

Esempio di gestione dell'accesso convergente (5760/3850/3650) tramite Prime Infrastructure con configurazione SNMP v2 e v3

Sommario

[Introduzione](#)

[Prerequisiti](#)

[Requisiti](#)

[Componenti usati](#)

[Configurazione \(Prime Infrastructure 2.2 e versioni precedenti\)](#)

[Configurazione SNMP v2 su uno switch](#)

[GUI](#)

[CLI](#)

[Configurazione di SNMP v3 su uno switch](#)

[CLI](#)

[Prime Infrastructure](#)

[SNMP v2](#)

[SNMP v3](#)

[Configurazione \(Prime Infrastructure 3.x e versioni successive\)](#)

[Configurazione SNMP su uno switch \(Denali 16.x\)](#)

[GUI](#)

[Configurazione GUI SNMP v2 su uno switch \(Denali 16.x\)](#)

[Configurazione CLI SNMP v2 su uno switch \(Denali 16.x\)](#)

[Configurazione GUI SNMP v3 su uno switch \(Denali 16.x\)](#)

[Configurazione CLI SNMP v3 su uno switch \(Denali 16.x\)](#)

[Prime Infrastructure](#)

[SNMP v2](#)

[SNMP v3](#)

[Verifica](#)

[Configurazione di SNMP v2 su uno switch \(Cisco IOS-XE\)](#)

[Configurazione di SNMP v3 su uno switch \(Cisco IOS-XE\)](#)

[Prime Infrastructure \(2.2 e versioni precedenti\)](#)

[Configurazione SNMP v2 su uno switch \(Denali 16.x\)](#)

[Configurazione SNMP v3 su uno switch \(Denali 16.x\)](#)

[Prime Infrastructure](#)

[Risoluzione dei problemi](#)

[Da accesso convergente](#)

[Prime Infrastructure](#)

Introduzione

Questo documento descrive come aggiungere l'accesso convergente (5760/3850/3650) a Prime Infrastructure con Simple Network Management Protocol (SNMP) v2 e v3.

Prerequisiti

Requisiti

Cisco raccomanda la conoscenza dei seguenti argomenti:

- Accesso convergente (5760/3850/3650) Cisco IOS[®] versione 3.3.x e successive o Denali 16.x
- Prime Infrastructure versione 2.0 o successiva

Componenti usati

Il documento può essere consultato per tutte le versioni software o hardware.

Le informazioni discusse in questo documento fanno riferimento a dispositivi usati in uno specifico ambiente di emulazione. Su tutti i dispositivi menzionati nel documento la configurazione è stata ripristinata ai valori predefiniti. Se la rete è operativa, valutare attentamente eventuali conseguenze derivanti dall'uso dei comandi.

Configurazione (Prime Infrastructure 2.2 e versioni precedenti)

Configurazione SNMP v2 su uno switch

GUI

Scegliere **Configurazione > Controller > Gestione > SNMP > Community > Nuovo**.

CISCO Wireless Controller Home Monitor Configuration Administration Help

Controller

- System
- Internal DHCP Server
- Management
 - Protocol Management
 - SNMP
 - General
 - Communities
 - SNMP V3 Users
 - SNMP Host
 - HTTP-HTTPS
 - Technical Support
 - System Resources Information
 - Controller crash
 - CoreDump
 - AP crash
- Mobility Management
 - Mobility Global Config
 - Mobility Peer
 - Switch Peer Group
- mDNS

SNMP v1/v2c Community

New Remove

Community Name	Status
No data available	

CISCO Wireless Controller Home Monitor Configuration Administration Help

Controller

- System
- Internal DHCP Server
- Management
 - Protocol Management
 - SNMP
 - General
 - Communities
 - SNMP V3 Users
 - SNMP Host
 - HTTP-HTTPS
 - Technical Support
 - System Resources Information
 - Controller crash
 - CoreDump
 - AP crash
- Mobility Management
 - Mobility Global Config
 - Mobility Peer
 - Switch Peer Group
- mDNS

SNMP v1/v2c Community

SNMP v1/v2c Community > New

Community Name

Access Mode

CLI

Immettere i seguenti comandi:

```
conf t
```

```
snmp-server community V2Community RW
```

Configurazione di SNMP v3 su uno switch

CLI

Immettere i seguenti comandi:

```
conf t
```

```
snmp-server group V3Group v3 auth read V3Read write V3Write
```

```
snmp-server user V3User V3Group v3 auth sha Password1 priv aes 128 Password1
```

```
snmp-server view V3Read iso included
```

```
snmp-server view V3Write iso included
```

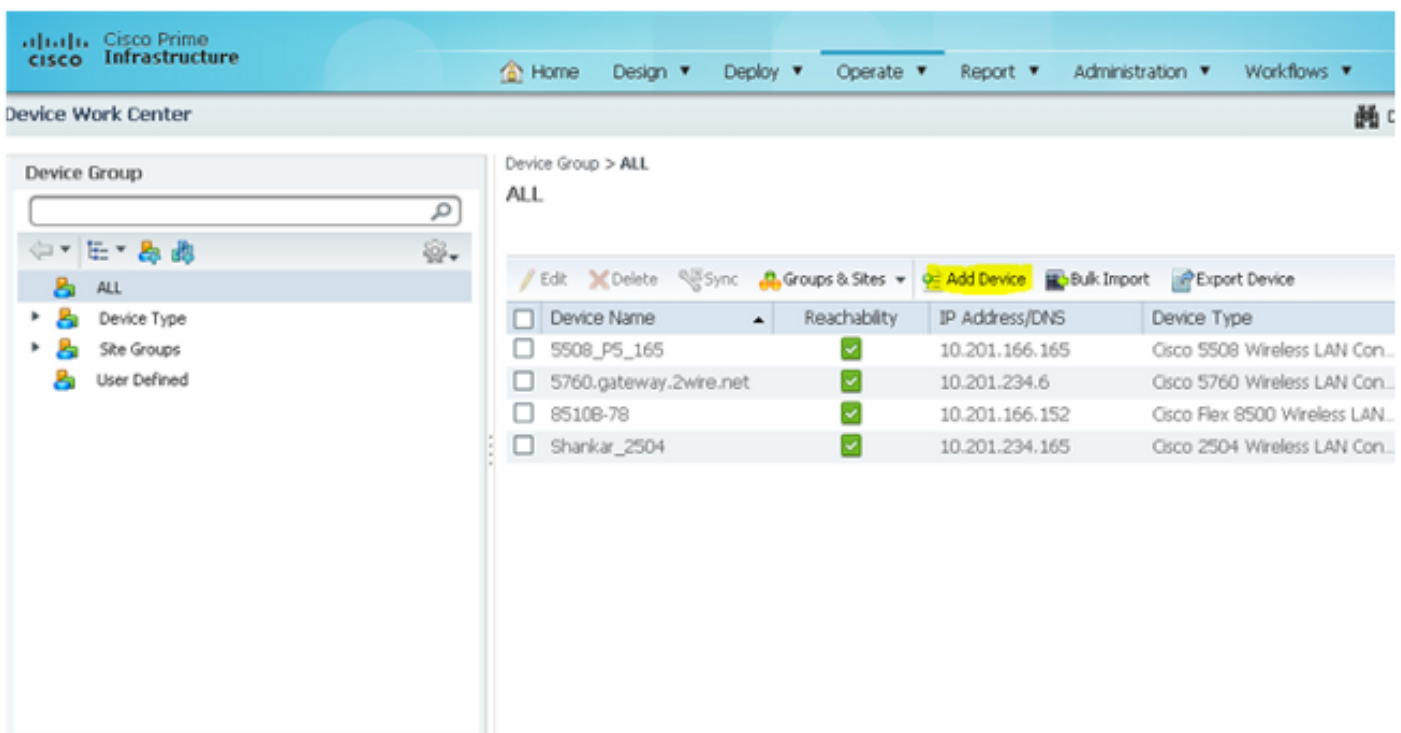
```
snmp-server host 10.201.234.170 version 3 auth V3User
```

```
snmp-server enable traps
```

Prime Infrastructure

Nota: Utilizzare la vista Ciclo di vita.

Scegliete **Operazione > Area di lavoro dispositivi > Aggiungi dispositivo.**



The screenshot displays the Cisco Prime Infrastructure Device Work Center interface. The top navigation bar includes 'Home', 'Design', 'Deploy', 'Operate', 'Report', 'Administration', and 'Workflows'. The main content area shows the 'Device Group > ALL' view with a table of devices. The table has columns for 'Device Name', 'Reachability', 'IP Address/DNS', and 'Device Type'. The 'Add Device' button is highlighted in yellow.

Device Name	Reachability	IP Address/DNS	Device Type
5508_PS_165	✓	10.201.166.165	Cisco 5508 Wireless LAN Con...
5760.gateway.2wire.net	✓	10.201.234.6	Cisco 5760 Wireless LAN Con...
85108-78	✓	10.201.166.152	Cisco Flex 8500 Wireless LAN...
Shankar_2504	✓	10.201.234.165	Cisco 2504 Wireless LAN Con...

SNMP v2

Add Device

▼ General Parameters *

IP Address

DNS Name

▼ SNMP Parameters

Version

* Retries

* Timeout (secs)

* Community ?

* Confirm Community

▼ Telnet/SSH Parameters

Protocol

* Timeout (secs)

Username

Password

Confirm Password

Enable Password

Confirm Enable Password

SNMP v3

Add Device X

▼ **General Parameters ***

IP Address

DNS Name

▼ **SNMP Parameters**

Version

* Retries

* Timeout (secs)

Username

Auth. Type

Auth. Password

Privacy Type

Privacy Password

▼ **Telnet/SSH Parameters**

Protocol

* Timeout (secs)

Username

Password

Nota: Se non si specificano i parametri Telnet/Secure Shell, Prime Infrastructure non raccoglierà l'inventario dallo switch.

Configurazione (Prime Infrastructure 3.x e versioni successive)

Configurazione SNMP su uno switch (Denali 16.x)

GUI

Scegliere **Impostazioni generali > Gestione > SNMP**.

Abilitare **SNMP**.

The screenshot shows the Cisco Cat3k Switch GUI for Denali 16.1.2. The left sidebar contains navigation options: Monitoring, Configure, Services, General Settings, Commands, DHCP Scopes, License, Logs, Management, HTTP/HTTPS, **SNMP**, NTP, System, and UserAdministration. The main content area is titled 'SNMP' and has four tabs: General, Communities, SNMP V3 Users, and SNMP Host. The 'General' tab is active, displaying the following configuration:

- SNMP Status: **Enable** (toggle switch)
- System Location:
- System Contact:
- SNMP Global Trap: **Enable** (toggle switch)
- SNMP Logging: Disabled

Buttons for 'Apply' and 'Cancel' are visible in the top right and bottom right corners.

Configurazione GUI SNMP v2 su uno switch (Denali 16.x)

The screenshot shows the Cisco Cat3k Switch GUI for Denali 16.1.2. The left sidebar is the same as in the previous image. The main content area is titled 'SNMP' and has four tabs: General, **Communities**, SNMP V3 Users, and SNMP Host. The 'Communities' tab is active, displaying a table of SNMP communities:

Community Name	Access Mode
v2community	Read/Write
	Read Only

Below the table, there are 'Add' and 'Delete' buttons. The bottom right corner has a 'Cancel' button. The page also shows '1 - 2 of 2 items' and '10 items per page'.

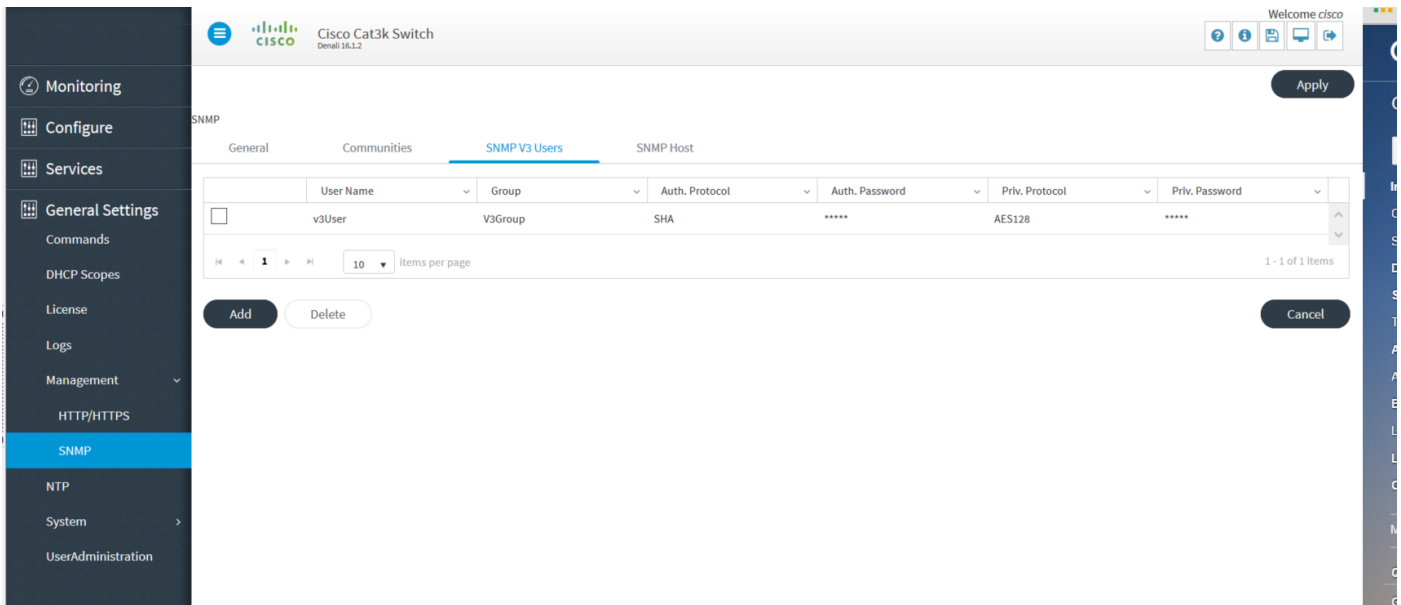
Configurazione CLI SNMP v2 su uno switch (Denali 16.x)

Immettere i seguenti comandi:

```
conf t
```

```
snmp-server community V2Community RW
```

Configurazione GUI SNMP v3 su uno switch (Denali 16.x)



Configurazione CLI SNMP v3 su uno switch (Denali 16.x)

Immettere i seguenti comandi:

```
conf t
```

```
snmp-server user V3user V3Group v3 auth sha Password1 priv aes 128 Password1
```

```
snmp-server view V3Read iso included
```

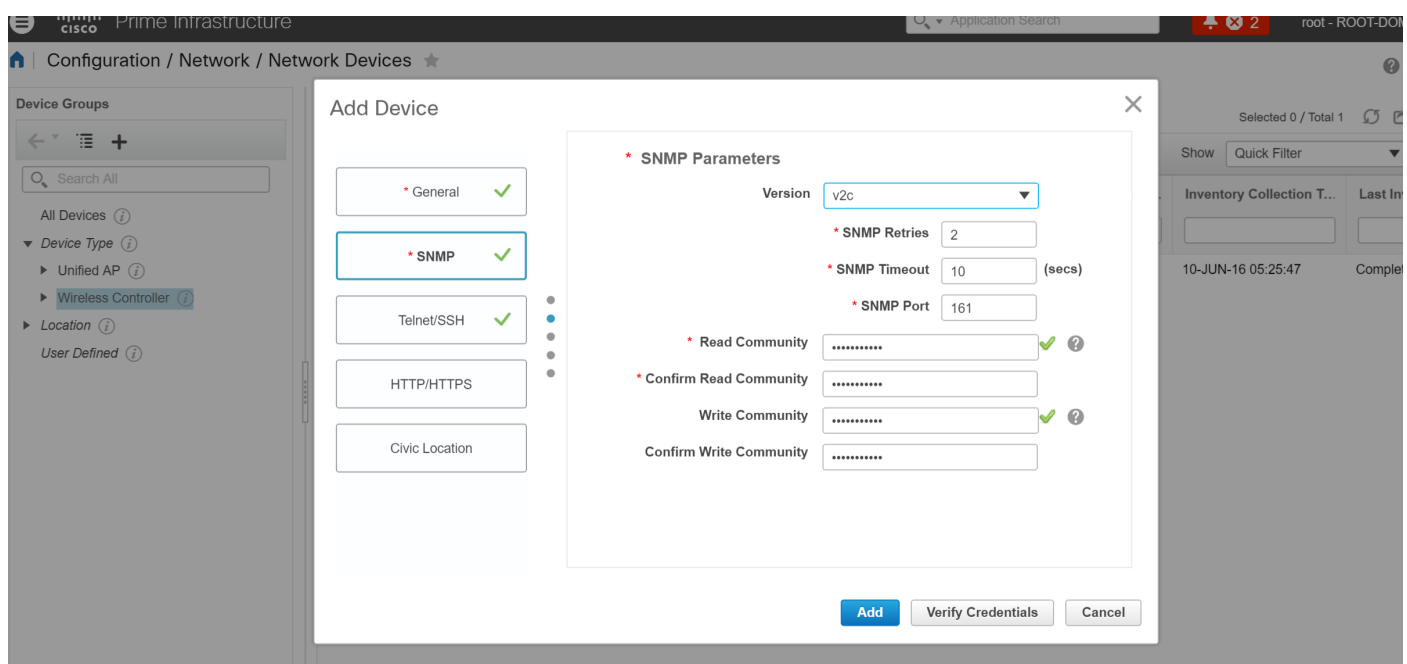
```
snmp-server view V3Write iso included
```

```
snmp-server host 10.201.236.107 version 3 auth V3user
```

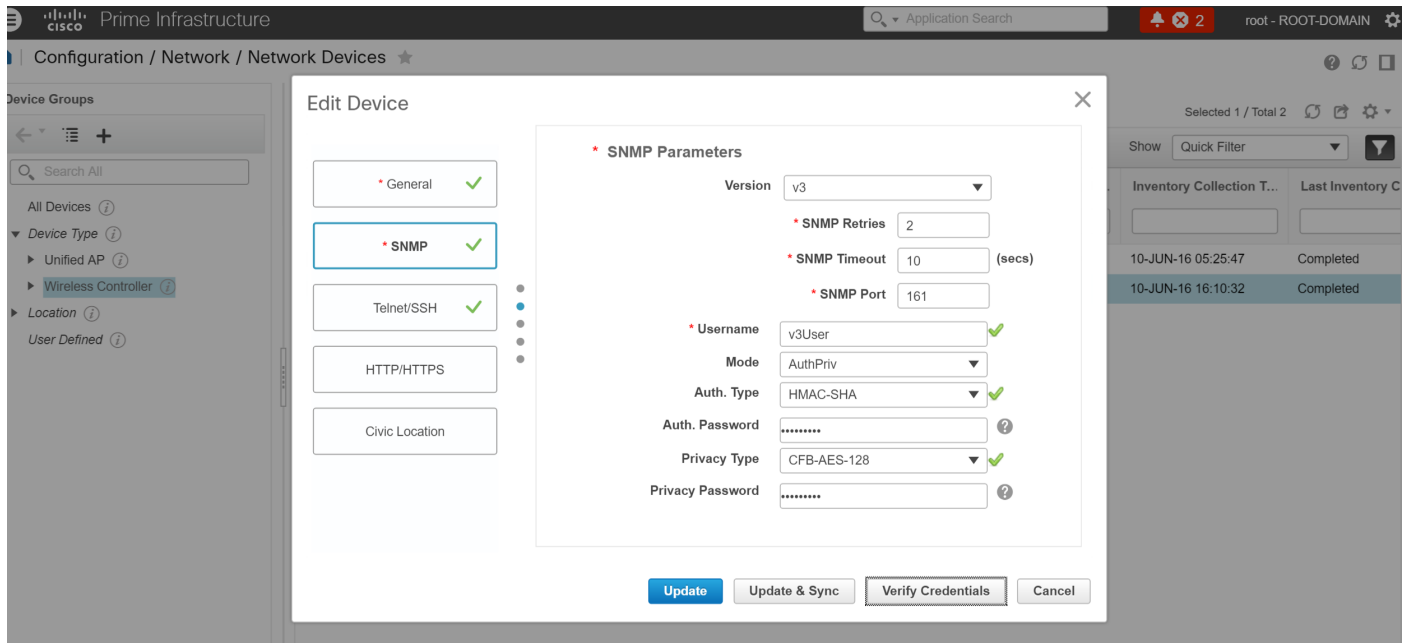
```
snmp-server enable traps
```

Prime Infrastructure

SNMP v2



SNMP v3



Verifica

Per verificare che la configurazione funzioni correttamente, consultare questa sezione.

[Cisco CLI Analyzer \(solo utenti registrati\) supporta alcuni comandi show.](#) Usare Cisco CLI Analyzer per visualizzare un'analisi dell'output del comando **show**.

Configurazione di SNMP v2 su uno switch (Cisco IOS-XE)

Immettere questo comando:

```
5760-79b#show snmp community
```

```
Community name: V2Community
Community Index: V2Community
Community SecurityName: V2Community
storage-type: nonvolatile          active
```

Configurazione di SNMP v3 su uno switch (Cisco IOS-XE)

Immettere i seguenti comandi:

```
5760-79b#show snmp user
```

```
User name: V3User
Engine ID: 80000009030068BC0C5A8F80
storage-type: nonvolatile          active
Authentication Protocol: SHA
Privacy Protocol: AES128
Group-name: V3Group
```

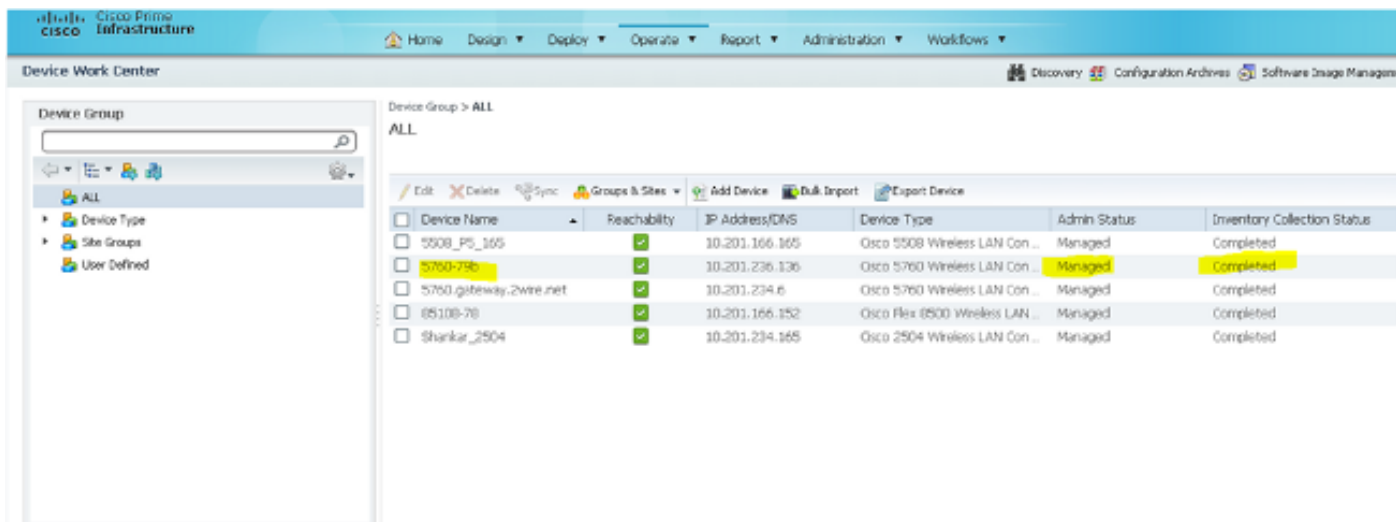
```
5760-79b#show snmp group
```

```
groupname: V3Group                                security model:v3 auth
```

```
contextname: <no context specified>      storage-type: nonvolatile
readview : V3Read                        writeview: V3Write
notifyview: <no notifyview specified>
row status: active
```

Nota: Per alcuni problemi noti risolti con l'ID bug Cisco [CSCuo52406](#), la CLI è preferita alla GUI per la configurazione di SNMP v3 sull'accesso convergente.

Prime Infrastructure (2.2 e versioni precedenti)



Configurazione SNMP v2 su uno switch (Denali 16.x)

Immettere questo comando:

```
polaris-3850#show snmp community
```

```
Community name: v2community
Community Index: v2community
Community SecurityName: v2community
storage-type: nonvolatile      active
```

Configurazione SNMP v3 su uno switch (Denali 16.x)

Immettere i seguenti comandi:

```
polaris-3850#show snmp user
```

```
User name: v3user
Engine ID: 80000009030068BC0C5A8F80
storage-type: nonvolatile      active
Authentication Protocol: SHA
Privacy Protocol: AES128
Group-name: V3Group
```

```
polaris-3850#show snmp group
```

```
groupname: V3Group
contextname: <no context specified>
readview : V3Read
notifyview: <no notifyview specified>
row status: active
security model:v3 auth
storage-type: nonvolatile
writeview: V3Write
```

Prime Infrastructure

Device Groups

Configuration / Network / Network Devices

Device Groups
All Devices

Selected 0 / Total 2

Reachab...	Admin Status	Device Name	IP Address	DNS Name	Device Type	Last Inventory Collect...	Last Success	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Managed	AirMario	10.201.236.100	10.201.236.100	Cisco 2504 Wireless ...	Completed	June 10, 2016
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Un-Managed		10.201.234.36	10.201.234.36		Synchronizing	

Risoluzione dei problemi

Le informazioni contenute in questa sezione permettono di risolvere i problemi relativi alla configurazione.

Da accesso convergente

Il comando **show logging** permette di visualizzare i pacchetti attivi inviati dal WLC all'indirizzo IP dell'infrastruttura Prime.

Immettere i seguenti comandi:

```
polaris-3850#debug snmp packets
```

```
Polaris-3850#show logging
```

```
entPhysicalEntry.7.2042 = Gi2/0/1
```

```
*Jun 10 15:58:51.817: SNMP: Packet sent via UDP to 10.201.236.107
```

```
*Jun 10 15:58:51.819: SNMP: Packet received via UDP from 10.201.236.107 on Vlan1105
```

```
*Jun 10 15:58:51.825: SNMP: Get-bulk request, reqid 945449769, nonrptr 0, maxreps 10
```

```
Jun 10 15:58:51.904: SNMP: Packet sent via UDP to 10.201.236.107
```

```
*Jun 10 15:58:51.927: SNMP: Packet received via UDP from 10.201.236.107 on Vlan1105
```

```
*Jun 10 15:58:51.928: SNMP: Get-bulk request, reqid 945449775, nonrptr 0, maxreps 10
```

```
entPhysicalEntry.7.2062 = NULL TYPE/VALUE
```

```
*Jun 10 15:58:51.931: SNMP: Response, reqid 945449775, errstat 0, erridx 0
```

```
entPhysicalEntry.7.2063 = Gi2/0/22
```

```
entPhysicalEntry.7.2064 = Gi2/0/23
```

```
entPhysicalEntry.7.2065 = Gi2/0/24
```

```
entPhysicalEntry.7.2066 = Switch 2 FRU Uplink Module 1
```

```
--More--
```

```
entPhysicalEntry.7.2067 = Gi2/1/1 Container
```

```
entPhysicalEntry.7.2068 = Gi2/1/2 Container
```

```
entPhysicalEntry.7.2069 = Te2/1/3 Container
```

```
entPhysicalEntry.7.2070 = Te2/1/4 Container
```

```
entPhysicalEntry.8.1 = V01
```

```
*Jun 10 15:58:51.951: SNMP: Packet sent via UDP to 10.201.236.107
```

```
*Jun 10 15:58:51.974: SNMP: Packet received via UDP from 10.201.236.107 on Vlan1105
```

```
*Jun 10 15:58:51.975: SNMP: Get-bulk request, reqid 945449777, nonrptr 0, maxreps 10
```

```
ciscoEnvMonTemperatureStatusEntry.3 = NULL TYPE/VALUE
```

```
*Jun 10 15:58:51.978: SNMP: Response, reqid 945449777, errstat 0, erridx 0
```

```
ciscoEnvMonTemperatureStatusEntry.3.2008 = 28  
ciscoEnvMonTemperatureStatusEntry.3.2009 = 40  
ciscoEnvMonTemperatureStatusEntry.3.2010 = 44
```

```
ciscoEnvMonTemperatureStatusEntry.6.2008 = 1
```

```
--More--
```

```
*Jun 10 15:58:52.001: SNMP: Packet sent via UDP to 10.201.236.107
```

Prime Infrastructure

SNMPWALK tra dispositivi.

Immettere i seguenti comandi:

```
PrimeInfrastructurejoker/admin# shell
```

```
Enter shell access password :
```

```
Starting bash shell ...
```

```
ade # snmpwalk -v2c -c v2community 10.201.234.36 sysUpTime
```

```
DISMAN-EVENT-MIB::sysUpTimeInstance = Timeticks: (238833753) 27 days, 15:25:37.53
```

```
v2community = community snmp
```

10.201.234.36 = WLC IP

Questo è il risultato se c'è raggiungibilità:

```
DISMAN-EVENT-MIB::sysUpTimeInstance = Scadenze temporali: xx,xxx
```