CHAPTER 3

Line Card Group

Use the line card group to assign a name, default inpulse rule, and class of service (COS) to individual ports on a Line Test Card-8 (LTC-8). This group consists of two tables:

- The line card table (lcTable)
- The line card port table (lcPortTable)

When configuring a port, assign a name, a default inpulse rule, and a class of service (COS) to the port.

Line Card Table

The line card table contains a list of the line cards available. Cards can be added, deleted, configured, and modified. The objects within the line card table identify the different attributes on that particular card. For further information on line cards, refer to the *Cisco VCO/4K Card Technical Descriptions.*

lcTable

{lc 1}

Description

Contains a list of the line cards.

Object Identifier

1.3.6.1.4.1.886.1.2.1

Data Type

Sequence of LcEntry

Access Policy

Not accessible

Status

Mandatory

lcEntry

{lcTable 1}

Description

Each entry corresponds to a line card in the system.

Object Identifier

1.3.6.1.4.1.886.1.2.1.1

Data Type

CardIndex

Access Policy

Not accessible

Status

Mandatory

Index

{lcIndex}

LcEntry

Sequence

lcIndex	CardIndex
lcRack	Integer
lcLevel	Integer
lcSlot	Integer
lcStatus	Integer
lcUnusedPorts	Integer
lcType	Integer
lcRevVer	DisplayString
lcPhyAdd	Integer
lcAlarm	Integer
lcErrorStatus	Integer
lcOwnerString	OwnerString
lcEntryStatus	EntryStatus

lcIndex

{lcEntry 1}

Description

Identifies an object in the line card table. The object contains the physical location (hardware address) of the line card. The object lists the rack (R), level (L), and slot (S) where the card resides. See the "Card Index" section on page 1-6 to determine the index value.

Object Identifier

1.3.6.1.4.1.886.1.2.1.1.1

Data Type

CardIndex

Access Policy

Read only

Status

Mandatory

lcRack

{lcEntry 2}

Description

The rack (R) where the card resides.

Object Identifier

1.3.6.1.4.1.886.1.2.1.1.2

Data Type

Integer

Access Policy

Read only

Status

Mandatory

lcLevel

{lcEntry 3}

Description

The level (L) where the card resides.

Object Identifier

1.3.6.1.4.1.886.1.2.1.1.3

Data Type

Integer

Access Policy

Read only

Status

Mandatory

lcSlot

{lcEntry 4}

Description

The slot (S) where the card resides.

Object Identifier

1.3.6.1.4.1.886.1.2.1.1.4

Data Type

Integer

Access Policy

Read only

Status

Mandatory

lcStatus

{1cEntry 5}

Description

Indicates the current status of the card.

Object Identifier

1.3.6.1.4.1.886.1.2.1.1.5

Data Type

Integer. Possible values and their meanings are shown in the following table:

Value	String	Meaning
1	active	Ports on this card can be involved in active calls and can be allocated to new calls.
2	maintenance	One or more ports on this card might be involved in active calls. No ports are allocated to new calls.
3	diagnostics	No ports on this card are involved in calls or allocated to new calls.
4	outOfService	No ports on this card are involved in active calls. No ports are allocated to new calls.

Access Policy

Read-write

Status

Mandatory

lcUnusedPorts

{lcEntry 6}

Description

Indicates the number of ports not currently active on this card. For multispan cards, this object indicates the number of ports not currently active on individual spans. Valid only for network interface and internal service circuit ports.

Object Identifier

1.3.6.1.4.1.886.1.2.1.1.6

Data Type

Integer

Access Policy

Read only

Status

Mandatory

lcType

{lcEntry 7}

Description

Indicates the card type. In this table the card type is a Subscriber Line Interface Card (SLIC). The value is always 1 for SLIC cards.

Object Identifier

1.3.6.1.4.1.886.1.2.1.1.7

Data Type

Integer

Access Policy

Read only

Status

Mandatory

lcRevVer

{lcEntry 8}

Description

Version and revision level of the firmware installed on this card. Use this field to verify the firmware versions you installed for the network interface and service circuit cards are at the current level.

Object Identifier

1.3.6.1.4.1.886.1.2.1.1.8

Data Type

DisplayString. Length is from 1 to 5 alphanumeric characters.

Access Policy

Read only

Status

Mandatory

lcPhyAdd

{lcEntry 9}

Description

Physical address of this card (assigned by the system).

Object Identifier

1.3.6.1.4.1.886.1.2.1.1.9

Data Type

Integer

Access Policy

Read only

Status

Mandatory

lcAlarm

{lcEntry 10}

Description

Contains the alarms active on this card.

Object Identifier

1.3.6.1.4.1.886.1.2.1.1.10

Data Type

Integer. The valid values and their meanings are shown in the following table:

Value	String
1	cardFailureMinor
2	portFailureMinor
3	cardAndPortFailureMinor

Access Policy

Read only

Status

Mandatory

lcErrorStatus

{lcEntry 11}

Description

Registers the last error that occurred on this card. For a list of card error messages, see Appendix A, “Card Error Messages”.

Object Identifier

1.3.6.1.4.1.886.1.2.1.1.11

Data Type

Integer

Access Policy

Read only

Status

Mandatory

lcOwnerString

{lcEntry 12}

Description

The entity that configured this object and is therefore using the resources assigned to it.

Object Identifier

1.3.6.1.4.1.886.1.2.1.1.12

Data Type

OwnerString

Access Policy

Read-write

Status

Mandatory

lcEntryStatus

{lcEntry 13}

Description

The status of this line card entry.

Object Identifier

1.3.6.1.4.1.886.1.2.1.1.13

Data Type

EntryStatus

Access Policy

Read-write

Status

Mandatory

lcDwnldVersion

{lcEntry 14}

Description

Version/revision of the card download file.

Object Identifier

1.3.6.1.4.1.886.1.2.1.1.14

Data Type

DisplayString (size 1...4)

Access Policy

Read only

Status

Mandatory

lcUpgradeState

{lcEntry 15}

Description

The upgrade state of this line card entry.

Object Identifier

1.3.6.1.4.1.886.1.2.1.1.13

Data Type

UpgradeState

Access Policy

Read only

Status

Mandatory

lcTableLastModified

{lc 2}

Description

The time, displayed in hundredths of a second, since the line card table was last modified. Helps application developers determine the polling of the agent parameters.

Object Identifier

1.3.6.1.4.1.886.1.2.2

Data Type

TimeTicks

Access Policy

Read only

Status

Mandatory

Line Card Port Table

Use the line card port configuration to assign a name, a hardware type, a default inpulse rule, and a class of service (COS) to individual ports on a line card.

For more information on configuring line ports, refer to the *Cisco VCO/4K System Administrator's Guide.*

lcPortTable

{lc 4}

Description

A list of the port entries on each line card.

Object Identifier

1.3.6.1.4.1.886.1.2.4

Data Type

Sequence of LcPortEntry

Access Policy

Not accessible

Status

Mandatory

lcPortEntry

{lcPortTable 1}

Description

Contains objects belonging to a particular port.

Object Identifier

1.3.6.1.4.1.886.1.2.4.1

Data Type

LcPortEntry

Access Policy

Not accessible

Status

Mandatory

Index

{lcIndex, lcPortIndex}

LcPortEntry

Sequence

lcPortIndex	Integer
lcPortState	Integer
lcPortName	DisplayString
lcPortCos	Integer
lcPortMajorState	PortMajorState
lcPortSuppState	PortSuppState
lcPortAddress	Integer
lcInpulseRuleIndex	Integer
lcResGroupIndex	Integer
lcResGroupPosition	Integer
lcPortErrorStatus	Integer
lcPortOwnerString	OwnerString
lcPortEntryStatus	PortEntryStatus

lcPortIndex

{lcPortEntry 1}

Description

Indicates the port number on the card.

Object Identifier

1.3.6.1.4.1.886.1.2.4.1.1

Data Type

Integer (1 to 8). There are eight ports on a line card.

Access Policy

Read only

Status

Mandatory

lcPortState

{lcPortEntry 2}

Description

Contains the state of the port. The port state can be active (1) or inactive (2).

Note Always modify the state of ports one at a time. That is, the EntryStatus object must be set to valid after every SNMP_SET command on this object.

Object Identifier

1.3.6.1.4.1.886.1.2.4.1.2

Data Type

Integer. The possible values are 1 (active) and 2 (inactive).

Access Policy

Read-write

Status

Mandatory

lcPortName

{lcPortEntry 3}

Description

Optional database object for identifying individual circuits. When used, each port name should be unique and helpful in describing for what the port is used.

Object Identifier

1.3.6.1.4.1.886.1.2.4.1.3

Data Type

DisplayString. This field accepts up to 8 upper- or lowercase alphanumeric characters.

Access Policy

Read-write

Status

Optional

lcPortCos

{lcPortEntry 4}

Description

Determines the software operating characteristics for this port. Ports on the same card can have different COS values.

Object Identifier

1.3.6.1.4.1.886.1.2.4.1.4

Data Type

Integer. The possible values and their meanings are shown in the following table:

Value	String	Meaning
1	o	Originating—Calls originating from the system. Outgoing calls are initiated by the host command.
2	t	Terminating—Calls terminating at the system. Incoming calls are initiated by action outside the system or forced by the host command.
3	w2	Two-Way—Calls originating from the system or calls terminating at the system. Outgoing calls are initiated by the host command. Incoming calls are initiated by outside actions.
4	oa	Always Off Hook and Originating—Calls originating from the system. Port goes off hook at system reset and remains off hook. Outgoing calls are initiated by the host command.
5	ta	Always Off Hook and Terminating—Calls terminating at the system. Port goes off hook at system reset and remains off hook. Incoming calls are initiated by outside actions or forced by the host command.
6	a2	Always Off Hook and Two-Way—Calls originating from the system or calls terminating at the system. Port goes off hook at system reset and remains off hook. Outgoing calls are initiated by the host command, incoming calls are initiated by outside actions or forced by the host command.

Access Policy

Read-write

Status

Mandatory

lcPortMajorState

{lcPortEntry 5}

Description

The major state of the port.

Object Identifier

1.3.6.1.4.1.886.1.2.4.1.5

Data Type

PortMajorState

Access Policy

Read only

Status

Mandatory

lcPortSuppState

{lcPortEntry 6}

Description

The supplementary state of the port.

Object Identifier

1.3.6.1.4.1.886.1.2.4.1.6

Data Type

PortSuppState

Access Policy

Read only

Status

Mandatory

lcPortAddress

{lcPortEntry 7}

Description

Specifies the software address (hexadecimal identifier) of the port for which data is displayed. The port can also be specified by the hardware address.

Object Identifier

1.3.6.1.4.1.886.1.2.4.1.7

Data Type

Integer

Access Policy

Read only

Status

Mandatory

lcInpulseRuleIndex

{lcPortEntry 8}

Description

A foreign key corresponding to the inpulseRuleIndex in the inpulseTable. Access this object when assigning a particular inpulse rule to a port.

Determines the inpulse rule processed when the port goes off hook. Use default inpulse rules for incoming ports only (Class of Service = T, W2, AT, or A2). The inpulse rule chosen must be defined from the control console or through the objects in the inpulseRuleTable.

Object Identifier

1.3.6.1.4.1.886.1.2.4.1.8

Data Type

Integer. The possible values range from 0 to 30. Default is 0.

Access Policy

Read-write

Status

Mandatory

lcResGroupIndex

{lcPortEntry 9}

Description

A foreign key corresponding to the resGroupIndex (ID 1.3.6.1.4.1.886.1.9.1.1.1) in the resGroupTable.

Indicates the number of the resource group to which this port belongs. If no resource group is assigned, the value is zero (0).

Change this attribute by setting the EntryStatus and the resGroupTable objects to underModification (3).

Object Identifier

1.3.6.1.4.1.886.1.2.4.1.9

Data Type

Integer. The possible values range from 0 to 63.

Access Policy

Read-write

Status

Mandatory

lcResGroupPosition

{lcPortEntry 10}

Description

Specifies the position of the port in the assigned resource group.

Object Identifier

1.3.6.1.4.1.886.1.2.4.1.10

Data Type

Integer

Access Policy

Read only

Status

Mandatory

lcPortErrorStatus

{lcPortEntry 11}

Description

Registers the last error that occurred on this port.

Object Identifier

1.3.6.1.4.1.886.1.2.4.1.11

Data Type

Integer

Access Policy

Read only

Status

Mandatory

lcPortOwnerString

{lcPortEntry 12}

Description

The entity that configured this object and is therefore using the assigned resources.

Object Identifier

1.3.6.1.4.1.886.1.2.4.1.12

Data Type

OwnerString

Access Policy

Read-write

Status

Mandatory

lcPortEntryStatus

{lcPortEntry 13}

Description

The status of the table object.

Object Identifier

1.3.6.1.4.1.886.1.2.4.1.13

Data Type

PortEntryStatus

Access Policy

Read-write

Status

Mandatory

lcPortTableLastModified

{lc 5}

Description

The time, displayed in hundredths of a second, since the beginning of the time that the line card port table was last modified. Helps NMS application developers determine the polling of the agent parameters.

Object Identifier

1.3.6.1.4.1.886.1.2.5

Data Type

TimeTicks

Access Policy

Read only

Status

Mandatory