在托管交换机上绑定入口或出口访问控制列表 (ACL)

目标

访问控制列表(ACL)是用于提高安全性的网络流量过滤器和相关操作的列表。它阻止或允许用 户访问特定资源。ACL包含允许或拒绝访问网络设备的主机。

ACL不仅可应用于入口,也可应用于出口接口。入口(入站)和出口(出站)ACL的用途是指 定允许进出网络设备的网络流量类型。此功能允许管理员过滤网络中到互联网或组织防火墙的 流量。

本文提供有关如何在交换机上配置和绑定入口或出口ACL的说明。

适用设备

- Sx350 系列
- SG350X 系列
- Sx550X 系列

软件版本

• 2.2.0.66

配置入口或出口ACL

重要信息:确保在交换机上配置了ACL和访问控制条目(ACE)。要配置基于IPv4的ACL和 ACE,请单击<u>此处</u>获取说明。对于基于IPv6的,请单击<u>此处</u>。要配置基于MAC的ACL和 ACE,请单击<u>此处</u>。

在接口上配置入口ACL

步骤1.登录基于Web的实用程序,然后选择Access Control > ACL Binding(Port)。

注意:在此场景中,使用SG350-28MP交换机。



步骤2.选中要应用ACL的接口旁的复选框,然后单击Edit。

| ACL Binding Table | | | | | | | |
|-------------------|--|-----------|-----------|----------|----------|--|--|
| Filte | Filter: Interface Type equals to Port ▼ Go | | | | | | |
| | Entry No. | Interface | Input ACL | | | | |
| | | | MAC ACL | IPv4 ACL | IPv6 ACI | | |
| | 1 | GE1 | | | | | |
| | 2 | GE2 | | | | | |
| | 3 | GE3 | | | | | |
| | 4 | GE4 | | | | | |
| | 5 | GE5 | | | | | |
| | 6 | GE6 | | | | | |
| | 7 | GE7 | | | | | |
| | 8 | GE8 | | | | | |
| | 9 | GE9 | | | | | |
| | 10 | GE10 | | | | | |
| | 11 | GE11 | | | | | |
| | 12 | GE12 | | | | | |
| | 13 | GE13 | | | | | |
| | 14 | GE14 | | | | | |
| | 15 | GE15 | | | | | |
| | 16 | GE16 | | | | | |
| | 17 | GE17 | | | | | |
| | 18 | GE18 | | | | | |
| | 19 | GE19 | | | | | |
| | 20 | GE20 | | | | | |
| | 21 | GE21 | | | | | |
| | 22 | GE22 | | | | | |
| | 23 | GE23 | | | | | |
| | 24 | GE24 | | | | | |
| | 25 | GE25 | | | | | |
| | 26 | GE26 | | | | | |
| | 27 | GE27 | | | | | |
| | 28 | GE28 | | | | | |
| | Copy Sett | ings | Edit | | lear | | |

注意:在本例中,选择基于MAC的ACL。

| Interface: | ● Port GE5 ▼ ○ LAG 1 ▼ |
|-----------------|--|
| Input ACL | |
| IAC-Based ACL: | ACL1 V |
| IPv4-Based ACL: | T |
| IPv6-Based ACL: | T |
| Default Action: | Deny Any Permit Any |
| Output ACL | |
| MAC-Based ACL: | ACL1 V |
| IPv4-Based ACL: | T |
| IPv6-Based ACL: | T |
| Default Action: | Deny Any Permit Any |
| Apply Close | se |

注意:如果要绑定基于IPv4或IPv6的ACL,请点击相应选择。

步骤4.从相应的下拉列表中选择ACL。

注意:在本例中,选择预配置的基于MAC的ACL ACL1。

| Interface: | ● Port GE5 ▼ ○ LAG 1 ▼ |
|-----------------|--|
| Input ACL | |
| MAC-Based ACL: | ACL1 V |
| IPv4-Based ACL: | Ψ. |
| IPv6-Based ACL: | w. |
| Default Action: | Deny Any Permit Any |
| Output ACL | |
| MAC-Based ACL: | ACL1 V |
| IPv4-Based ACL: | Ŧ |
| IPv6-Based ACL: | Ŧ |
| Default Action: | Deny Any Permit Any |
| Apply Clo | se |

步骤5.点击Default Action单选按钮。

| Interface: | ● Port GE5 ▼ ○ LAG 1 ▼ |
|-----------------|--|
| Input ACL | |
| MAC-Based ACL: | ACL1 V |
| IPv4-Based ACL: | W |
| IPv6-Based ACL: | v |
| Default Action: | Deny Any Permit Any |
| Output ACL | |
| MAC-Based ACL: | ACL1 V |
| IPv4-Based ACL: | w. |
| IPv6-Based ACL: | V |
| Default Action: | Deny Any Permit Any |
| Apply Clo | se |

选项有:

- Deny Any 交换机丢弃不符合ACL所需条件的数据包。
- Permit Any 交换机转发符合ACL所需条件的数据包。

步骤6.单击"应用"以保存对运行配置文件所做的更改,然后单击"关闭"。

步骤7. ACL绑定表应显示所选接口上配置的ACL。单击Save更新启动配置文件。

| P 2 | P 28-Port Gigabit PoE Managed Switch | | | | | | | | |
|-------|---|-----------|-----------|----------|----------|----------------|-----------|--|--|
| AC | ACL Binding Table | | | | | | | | |
| Filte | Filter: Interface Type equals to Port Go | | | | | | | | |
| | Entry No. | Interface | Input ACL | | | | Output AC | | |
| | | | MAC ACL | IPv4 ACL | IPv6 ACL | Default Action | MAC ACL | | |
| | 1 | GE1 | | | | | | | |
| | 2 | GE2 | | | | | | | |
| | 3 | GE3 | | | | | | | |
| | 4 | GE4 | | | | | | | |
| | 5 | GE5 | ACL1 | | | Deny Any | | | |
| | 6 | GE6 | | | | | | | |
| | 7 | GE7 | | | | | | | |
| | 8 | GE8 | | | | | | | |

在接口上配置出口ACL

重要信息:在继续执行这些步骤之前,请确保已在交换机上创建基于MAC的ACL和访问控制 条目(ACE)。有关详细说明,请点击此处。

步骤1.在基于Web的实用程序中,选择Access Control > ACL Binding(Port)。

注意:在此场景中,使用SG350-28MP交换机。



步骤2.选中要应用ACL的接口旁的复选框,然后单击Edit。

注意:在本例中,选择GE6。

| ACL Binding Table | | | | | | | | |
|-------------------|---|-----------|-----------|----------|----------|--|--|--|
| Filte | Filter: Interface Type equals to Port Go | | | | | | | |
| | Entry No. | Interface | Input ACL | | | | | |
| | | | MAC ACL | IPv4 ACL | IPv6 ACL | | | |
| | 1 | GE1 | | | | | | |
| | 2 | GE2 | | | | | | |
| | 3 | GE3 | | | | | | |
| | 4 | GE4 | | | | | | |
| | 5 | GE5 | _ | | | | | |
| | 6 | GE6 | | | | | | |
| | 7 | GE7 | | | | | | |
| | 8 | GE8 | | | | | | |
| | 9 | GE9 | | | | | | |
| | 10 | GE10 | | | | | | |
| | 11 | GE11 | | | | | | |
| | 12 | GE12 | | | | | | |
| | 13 | GE13 | | | | | | |
| | 14 | GE14 | | | | | | |
| | 15 | GE15 | | | | | | |
| | 16 | GE16 | | | | | | |
| | 17 | GE17 | | | | | | |
| | 18 | GE18 | | | | | | |
| | 19 | GE19 | | | | | | |
| | 20 | GE20 | | | | | | |
| | 21 | GE21 | | | | | | |
| | 22 | GE22 | | | | | | |
| | 23 | GE23 | | | | | | |
| | 24 | GE24 | | | | | | |
| | 25 | GE25 | | | | | | |
| | 26 | GE26 | | | | | | |
| | 27 | GE27 | | | | | | |
| | 28 | GE28 | | | | | | |
| | Copy Sett | ings | Edit | | Clear | | | |

注意:在本例中,选择基于MAC的ACL。

| Interface: | ● Port GE5 ▼ ○ LAG 1 ▼ |
|-----------------|--|
| Input ACL | |
| MAC-Based ACL: | ACL1 V |
| IPv4-Based ACL: | V |
| IPv6-Based ACL: | V |
| Default Action: | Deny AnyPermit Any |
| Output ACL | |
| MAC-Based ACL: | ACL2 V |
| IPv4-Based ACL: | V |
| IPv6-Based ACL: | V |
| Default Action: | Deny Any Permit Any |
| Apply Clos | se |

注意:如果要绑定基于IPv4或IPv6的ACL,请点击相应选择。

步骤4.从基于MAC的ACL下拉列表中选择ACL。

注意:在本例中,选择预配置的基于MAC的ACL ACL2。

| Interface: | ● Port GE6 ▼ ○ LAG 1 ▼ |
|-----------------|--|
| Input ACL | |
| MAC-Based ACL: | ACL1 * |
| IPv4-Based ACL: | w. |
| Default Action: | Deny Any Permit Any |
| Output ACL | |
| MAC-Based ACL | ACL2 V |
| IPv4-Based ACL: | Ŧ |
| Default Action: | Deny Any Permit Any |
| Apply Clos | e |

步骤5.点击Default Action单选按钮。

| Interface: | ● Port GE6 ▼ ○ LAG 1 ▼ |
|--------------------------------|--|
| Input ACL | |
| MAC-Based ACL: IPv4-Based ACL: | ACL1 V |
| Default Action: | Deny Any Permit Any |
| Output ACL | |
| MAC-Based ACL: | ACL2 V |
| IPv4-Based ACL: | T. |
| Default Action: | Deny Any Permit Any |
| Apply Clo | se |

选项有:

- Deny Any 交换机丢弃不符合ACL所需条件的数据包。
- Permit Any 交换机转发符合ACL所需条件的数据包。

步骤6.单击"应用"以保存对运行配置文件所做的更改,然后单击"关闭"。

步骤7. ACL绑定表应显示所选接口上配置的ACL。单击Save更新启动配置文件。

| | | | | | Save | cisco | Language | English | • | |
|---------------|--|------------|----------|----------|----------------|---------|----------|----------|----------------|--|
| ort (| Gigabit | PoE M | lanage | d Swite | h | | | | | |
| ding | ding (Port) | | | | | | | | | |
| bou iction | bound with either a policy or an ACL, but not both. ction is to discard (Deny Any) all the packets that do not meet the rules in an ACL. You can override the default ACL to forward those packets by configuring Permit Any on the desired ports. | | | | | | | | | |
| ng Ta | ble | | | | | | | | | |
| rface | Type equal | sto Port 🔻 | Go | | | | | | | |
| No. | Interface | Input ACL | | | Output ACL | | | | | |
| | | MAC ACL | IPv4 ACL | IPv6 ACL | Default Action | MAC ACL | IPv4 ACL | IPv6 ACL | Default Action | |
| 1 | GE1 | | | | | | | | | |
| 2 | GE2 | | | | | | | | | |
| 3 | GE3 | | | | | | | | | |
| 4 | GE4 | | | | | | | | | |
| 5 | GE5 | ACL1 | | | Deny Any | | | | | |
| 6 | GE6 | | | | | ACL2 | | | Permit Any | |
| 7 | GE7 | | | | | | | | | |
| 8 | GE8 | | | | | | | | | |

注意:如果您希望同时配置出口ACL和入口ACL,可以通过配置输入ACL和输出ACL区域来配置。

现在,您应该已在交换机的接口上配置出口ACL和入口ACL。