolved-Identities	smith@Lfc.lab
AD-User-Resolved-DNs	CN=smith,CN=Users,DC=Lfc,DC=lab
AD-User-DNS-Domain	Lfc.lab
AD-Groups-Names	Lfc.lab/Builtin/Administrators
AD-Groups-Names	Lfc.lab/Builtin/Remote Desktop Users
AD-Groups-Names	Lfc.lab/Builtin/Remote Management Users
AD-Groups-Names	Lfc.lab/Builtin/Users
AD-Groups-Names	Lfc.lab/Users/Denied RODC Password Replication Group
AD-Groups-Names	Lfc.lab/Users/Domain Test
AD-Groups-Names	Lfc.lab/Users/NAD Admins
AD-Groups-Names	Lfc.lab/Users/Domain Users
AD-User-NetBios-Name	Lfe
AD-User-SamAccount-Name	smith
AD-User-Qualified-Name	smith@Lfc.lab
AuthorizationSGTName	Employees
ProviderIpAddress	10.10.10.132
SessionId	cf0d2acd-0d3d-413b-b2fb-6860df3f0d84
provider	Agent
UseCase	PassiveIDAuthZOnly

Steps

15041	Evaluating Identity Policy
15013	Selected Identity Source - All_AD_Join_Points
24432	Looking up user in Active Directory - All_AD_Join_Points
24325	Resolving identity - Lfc\smith
24313	Search for matching accounts at join point - Lfc.lab
24315	Single matching account found in domain - Lfc.lab
24323	Identity resolution detected single matching account
24355	LDAP fetch succeeded - Lfc.lab
24416	User's Groups retrieval from Active Directory succeeded All_AD_Join_Points
22037	Authentication Passed
90506	Running Authorize Only Flow for Passive ID - Provider Agent
15049	Evaluating Policy Group
15008	Evaluating Service Selection Policy
15036	Evaluating Authorization Policy
90500	New Identity Manning

5236 Authorize-Only succeeded

被动ID	passiveid	跟踪	passiveid-*.log
PxGrid	pxgrid	跟踪	pxgrid-server.log
SXP	sxp	调试	sxp.log

≫ 注意:完成故障排除后,请记得重置调试,然后选择相关节点并单击 Reset to Default.

日志片段

1. ISE从提供商接收登录事件:

Passiveid-*.log文件:

2022-09-06 20:28:31,309 DEBUG [Grizzly-worker(27)][[]] com.cisco.idc.agent-probe- Received login event. Identity Mapping.probe = Agent , dc-host = /10.10.10.132 , Identity Mapping.server = ise-3-2 , event-operation-type = ADD ,

2022-09-06 20:28:31,309 DEBUG [Grizzly-worker(27)][[]] com.cisco.idc.agent-probe- Validating incoming loging event...

2022-09-06 20:28:31,309 DEBUG [Grizzly-worker(27)][[]] com.cisco.idc.agent-probe- Building login event to be published to session directory.

2022-09-06 20:28:31,309 DEBUG [Grizzly-worker(27)][[]] com.cisco.idc.agent-probe- retrieving user's additional information from Active Directory.

Passiveid-*.log文件

2. ISE根据配置的授权策略分配SGT,并将PassiveID用户的IP-SGT映射发布到PxGrid用户和 SXP对等体:

sxp.log文件:

2022-09-06 20:28:31,587 DEBUG [sxpservice-http-96443] cisco.ise.sxp.rest.SxpGlueRestAPI:27 - Adding session binding tag=4, ip=10.10.10.10, vns=[], vpns=[null] naslp=10.10.10.132

2022-09-06 20:28:31,587 DEBUG [sxpservice-http-96443] cisco.ise.sxp.rest.SxpGlueRestAPI:23 - session binding created for ip address : 10.10.10.10/32

2022-09-06 20:28:31,613 DEBUG [SxpNotification] cisco.cpm.sxp.engine.SxpEngine:23 - Adding 1 session bindings

2022-09-06 20:28:31,613 DEBUG [SxpNotificationSerializer-Thread] cisco.cpm.sxp.engine.SxpEngine:42 - Adding session binding RestSxpLocalBinding(tag=4, groupName=null, ipAddress=10.10.10.10/32, naslp=10.10.10.132, sessionId=cf0d2acd-0d3d-413b-b2fb-6860df3f0d84, peerSequence=null, sxpBindingOpType=ADD, sessionExpiryTimeInMillis=-1, apic=false, routable=true, vns=[DEFAULT_VN]) to VPNs [default]

sxp.log文件

pxgrid-server.log文件:

2022-09-06 20:28:31,693 TRACE [Grizzly(1)][[]] cpm.pxgrid.ws.client.WsEndpoint -::::- Send. session=[id=b0df936b-bfab-435f-80e6-aa836aa3b24c,client=~ise-fanout-ise-3-2,server=wss://ise-3-2.Lfc.lab:8910/pxgrid/ise/pubsub] frame=[command=SEND,headers=[content-length=1859, destination=/topic/distributed, from=~ise-fanout-ise-3-2, via=~ise-fanout-ise-3-2],content-len=1859] content=MESSAGE content-length:1/30
destination:/topic/com.cisco.ise.session
message-id:616
subscription:2
<pre>via:~ise-fanout-ise-3-2 {"sessions":[{"timestamp":"2022:09:06T20:28:31.41105:00","state":"AUTHENTICATED","userName":"smith","callingStationId":" 10.10.10.10","auditSessionId":"ddda40ec-e557-4457-81db-a36af7b7d4ec", "ipAddresses":["10.10.10.10"],"naslpAddress":"10.10.10.132" "ctsSecurityGroup":"Employees" "adNormalizedUser":"smith", "adUserDomainName":"Lfc.lab","adUserNetBiosName":"Lfc","adUserResolvedIdentities":"smith@Lfc.lab","selectedAuthzProfil es":["PermitAccess"]}],"sequence":13}</pre>
2022-09-06 20:28:31,673 TRACE [Grizzly(1)][[]] cpm.pxgrid.ws.client.WsEndpoint -:::::- Send. session=[id=b0df936b-bfab-435f-
frame=[command=SEND,headers=[content-length=308, destination=/topic/distributed, from=~ise-fanout-ise-3-2, via=~ise-fanout-ise-3-2],content-len=308] content=MESSAGE
destination:/tonic/com/cisco/ise/syn/hinding
message-id:612 subscription:2
via:~ise-fanout-ise-3-2
{"operation":"CREATE","binding":{"ipPrefix":"10.10.10.10/32","tag":4, source":"10.10.10.132",
"peerSequence":"10.10.10.135,10.10.10.132","vpn":"default"},"sequence":17}

pxgrid-server.log文件

关于此翻译

思科采用人工翻译与机器翻译相结合的方式将此文档翻译成不同语言,希望全球的用户都能通过各 自的语言得到支持性的内容。

请注意:即使是最好的机器翻译,其准确度也不及专业翻译人员的水平。

Cisco Systems, Inc. 对于翻译的准确性不承担任何责任,并建议您总是参考英文原始文档(已提供 链接)。