如何使用 SNMP 跟踪电源中断时间或冗余电源变化状态

目录

简介

当设备包含冗余电源时，您能选择安排设备形成陷阱，当一个电源中断或更改状态时。陷阱在两路由器存在和交换机，并且他们通知状态变换或失败和点对更多信息至于更改的本质。当一个冗余电源中断或使用简单网络管理协议(SNMP)时的更改状态本文解释如何跟踪。

先决条件

要求

本文档没有任何特定的要求。

使用的组件

本文档中的信息为有冗余电源的Cisco路由器和交换机是有效。

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。如果您使用的是真实网络，请确保您已经了解所有命令的潜在影响。

规则

有关文档规则的详细信息，请参阅 Cisco 技术提示规则。

跟踪程序

对于路由器，请注意从CISCO-ENVMON-MIB MIB的ciscoEnvMonRedundantSupplyNotification陷阱。变量ciscoEnvMonSupplyDescr和ciscoEnvMonSupplyState在更改的本质提供细节。您必须配置**snmp-server enable traps envmon命令**启用陷阱。

```
.1.3.6.1.4.1.9.9.13.3.0.5
ciscoEnvMonRedundantSupplyNotification OBJECT-TYPE
-- FROM CISCO-ENVMON-MIB TRAP VARBINDS { ciscoEnvMonSupplyStatusDescr, ciscoEnvMonSupplyState }
DESCRIPTION "A ciscoEnvMonRedundantSupplyNotification is sent if the redundant power supply
   (where extant) fails. Since such a
notification is usually generated before the shutdown state is reached, it can convey more data
   and has a better chance of being sent than does the
ciscoEnvMonShutdownNotification."
::= { iso(1) org(3) dod(6) internet(1) private(4) enterprises(1) cisco(9) ciscoMgmt(9)
ciscoEnvMonMIB(13)
ciscoEnvMonMIBNotificationPrefix(3)ciscoEnvMonMIBNotifications(0) 5 }

.1.3.6.1.4.1.9.9.13.1.5.1.2
ciscoEnvMonSupplyStatusDescr OBJECT-TYPE
-- FROM CISCO-ENVMON-MIB
-- TEXTUAL CONVENTION DisplayString
SYNTAX OCTET STRING (0..32) DISPLAY-HINT "255a"
MAX-ACCESS read-only
STATUS Current
DESCRIPTION "Textual description of the power supply being instrumented. This description is a
   short textual label, suitable as a
human-sensible identification for the rest of the information in the entry."
::= { ISO(1) org(3) DOD(6) Internet(1) private(4) enterprises(1) cisco(9) ciscoMgmt(9)
   ciscoEnvMonMIB(13) ciscoEnvMonObjects(1)
ciscoEnvMonSupplyStatusTable(5) ciscoEnvMonSupplyStatusEntry(1) 2 }

.1.3.6.1.4.1.9.9.13.1.5.1.3 ciscoEnvMonSupplyState OBJECT-TYPE
-- FROM CISCO-ENVMON-MIB
-- TEXTUAL CONVENTION CiscoEnvMonState
SYNTAX Integer { normal(1), warning(2), critical(3), shutdown(4), notPresent(5) }
MAX-ACCESS read-only
STATUS Current
DESCRIPTION "The current state of the power supply being instrumented."
::= { ISO(1) org(3) DOD(6) Internet(1) private(4) enterprises(1) cisco(9) ciscoMgmt(9)
   ciscoEnvMonMIB(13) ciscoEnvMonObjects(1)
ciscoEnvMonSupplyStatusTable(5) ciscoEnvMonSupplyStatusEntry(1) 3 }
```

对于交换机，请注意SNMP陷阱chassisAlarmOn。变量chassisTempAlarm、chassisMinorAlarm和chassisMajorAlarm用陷阱包括并且为确定进展中特定机箱的报警是必要的。所有这些陷阱是从CISCO-STACK-MIB。

```
.1.3.6.1.4.1.9.5.0.5 chassisAlarmOn OBJECT-TYPE
-- FROM CISCO-STACK-MIB TRAP VARBINDS { chassisTempAlarm, chassisMinorAlarm, chassisMajorAlarm }
DESCRIPTION "A chassisAlarmOn trap signifies that the agent entity has detected the
chassisTempAlarm,
   chassisMinorAlarm, or
chassisMajorAlarm object in this MIB has transitioned to the on(2) state. The generation of this
trap
   can be controlled by the
sysEnableChassisTraps object in this MIB."
::= { ISO(1) org(3) DOD(6) Internet(1) private(4) enterprises(1) cisco(9) workgroup(5)
   ciscoStackNotificationsPrefix(0) 5 }

.1.3.6.1.4.1.9.5.1.2.13 chassisTempAlarm OBJECT-TYPE
-- FROM CISCO-STACK-MIB SYNTAX Integer { off(1), on(2), critical(3) }
MAX-ACCESS read-only
STATUS Current
DESCRIPTION "The chassis temperature alarm status."
::= { ISO(1) org(3) DOD(6) Internet(1) private(4) enterprises(1) cisco(9) workgroup(5)
ciscoStackMIB(1)
   chassisGrp(2) 13 }
```

```
.1.3.6.1.4.1.9.5.1.2.11 chassisMinorAlarm OBJECT-TYPE
-- FROM CISCO-STACK-MIB SYNTAX Integer { off(1), on(2) }
MAX-ACCESS read-only
STATUS Current
DESCRIPTION "The chassis minor alarm status."
::= { ISO(1) org(3) DOD(6) Internet(1) private(4) enterprises(1) cisco(9) workgroup(5)
ciscoStackMIB(1)
   chassisGrp(2) 11 }

.1.3.6.1.4.1.9.5.1.2.12 chassisMajorAlarm OBJECT-TYPE
-- FROM CISCO-STACK-MIB
SYNTAX Integer { off(1), on(2) }
MAX-ACCESS read-only
STATUS Current
DESCRIPTION "The chassis major alarm status."
::= { ISO(1) org(3) DOD(6) Internet(1) private(4) enterprises(1) cisco(9) workgroup(5)
ciscoStackMIB(1)
   chassisGrp(2) 12 }
```

相关信息

- 简单网络管理协议支持资源
- 技术支持 - Cisco Systems