Pica8 Private MIB

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Version: 1

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Contents

Pica8 added some private and trap MIBs listed below:

1**SNMP Trap list:**

(1)**lldpStatistics**1.0.8802.1.1.2.1.2

(2)**Ospf**1.3.6.1.2.1.14

(3)**link up**: OID: 1.3.6.1.6.3.1.1.5.4

l**ink down**:OID:1.3.6.1.6.3.1.1.5.3

(support physical port's link up/down and lag port up/down)

(4)**Rpsu trap** :1.3.6.1.4.1.35098.21.1

(rpsu plugged in/out , rpsustatechange-power on/off, rpsuFanFailed)

(5)**Sfp trap**: 1.3.6.1.4.1.35098.21.2 (plugged in /out)

(6)**Warm start** : OID:1.3.6.1.6.3.1.1.5.2

Cold start: OID:1.3.6.1.6.3.1.1.5.1

2**pica8 private mib:**

cpuUsage OID 1.3.6.1.4.1.35098.1.1

totalPhyMemory 1.3.6.1.4.1.35098.1.2

usedPhyMemory 1.3.6.1.4.1.35098.1.3

freePhyMemory 1.3.6.1.4.1.35098.1.4

switchTemperature 1.3.6.1.4.1.35098.1.5

cpuTemperature 1.3.6.1.4.1.35098.1.6

switchChipTemperature 1.3.6.1.4.1.35098.1.7

switchFanSpeed 1.3.6.1.4.1.35098.1.8

switchPWM 1.3.6.1.4.1.35098.1.9

sfpstatusEntry 1.3.6.1.4.1.35098.1.10.1

sfpIndex 1.3.6.1.4.1.35098.1.10.1.1

sfpVendorName 1.3.6.1.4.1.35098.1.10.1.2

sfpSerialNumber 1.3.6.1.4.1.35098.1.10.1.3

sfpTemp 1.3.6.1.4.1.35098.1.10.1.4

sfpVoltage 1.3.6.1.4.1.35098.1.10.1.5

sfpBias 1.3.6.1.4.1.35098.1.10.1.6

sfpTxPower 1.3.6.1.4.1.35098.1.10.1.7

sfpRxPower 1.3.6.1.4.1.35098.1.10.1.8

sfpType 1.3.6.1.4.1.35098.1.10.1.9

rpsustatusEntry 1.3.6.1.4.1.35098.1.11.1

rpsuIndex 1.3.6.1.4.1.35098.1.11.1.1

serialNumber 1.3.6.1.4.1.35098.1.11.1.2

rpsuStatus 1.3.6.1.4.1.35098.1.11.1.3

rpsuTemprature 1.3.6.1.4.1.35098.1.11.1.4

rpsuFanSpeed 1.3.6.1.4.1.35098.1.11.1.5

rpsuPWM 1.3.6.1.4.1.35098.1.11.1.6

- pica_private_mib.my
- pica_private_trap_mib.my

pica_private_mib.my

```
PICA-PRIVATE-MIB DEFINITIONS ::= BEGIN

IMPORTS
MODULE-IDENTITY, OBJECT-TYPE, Counter32, Gauge32, Counter64,
Integer32, TimeTicks, mib-2, snmpModules,IpAddress,
NOTIFICATION-TYPE FROM SNMPv2-SMI
TEXTUAL-CONVENTION, DisplayString,
PhysAddress, TruthValue, RowStatus,
TimeStamp, AutonomousType, TestAndIncr FROM SNMPv2-TC
MODULE-COMPLIANCE, OBJECT-GROUP,
NOTIFICATION-GROUP FROM SNMPv2-CONF
snmpTraps FROM SNMPv2-MIB
IANAifType FROM IANAifType-MIB
enterprises FROM RFC1155-SMI;

picaPrivateMib MODULE-IDENTITY
LAST-UPDATED "201104280000Z"
ORGANIZATION "Pica8 Inc."
CONTACT-INFO
" Customer Support
E-Mail: support@pica8.com
WWW: http://www.pica8.com"
DESCRIPTION
"The MIB module to manage Pica8's Pronto product."
REVISION
"201104280000Z"
DESCRIPTION
"The Pica8 Private MIB, Initial Version.
Author: Robin Wan."

::= { enterprises 35098 }

hostStatusGroup OBJECT IDENTIFIER ::= { picaPrivateMib 1 }
```

cpuUsage OBJECT-TYPE
SYNTAX INTEGER(0..100)
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The usage of CPU, the output format is integer."
::= { hostStatusGroup 1 }

totalPhyMemory OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The total physical memory size, the output format is string."
::= { hostStatusGroup 2 }

usedPhyMemory OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The used physical memory size, the output format is string."
::= { hostStatusGroup 3 }

freePhyMemory OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The free physical memory size, the output format is string."
::= { hostStatusGroup 4 }

switchTemperature OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The temperature of switch, the output format is integer."
::= { hostStatusGroup 5 }

cpuTemperature OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The teperature of CPU, the output format is integer."
::= { hostStatusGroup 6 }

switchChipTemperature OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The teperature of switch chip."
::= { hostStatusGroup 7 }

switchFanSpeed OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The fan speed of switch chip."
::= { hostStatusGroup 8 }

switchPWM OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"Pulse Width Modulation(PWM) of switch chip."
::= { hostStatusGroup 9 }

sfpstatusTable OBJECT-TYPE
SYNTAX SEQUENCE OF SfpstatusEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION
"A list of sfp moudule status entries."
::= { hostStatusGroup 10 }

sfpstatusEntry OBJECT-TYPE
SYNTAX SfpstatusEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION
"An entry containing all sfp module stauts"
INDEX { sfpIndex }
::= { sfpstatusTable 1 }

SfpstatusEntry ::=
SEQUENCE {
sfpIndex INTEGER,
sfpVendorName DisplayString,
sfpSerialNumber DisplayString,
sfpTemp DisplayString,
sfpVoltage DisplayString,
sfpBias DisplayString,
sfpTxPower DisplayString,
sfpRxPower DisplayString,
sfpType DisplayString
}

sfpIndex OBJECT-TYPE
SYNTAX INTEGER (1..2147483647)
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The port number of interface."
::= { sfpstatusEntry 1 }

sfpVendorName OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The vendor name of sfp ransceiver transfer."
::= { sfpstatusEntry 2 }

sfpSerialNumber OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The serial number of sfp ransceiver transfer."
::= { sfpstatusEntry 3 }

sfpTemp OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The temperature of sfp ransceiver transfer."
::= { sfpstatusEntry 4 }

sfpVoltage OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The voltage of sfp ransceiver transfer."
::= { sfpstatusEntry 5 }

```
sfpBias OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The bias current of sfp ransceiver transfer."
::= { sfpstatusEntry 6 }

sfpTxPower OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The Tx power of sfp ransceiver transfer(dBm)."
::= { sfpstatusEntry 7 }

sfpRxPower OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The Rx power of sfp ransceiver transfer(dBm)."
::= { sfpstatusEntry 8 }

sfpType OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The type of sfp ransceiver transfer(dBm)."
::= { sfpstatusEntry 9 }

rpsustatusTable OBJECT-TYPE
SYNTAX SEQUENCE OF RpsustatusEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION
"A list of Redundancy power supply unit(RPSU) status entries."
::= { hostStatusGroup 11 }
rpsustatusEntry OBJECT-TYPE
SYNTAX RpsustatusEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION
"An entry containing all Redundancy power supply unit(RPSU) stauts."
INDEX { rpsuIndex }
::= { rpsustatusTable 1 }
```

RpsustatusEntry ::=
SEQUENCE {
rpsuIndex INTEGER,
serialNumber DisplayString,
rpsuStatus INTEGER,
rpsuTemprature DisplayString,
rpsuFanSpeed INTEGER,
rpsuPWM DisplayString
}
rpsuIndex OBJECT-TYPE
SYNTAX INTEGER(0..10)
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The slot number Redundancy power supply unit(RPSU)."
::= { rpsustatusEntry 1 }

serialNumber OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The serial number Redundancy power supply unit(RPSU)."
::= { rpsustatusEntry 2 }

rpsuStatus OBJECT-TYPE
SYNTAX INTEGER (0..1)
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The status of Redundancy power supply unit(RPSU).
1: The Redundancy power supply unit(RPSU) power on.
0: The Redundancy power supply unit(RPSU) power off."
::= { rpsustatusEntry 3 }

rpsuTemprature OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"Temprature of the Redundancy power supply unit(RPSU)."
::= { rpsustatusEntry 4 }

rpsuFanSpeed OBJECT-TYPE
SYNTAX INTEGER(1..2147483647)
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"Fan speed of the Redundancy power supply unit(RPSU)."
::= { rpsustatusEntry 5 }

rpsuPWM OBJECT-TYPE
SYNTAX DisplayString
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"Pulse Width Modulation(PWM) of the Redundancy power supply unit(RPSU)."
::= { rpsustatusEntry 6 }

switchConfigGroup OBJECT IDENTIFIER ::= { picaPrivateMib 2 }

tftpConfigFilePath OBJECT-TYPE
SYNTAX OCTET STRING (SIZE (2..255))
MAX-ACCESS read-write
STATUS current
DESCRIPTION
"If the tftp path of defined config file is set, the configurations
included in the config file are also applied meanwhile. "
::= { switchConfigGroup 0 }

```
tftpBatchFilePath OBJECT-TYPE
SYNTAX OCTET STRING (SIZE (2..255))
MAX-ACCESS read-write
STATUS current
DESCRIPTION
"If the tftp path of a command batch file is set, the present configurations
will changed depending on the execution of the command in the batch file."
::= { switchConfigGroup 1 }

picaConformance OBJECT IDENTIFIER ::= { picaPrivateMib 20}
picaGroups OBJECT IDENTIFIER ::= { picaConformance 1 }
picaCompliances OBJECT IDENTIFIER ::= { picaConformance 2 }

picaBasicGroup OBJECT-GROUP
OBJECTS {
cpuUsage,
totalPhyMemory,
usedPhyMemory,
freePhyMemory,
switchTemperature,
cpuTemperature,
switchChipTemperature,
switchFanSpeed,
switchPWM

}
STATUS current
DESCRIPTION
"These objects are required for pica private mib."
::= { picaGroups 1 }
picasfpGroup OBJECT-GROUP
OBJECTS {
sfpIndex,
sfpVendorName,
sfpSerialNumber,
sfpTemp,
sfpVoltage,
sfpBias,
sfpTxPower,
sfpRxPower,
sfpType
}
STATUS current
DESCRIPTION
"These objects are required for pica private mib."
::= { picaGroups 2 }
```

```
picarpsuGroup OBJECT-GROUP
OBJECTS {
rpsuIndex,
serialNumber,
rpsuStatus,
rpsuTemprature,
rpsuFanSpeed,
rpsuPWM
}
STATUS current
DESCRIPTION
" These objects are required for pica private mib."
::= { picaGroups 3 }

picaConfigGroup OBJECT-GROUP
OBJECTS {
tftpConfigFilePath,
tftpBatchFilePath
}
STATUS current
DESCRIPTION
" These objects are required for pica private mib."
::= {picaGroups 4 }

picaCompliance MODULE-COMPLIANCE
STATUS current
DESCRIPTION
"The compliance statement "
MODULE -- this module
MANDATORY-GROUPS {
picaBasicGroup,
picasfpGroup,
picarpsuGroup,
picaConfigGroup
}
::= { picaCompliances 1 }

END
```

pica_private_trap_mib.my

```
PICA-PRIVATE-TRAP-MIB DEFINITIONS ::= BEGIN

IMPORTS
MODULE-IDENTITY, OBJECT-TYPE, NOTIFICATION-TYPE, IpAddress
FROM SNMPv2-SMI
MODULE-COMPLIANCE, OBJECT-GROUP, NOTIFICATION-GROUP
FROM SNMPv2-CONF
rpsuIndex, rpsuStatus,sfpIndex,picaPrivateMib
FROM PICA-PRIVATE-MIB;

picaTrap MODULE-IDENTITY
LAST-UPDATED "201212290000Z"
ORGANIZATION "Pica8 Inc."
CONTACT-INFO
" Customer Support
E-Mail: support@pica8.com
WWW: http://www.pica8.com"
DESCRIPTION
"The MIB module to describe traps for pica private mib."
::= { picaPrivateMib 21 }

-- Trap Support Objects

-- The following are support objects for the pica private traps.

rpsuTraps OBJECT IDENTIFIER ::= { picaTrap 1 }
spfTraps OBJECT IDENTIFIER ::= { picaTrap 2 }
switchTraps OBJECT IDENTIFIER ::= { picaTrap 3 }

-- Traps

switchFanFailed NOTIFICATION-TYPE
STATUS current
DESCRIPTION
"A switchFanFailed trap will be generated if the fan
of switch is failed."
::= { switchTraps 1 }
```

```
rpsuStateChange NOTIFICATION-TYPE
OBJECTS {
rpsuIndex, -- The number of RPSU
rpsuStatus -- The new state
}
STATUS current
DESCRIPTION
"A rpsuStateChange trap signifies that there
has been a change in the state of a Redundancy
power supply unit(RPSU) . This trap should be
generated when the RPSU status changed (e.g.,
plugged in or out)."
::= { rpsuTraps 1 }

rpsuPlugIn NOTIFICATION-TYPE
OBJECTS {
rpsuIndex -- The number of RPSU
}
STATUS current
DESCRIPTION
"A rpsuPlugIn trap will be generated if the
Redundancy power supply unit(RPSU) is plugged in."
::= { rpsuTraps 2 }

rpsuPlugOut NOTIFICATION-TYPE
OBJECTS {
rpsuIndex -- The number of RPSU
}
STATUS current
DESCRIPTION
"A rpsuPlugOut trap will be generated if the
Redundancy power supply unit(RPSU) is plugged out."
::= { rpsuTraps 3 }

rpsuFanFailed NOTIFICATION-TYPE
OBJECTS {
rpsuIndex -- The number of RPSU
}
STATUS current
DESCRIPTION
"A rpsuFanFailed trap will be generated if the fan
of Redundancy power supply unit(RPSU) is failed."
::= { rpsuTraps 4 }
```

```
sfpPlugIn NOTIFICATION-TYPE
OBJECTS {
sfpIndex -- The index of SFP
}
STATUS current
DESCRIPTION
"A sfpPlugIn trap signifies the SFP is plugged in."
::= { spfTraps 1 }

sfpPlugOut NOTIFICATION-TYPE
OBJECTS {
sfpIndex -- The index of SFP
}
STATUS current
DESCRIPTION
"A sfpPlugOut trap signifies the SFP is plugged out."
::= { spfTraps 2 }


picaTrapConformance OBJECT IDENTIFIER ::= { picaTrap 20 }

picaTrapGroups OBJECT IDENTIFIER ::= { picaTrapConformance 1 }
picaTrapCompliances OBJECT IDENTIFIER ::= { picaTrapConformance 2 }

-- compliance statements

picaTrapCompliance MODULE-COMPLIANCE
STATUS current
DESCRIPTION
"The compliance statement "
MODULE -- this module
GROUP picaTrapGroups
DESCRIPTION
"This group is optional but recommended"
::= { picaTrapCompliances 1 }

-- units of conformance

rpusTrapGroup OBJECT-GROUP
OBJECTS {
rpsuIndex, -- The number of RPSU
rpsuStatus
}
STATUS current
DESCRIPTION
"These objects are required to control traps."
::= { picaTrapGroups 1 }
```

```
picaTrapEventGroup NOTIFICATION-GROUP
NOTIFICATIONS {
switchFanFailed,
rpsuStateChange,
rpsuPlugIn,
rpsuPlugOut,
rpsuFanFailed,
sfpPlugIn,
sfpPlugOut
}
STATUS current
DESCRIPTION
"A grouping of pica private trap events, as specified
in NOTIFICATION-TYPE constructs."
::= { picaTrapGroups 2 }

END
```