Trunk Card Group

Use the trunk card group to configure individual ports on a trunk card. You can configure the following cards:

- T1 Interface Card (T1)
- E1 Interface Card (E1)
- Universal Trunk Card (UTC)
- E+M Interface Card (E+M)
- Direct Inward Dial Card (DID)

Trunk Card Table

The trunk card table contains a list of the trunk cards available. You can add, delete, configure, and modify trunk cards. The objects within the trunk card table identify the different attributes on that particular card. For further information on trunk cards, refer to the *Cisco VCO/4K Card Technical Descriptions.*

tcTable

{tc 1}

Description

A list of the trunk cards.

Object Identifier

1.3.6.1.4.1.886.1.3.1

Data Type

Sequence of TcEntry

Access Policy

Not accessible

Status

Mandatory

tcEntry

{tcTable 1}

Description

Each entry corresponds to a trunk card in the system.

Object Identifier

1.3.6.1.4.1.886.1.3.1.1

Data Type

TcEntry

Access Policy

Not accessible

Status

Mandatory

Index

{tcIndex, tcType}

TcEntry

Sequence

tcIndex	CardIndex
tcRack	Integer
tcLevel	Integer
tcSlot	Integer
tcStatus	Integer
tcUnusedPorts	Integer
tcType	Integer
tcRevVer	DisplayString
tcPhyAdd	Integer
tcNfasGrpIndex	Integer
tcNfasGrpPosition	Integer
tcAlarm	Integer
tcErrorStatus	Integer

| tcOwnerString | OwnerString |
| tcEntryStatus | EntryStatus |

tcIndex

{tcEntry 1}

Description

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

Object Identifier

1.3.6.1.4.1.886.1.3.1.1.1

Data Type

CardIndex

Access Policy

Read only

Status

Mandatory

tcRack

{tcEntry 2}

Description

Rack (R) where the card resides.

Object Identifier

1.3.6.1.4.1.886.1.3.1.1.2

Data Type

Integer

Access Policy

Read only

Status

Mandatory

tcLevel

{tcEntry 3}

Description

Level (L) where the card resides.

Cisco VCO/4K Management Information Base (MIB) Reference

Object Identifier

1.3.6.1.4.1.886.1.3.1.1.3

Data Type

Integer

Access Policy

Read only

Status

Mandatory

tcSlot

{tcEntry 4}

Description

Slot (S) where the card resides.

Object Identifier

1.3.6.1.4.1.886.1.3.1.1.4

Data Type

Integer

Access Policy

Read only

Status

Mandatory

tcStatus

{tcEntry 5}

Description

Current status of the card.

Object Identifier

1.3.6.1.4.1.886.1.3.1.1.5

Data Type

Integer. The 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.

Value	String	Meaning
4	outOfService	No ports on this card can be involved in active calls. No ports are allocated to new calls.
6	campedOn	Status change to diagnostics mode was attempted while ports on this card were still involved in calls. No ports are allocated to new calls and card remains in this mode until further administrator action.

Access Policy

Read-write

Status

Mandatory

tcUnusedPorts

{tcEntry 6}

Description

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

Object Identifier

1.3.6.1.4.1.886.1.3.1.1.6

Data Type

Integer

Access Policy

Read only

Status

Mandatory

tcType

{tcEntry 7}

Description

Indicates the type of trunk card. The tcType object is the secondary index in the truck card table.

Object Identifier

1.3.6.1.4.1.886.1.3.1.1.7

Data Type

Integer. The valid card values and names are shown in the following table:

Value	String	Meaning
1	t1	T1 Card
2	e1	E1 Card
3	utc	Universal Trunk Card
4	did	Direct Inward Dial Card
5	e-m	E and M Card

Access Policy

Read only

Status

Mandatory

tcRevVer

{tcEntry 8}

Description

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

Object Identifier

1.3.6.1.4.1.886.1.3.1.1.8

Data Type

DisplayString. Length of the display string is from 1 to 5 characters.

Access Policy

Read only

Status

Mandatory

tcPhyAdd

{tcEntry 9}

Description

Physical address of this card. The address is assigned by the system.

Object Identifier

1.3.6.1.4.1.886.1.3.1.1.9

Data Type

Integer

Access Policy

Read only

Status

Mandatory

tcNfasGrpIndex

{tcEntry 10}

Description

A foreign key in the NFAS group table. Indicates to which NFAS group this card belongs.

To change this attribute, set the tcEntryStatus and the nfasGroup Table to underModification (3).

Object Identifier

1.3.6.1.4.1.886.1.3.1.1.10

Data Type

Integer

Access Policy

Read-write

Status

Mandatory

tcNfasGrpPosition

{tcEntry 11}

Description

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

Object Identifier

1.3.6.1.4.1.886.1.3.1.1.11

Data Type

Integer

Access Policy

Read only

Status

Mandatory

tcAlarm

{tcEntry 12}

Description

Tracks which alarms (internally represented as a bit map) are active on this card. A bit is set to 1 for each active card alarm (there are a total of 32 bits). The following table shows the bits and the alarm description:

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Bit	Alarm Description
0	Card failure – minor
1	Port failure – minor
2	T1/PRI carrier failure – major
3	T1/PRI remote carrier failure – major
4	T1/PRI card failure – major
5	T1 Signaling Bit – minor
6	PRI Bipolar Violations Mlimit reached
7	T1/PRI Out of Frame MLimit reached – minor
8	T1 Slip Maint Limit reached – minor
9	T1/PRI OOF condition – minor
10	PRI D-channel failure – major
11-32	Unsigned filler (set to zero)

Note   The NMS application needs to interpret the alarm status from the integer value returned by this object.

Object Identifier

1.3.6.1.4.1.886.1.3.1.1.12

Data Type

Integer

Access Policy

Read only

Status

Mandatory

tcErrorStatus

{tcEntry 13}

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

1.3.6.1.4.1.886.1.3.1.1.13

Data Type

Integer

Access Policy

Read only

Status

Mandatory

tcOwnerString

{tcEntry 14}

Description

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

Object Identifier

1.3.6.1.4.1.886.1.3.1.1.14

Data Type

OwnerString

Access Policy

Read-write

Status

Mandatory

tcEntryStatus

{tcEntry 15}

Description

Status of this trunk card object.

Object Identifier

1.3.6.1.4.1.886.1.3.1.1.15

Data Type

EntryStatus

Access Policy

Read-write

Status

Mandatory

tcDwnldVersion

{tcEntry 16}

Description

Version/revision of the card download file.

Object Identifier

1.3.6.1.4.1.886.1.3.1.1.16

Data Type

DisplayString (size 1...4)

Access Policy

Read-only

Status

Mandatory

tcUpgradeState

{tcEntry 17}

Description

Version/revision of the card download file.

Object Identifier

1.3.6.1.4.1.886.1.3.1.1.17

Data Type

UpgradeState

Access Policy

Read-only

Status

Mandatory

tcTableLastModified

{tc 2}

Description

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

Object Identifier

1.3.6.1.4.1.886.1.3.2

Data Type

TimeTicks

Access Policy

Read only

Status

Mandatory

Trunk Port Table

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

tcPortTable

{tc 4}

Description

A list of port entries on the trunk card.

Object Identifier

1.3.6.1.4.1.886.1.3.4

Data Type

Sequence of TcPortEntry

Access Policy

Not accessible

Status

Mandatory

tcPortEntry

{tcPortTable 1}

Description

Contains objects belonging to a particular port.

Object Identifier

1.3.6.1.4.1.886.1.3.4.1

Data Type

TcPortEntry

Access Policy

Not accessible

Status

Mandatory

Index

{tcIndex, tcPortIndex}

TcPortEntry

Sequence

tcPortIndex	Integer
tcPortState	Integer
tcCardType	Integer
tcPortName	DisplayString

tcPortHwType	Integer
tcPortCos	Integer
tcPortMajorState	PortMajorState
tcPortSuppState	PortSuppState
tcPortAddress	Integer
tcInpulseRuleIndex	Integer
tcResGroupIndex	Integer
tcResGroupPosition	Integer
tcPortErrorStatus	Integer
tcPortOwnerString	OwnerString
tcPortEntryStatus	PortEntryStatus

tcPortIndex

{tcPortEntry 1}

Description

Indicates the port number on the card. Trunk cards can have 8, 24, or 32 ports. This object is the primary index key into this table.

Object Identifier

1.3.6.1.4.1.886.1.3.4.1.1

Data Type

Integer. The valid values for this field are 8, 24, or 32.

Access Policy

Read only

Status

Mandatory

tcPortState

{tcPortEntry 2}

Description

Contains the state of the port. The states are 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

1.3.6.1.4.1.886.1.3.4.1.2

Data Type

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

Access Policy

Read-write

Status

Mandatory

tcPCardType

{tcPortEntry 3}

Description

This object contains the type of trunk card to which the port is attached.

Object Identifier

1.3.6.1.4.1.886.1.3.4.1.3

Data Type

Integer. The valid cards and their names are shown in the following table:

Value	String	Meaning
1	t1	T1 Card
2	e1	E1 Card
3	utc	Universal Trunk Card
4	did	Direct Inward Dial Card
5	e-m	E and M Card

Access Policy

Read only

Status

Mandatory

tcPortName

{tcPortEntry 4}

Description

Identifies individual circuits (optional database object). When using a port name, each one should be unique and describe what you use the port for.

Object Identifier

1.3.6.1.4.1.886.1.3.4.1.4

Data Type

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

Access Policy

Read-write

Status

Optional

tcPortHwType

{tcPortEntry 5}

Description

Determines the type of trunk interface circuit used for this port. Not all trunk card types require an entry for this field.

Object Identifier

1.3.6.1.4.1.886.1.3.4.1.5

Data Type

Integer. The following table shows valid combinations of card type and hardware type:

Value	String	Hardware Type				
		T1	UTC Outgoing	UTC Incoming	DID	E+M
0	none	N/A	N/A	N/A	N/A	N/A
1	gs	No	Yes	None[1]	None	None
2	ls	No	Yes	None	None	None
3	em2w	No	No	None	None	None
4	em4w	Yes	No	None	None	None

1.   No hardware type necessary.

Access Policy

Read-write

Status

Mandatory

tcPortCos

{tcPortEntry 6}

Description

Determines the software operating characteristics for this port. Ports on the same card can have different class of service (COS) values.

Object Identifier

1.3.6.1.4.1.886.1.3.4.1.6

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 VCO 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 VCO. Port goes off hook at VCO 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 VCO or calls terminating at the VCO. Port goes off hook at VCO 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

tcPortMajorState

{tcPortEntry 7}

Description

The major state of the port.

Object Identifier

1.3.6.1.4.1.886.1.3.4.1.7

Data Type

PortMajorState

Access Policy

Read only

Status

Mandatory

tcPortSuppState

{tcPortEntry 8}

Description

The supplementary state of the port.

Object Identifier

1.3.6.1.4.1.886.1.3.4.1.8

Data Type

PortSuppState

Access Policy

Read only

Status

Mandatory

tcPortAddress

{tcPortEntry 9}

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

1.3.6.1.4.1.886.1.3.4.1.9

Data Type

Integer

Access Policy

Read only

Status

Mandatory

tcInpulseRuleIndex

{tcPortEntry 10}

Description

A foreign key corresponding to the inpulseRuleIndex (ID 1.3.6.1.4.1.886.1.9.5.1.1) in the inpulseTable. Access this object while you are assigning a particular inpulse rule to a port.

This object determines the inpulse rule processed when the port goes off hook. Default inpulse rules are used for incoming ports only (Class of Service = T, W2, AT, or A2). The inpulse rule chosen must be defined at the control console using the inpulse rules Table screens or by using the inpulse rule table objects.

Object Identifier

1.3.6.1.4.1.886.1.3.4.1.10

Data Type

Integer. Possible values for this field are 0 to 30 in 2K mode, or 0 to 255 in 4K mode. Zero means you are not selecting a default inpulse rule.

Access Policy

Read-write

Status

Mandatory

tcResGroupIndex

{tcPortEntry 11}

Description

A foreign key corresponding to the resGroupIndex in the resGroupTable. This index indicates the number of the resource group to which this port belongs. If no resource group is assigned, the value in this object is zero (0).

To change this attribute, set the tcEntryStatus and the resGroup Table objects to underModification (3).

Object Identifier

1.3.6.1.4.1.886.1.3.4.1.11

Data Type

Integer. Possible values for this field are from 0 to 63 in 2K mode, or 0 to 224 in 4K mode.

Access Policy

Read-write

Status

Mandatory

tcResGroupPosition

{tcPortEntry 12}

Description

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

Object Identifier

1.3.6.1.4.1.886.1.3.4.1.12

Data Type

Integer

Access Policy

Read only

Status

Mandatory

tcPortErrorStatus

{tcPortEntry 13}

Description

Registers the last error that occurred on this port.

Object Identifier

1.3.6.1.4.1.886.1.3.4.1.13

Data Type

Integer

Access Policy

Read only

Status

Mandatory

tcPortOwnerString

{tcPortEntry 14}

Description

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

Object Identifier

1.3.6.1.4.1.886.1.3.4.1.14

Data Type

OwnerString

Access Policy

Read-write

Status

Mandatory

tcPortEntryStatus

{tcPortEntry 15}

Description

The status of the table entry.

Object Identifier

1.3.6.1.4.1.886.1.3.4.1.15

Data Type

PortEntryStatus

Access Policy

Read-write

Status

Mandatory

tcPortTableLastModified

{tc 5}

Description

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

Object Identifier

1.3.6.1.4.1.886.1.3.5

Data Type

TimeTicks

Access Policy

Read only

Status

Mandatory