



APPENDIX C

System Messages

This appendix lists the system messages for Cisco Transport Planner. They are classified as:

- [C.1 Error Messages](#)
- [C.2 Warning Messages](#)
- [C.3 Information Messages](#)



Note

In the System Messages, Cisco Transport Planner will replace {n} with a Site name, an Unit name, an Optical design rule, or a Number as applicable.

C.1 Error Messages

Error Messages for Cisco Transport Planner are listed in [Table C-1](#):

Table C-1 **Error Messages**

Message Type	Error Message
Traffic mapping	50 GHz scalability is supported only with {0} design rules.
Traffic mapping	Verify if in Add/Drop sites, OADM units are forced and compatible with the traffic.
Traffic mapping	No available wavelength due to units forced on optical bypass site {0}
Traffic mapping	Verify if in the optical bypass interfaces there are wavelengths compatible units
Traffic mapping	The network is broken: please connect all the sites together.
Traffic mapping	The traffic model is empty: please add at least one service request.
Traffic mapping	Number of add/drop nodes exceeded the maximum ({0}) allowed in the network.
Traffic mapping	ONS15454 DWDM platform supports up to {0} non-pass-through sites.
Traffic mapping	Line+ sites can't support DMX-O units due to layout constraints.
Traffic mapping	Line+ sites can't support Individual Shelf with DCC chain option due to layout constraints.

Table C-1 Error Messages (continued)

Message Type	Error Message
Traffic mapping	Client {0} is not available in the equipment list.
Traffic mapping	Any to Any traffic is not supported by {0} rules.
Traffic mapping	Can't find a valid path between site {0} and site {1} due to ROADM demand strategy
Traffic mapping	Any to Any traffic requires ROADM units but ROADM is not allowed by restricted equipment list.
Traffic mapping	Can't place ROADM units in site {0} to support Any to Any traffic.
Traffic mapping	ROADM configuration is not allowed by restricted equipment list.
Traffic mapping	Mux Demux configuration is not allowed by restricted equipment list.
Traffic mapping	Only ROADM configuration is allowed with selected design rules.
Traffic mapping	ROADM is not allowed by the selected design rules.
Traffic mapping	ROADM-O is not allowed with L band.
Traffic mapping	Line+ or Terminal+ site topologies are not allowed by selected design rules.
Traffic mapping	Line+ or Terminal+ site topologies require ROADM units but ROADM is not allowed by restricted equipment list.
Traffic mapping	OADM unit {0} defined in {1} is not allowed by restricted equipment list.
Traffic mapping	Can't find a valid aggregating client.
Traffic mapping	Can't find a valid client.
Traffic mapping	Client {0} can't be tuned on wavelength {1}.
Traffic mapping	Forced wavelength {0} is outside selected band.
Traffic mapping	Forced client {0} can't be tuned on selected band.
Traffic mapping	Interface Type {0} is not supported by the selected Design Rules.
Traffic mapping	Add/Drop not available in site {0}.
Traffic mapping	Maximum wavelength re-usage reached for ITU channel {0}.
Traffic mapping	All solutions exceed {0} wavelengths. See the “C.4.1 Wavelength Exceeded” section on page C-20.
Traffic mapping	The anti ASE option is available only in sites with add/drop capability.
Traffic mapping	More than one anti ASE site was selected.
Traffic mapping	Protected services are not allowed with linear networks.
Traffic mapping	In a network with hub nodes protected services are allowed only between hub sites.
Traffic mapping	Invalid routing (out of network boundary). See the “C.4.2 Invalid Routing” section on page C-21.
Traffic mapping	Can't route service with optical bypass in {0}.

Table C-1 Error Messages (continued)

Message Type	Error Message
Traffic mapping	Can't find alternate route due to multiple HUB nodes along the path. See the “C.4.3 Cannot Find Alternate Route” section on page C-21.
Traffic mapping	Can't route service through HUB node {0}. See the “C.4.4 Cannot Route Service” section on page C-22.
Traffic mapping	Overlapped services assigned to the same wavelength. See the “C.4.5 Overlapped Services Assigned to the Same Wavelength” section on page C-22.
Traffic mapping	Protected services assigned to the same wavelength. See the “C.4.6 Protected Services Assigned to the Same Wavelength” section on page C-23.
Traffic mapping	Can't route service due to add drop equipment constraints. See the “C.4.7 Cannot Route Service Because of Add/Drop Constraints” section on page C-23.
Traffic mapping	Design requires forcing a site as ROADM or Full Mux/Demux but no valid site was found.
Traffic mapping	Design requires forcing site as ROADM or Full Mux/Demux: remove equipment constraints.
Traffic mapping	Path constraints prevent routing of {0}
Traffic mapping	Traffic subnet constraints prevent routing of {0}
Traffic mapping	In a linear network, terminal sites must have structure Terminal
Traffic mapping	Wavelength {0} may require additional ASE filtering
Traffic mapping	50 GHz scalability is supported only with {0} design rules
Traffic mapping	The Network is broken: please connect all the sites together
Traffic mapping	The traffic model is empty: please add at least one service request
Traffic mapping	Number of add/drop nodes exceeded the maximum ({0}) allowed in the network
Traffic mapping	ONS15454 DWDM platform supports up to {0} non-pass-through sites
Traffic mapping	Line+ sites can't support DMX-O units due to layout constraints
Traffic mapping	Line+ sites can't support Individual Shelf with DCC chain option due to layout constraints
Traffic mapping	Client {0} is not available in the equipment list
Traffic mapping	Any to Any traffic is not supported by {0} rules
Traffic mapping	Any to Any traffic requires ROADM units but ROADM is not allowed by restricted equipment list
Traffic mapping	Can't place ROADM units in site {0} to support Any to Any traffic
Traffic mapping	ROADM configuration is not allowed by restricted equipment list
Traffic mapping	WXC configuration is not allowed by restricted equipment list
Traffic mapping	Mux Demux configuration is not allowed by restricted equipment list
Traffic mapping	Only ROADM configuration is allowed with selected design rules

Table C-1 Error Messages (continued)

Message Type	Error Message
Traffic mapping	Multidegree structure in site {0} is not allowed with selected design rules
Traffic mapping	ROADM is not allowed by the selected design rules
Traffic mapping	ROADM-O is not allowed with L band
Traffic mapping	Line+ or Terminal+ site topologies are not allowed by selected design rules
Traffic mapping	Line+ or Terminal+ site topologies require ROADM units but ROADM is not allowed by restricted equipment list
Traffic mapping	OADM unit {0} defined in {1} is not allowed by restricted equipment list
Traffic mapping	In mesh network user must force OADM units for site configured as OADM
Traffic mapping	Can't find a valid aggregating client
Traffic mapping	Can't find a valid client
Traffic mapping	Can't find a valid XFP
Traffic mapping	Client {0} can't be tuned on wavelength {1}
Traffic mapping	Forced wavelength {0} is outside selected band
Traffic mapping	Forced client {0} can't be tuned on selected band
Traffic mapping	Interface Type {0} is not supported by the selected Design Rules
Traffic mapping	Add/Drop not available in site {0}
Traffic mapping	Maximum wavelength re-usage reached for ITU channel {0}
Traffic mapping	All solutions exceed {0} wavelengths
Traffic mapping	The anti ASE option is available only in sites with add/drop capability
Traffic mapping	More than one anti ASE site was selected
Traffic mapping	No specific anti-ASE node is required for this traffic matrix requirement
Traffic mapping	Protected services are not allowed with linear networks
Traffic mapping	In a network with hub nodes protected services are allowed only between hub sites
Traffic mapping	Invalid routing (out of network boundary)
Traffic mapping	Can't route service with optical bypass in {0}
Traffic mapping	Can't find alternate route due to HUB nodes along the path
Traffic mapping	Can't route service through HUB node {0}
Traffic mapping	Overlapped services assigned to the same wavelength
Traffic mapping	Routing for some of the services cannot be completed with the given constraints. Please use the link aside for details about the problem.
Traffic mapping	Protected services assigned to the same wavelength
Traffic mapping	Can't route service due to add drop equipment constraints

Table C-1 Error Messages (continued)

Message Type	Error Message
Traffic mapping	Design requires forcing a site as ROADM or Full Mux/Demux but no valid site was found
Traffic mapping	Design requires forcing site as ROADM or Full Mux/Demux: remove equipment constraints
Traffic mapping	PP4 is not allowed in site {0} (fiber interfaces are limited to A,B,C and D)
Traffic mapping	No valid path from {0} to {1}
Traffic mapping	No valid path from {0} to {1}, bypass in {2}
Traffic mapping	Wavelength forced outside of selected band for {0}
Traffic mapping	Client {0} can't be tuned at {1}
Traffic mapping	Invalid functionality option for structure {0} in site {1}
Traffic mapping	Invalid mux - demux configuration in site {0}
Traffic mapping	Invalid mux - demux combination on two sides of site {0}
Traffic mapping	Unit options are not compatible with design rule {0} in site {1}
Traffic mapping	Unit options are not compatible with design rules in site {0}
Traffic mapping	Unit {0} is not available in Restricted Equipment List
Traffic mapping	Mesh topology not supported yet
Traffic mapping	Network Cluster {0} requires mesh algorithm
Traffic mapping	Unconnected site {0}
Traffic mapping	Incompatible port {0} assignment in site {1}
Traffic mapping	No valid SFP was found for port {0} in site {1}
Traffic mapping	Only one GE-ST524 can be assigned to port {0} in site {1}
Traffic mapping	Incompatible rate/reach options circuit {0}
Traffic mapping	Incompatible rate/reach options for port {0} in site {1}
Traffic mapping	Incompatible CIR settings for port {0} in site {1}
Traffic mapping	Can't find a valid SFP for port {0} in site {1}
Traffic mapping	Port {0} in site {1} is not available
Traffic mapping	Exceeded rate for port {0} in site {1}
Traffic mapping	Can't provision circuit {0}
Traffic mapping	Maximum frame rate exceeded in section {0} - {1}
Traffic mapping	Maximum frame rate exceeded in node {0}
Traffic mapping	Protected circuits are not allowed in a linear traffic subnet
Traffic mapping	Invalid routing {0}
Traffic mapping	Client protection is not allowed if all nodes are single card configuration
Traffic mapping	Trunk protection with no client protection is not allowed if at least one node is double card configuration

Table C-1 Error Messages (continued)

Message Type	Error Message
Traffic mapping	Client protection with no trunk protection is not allowed
Traffic mapping	Errors were found on {0}: please run the checker and fix all problems
Traffic mapping	Client and trunk protections are not allowed at the same time on port {0} in site {1}
Traffic mapping	50 GHz scalability is not supported with Ethernet or TDM aggregated demands
Traffic mapping	Cards required for {0} demand are not available in the equipment list
Traffic mapping	Impossible to find two independent paths for protected service
Traffic mapping	Structure {0} is not supported for design rule {1}
Traffic mapping	No available wavelength found due to traffic constraints
Traffic mapping	Too many add/drop nodes ({0} > {1}) in cluster {2}
Traffic mapping	Too many nodes ({0} > {1}) in cluster {2}
Traffic mapping	Too many ROADMs nodes ({0} > {1}) in group {2}
Traffic mapping	Demand {0} defined on traffic subnet {1} is in an invalid status
Traffic mapping	Demand {0} is crossing different sites clusters
Traffic mapping	PP4 forced on site {0} can handle at most 4 sides
Traffic mapping	{0} in Any to Any demand doesn't support 50 GHz scalability
Traffic mapping	Regeneration not available
Traffic mapping	Alien traffic type cannot be regenerated
Traffic mapping	Regeneration not allowed
Traffic mapping	Regeneration not allowed for PSM-OCH protected demands
Traffic mapping	Cards forced in the trails of PRing are not compatible
Traffic mapping	L Band Option not allowed with PSM topology
Traffic mapping	32MUX-O/32-DMX-O cards are not allowed for PSM configuration
Traffic mapping	Optical ByPass not allowed with PSM Config
Traffic mapping	Regeneration not allowed with PSM Config
Traffic mapping	Only LINE site topology is allowed between PSM config
Traffic mapping	Only OLA and Passthrough sites allowed between PSM config
Traffic mapping	Only Passthrough sites allowed between PSM Config
Traffic mapping	Terminal or Terminal Plus configurations are not allowed for PSM Och protection
Traffic mapping	Is not allowed to insert circuit from site {0} to site {1} because is tagged as Omnidirectional Entry Point configuration
Traffic mapping	Is not allowed to insert Any to Any Group contains site {0} and site {1} because is tagged as Omnidirectional Entry Point configuration
Traffic mapping	No Interoperable group found for the card selection. Please check if its a valid card selection

Table C-1 Error Messages (continued)

Message Type	Error Message
Traffic mapping	All the trails of the P-Ring should have same card
Traffic mapping	Restricted Equipment forced by user tm.client_restricted2.details = Client {0} is not available in the equipment list
Traffic mapping	Incompatible source and destination
Traffic mapping	Forced source and destination cards are not compatible
Traffic mapping	Demand cannot be regenerated
Traffic mapping	Conflicting trunk mode
Traffic mapping	Unfeasible trunk mode forcing by the user
Traffic mapping	Cannot force different cards for protection {0} in demand {1}
Traffic mapping	Trunk pluggable not found
Traffic mapping	No trunk pluggable found for the user forced card
Traffic mapping	Unfeasible card mode forcing by user
Traffic mapping	OTU2 XP can have both in/out going trunks in EFEC only in Enhanced Regen Mode
Traffic mapping	No suitable card found
Traffic mapping	Unable to find a compatible card for source or destination
Traffic mapping	Alien traffic type cannot be regenerated
Traffic mapping	User must force OADM units for sites configured as OADM.
Traffic mapping	Mux-Demux should not be forced for site ({0}) as it is not supported by the site type.
Traffic mapping	For hybrid 216 {0} only FLA8 and MD-40 Mux/Demux is allowed.
Traffic mapping	The express loss in the site {0} is High. Please reduce the number of FLAs.
Traffic mapping	The add/drop loss in the site {0} is High. Please reduce the number of FLAs.
Traffic mapping	We cannot mix hybrid 15216 sites with non-hybrid pure MSTP site {0}.
Traffic mapping	We must have atleast one Hub site in a Ring Topology.
Traffic mapping	ROADM demands are not allowed with 15216 hybrid network.
Traffic mapping	L-Band optical subnet rule is not supported in 15216 network.
Traffic mapping	Multiple optical subnets are not supported in single 15216 cluster.
Traffic mapping	A 15216 network is capable only till C Band odd 40ch. Please remove any higher capacity selected {0}.
Traffic mapping	We cannot force FLA8 {0} in a 40 ch optical subnet.
Traffic mapping	Site type Mux/Demux not allowed for {0} in 8 ch optical subnet.
Traffic mapping	Optical by pass at {0} is not allowed with 15216 Network.
Traffic mapping	PSM Line or Section protection at {0} is not allowed with 15216 network.

Table C-1 Error Messages (continued)

Message Type	Error Message
Traffic mapping	There is an overlap in the Route involving {0}. This may be due to the order of regeneration selected.
Traffic mapping	Trunk protection with no client protection is not allowed for selected traffic type.
Traffic mapping	ROADM demand is not supported for PSM Line, PSM Section topology.
Traffic mapping	Optical Bypass is not allowed in a non Add Drop Site {0}.
Traffic mapping	SMR Multidegree site {0} cannot have an omni-direction entry interface.
Traffic mapping	SMR Multidegree is not allowed in site {0} (fiber interfaces are limited to A,B,C and D)
Traffic mapping	PP-Mesh-4-SMR is restricted. SMR Multidegree is not possible in site {0}
Traffic mapping	SMR-1 is restricted. Site {0} type cannot be SMR-1
Traffic mapping	SMR-2 is restricted. Site {0} type cannot be SMR-2
Traffic mapping	Incorrect Client Interface forcing for LAN-WAN Conversion traffic.
Traffic mapping	Incompatible Client Interface forcing.
Traffic mapping	Y-Cable protection is not allowed with electrical SFP.
Traffic mapping	Incompatible trunk Interface forcing
Traffic mapping	10G-XR support w/o FEC trunk interface only.
Amplifier Placement	Automatic Node Turn-Up: In {0}, 32 channels cards are not supported in WXC site.
Amplifier Placement	Automatic Node Turn-Up: In {0}, different design rules for different spans are not supported
Amplifier Placement	Automatic Node Turn-Up: In {0}, Line+ node does not support the selected design rule
Amplifier Placement	Automatic Node Turn-Up: In {0}, multidegree node does not support the selected design rule.
Amplifier Placement	Automatic Node Turn-Up: In {0}, only WXC functionality is supported
Amplifier Placement	Automatic Node Turn-Up: In {0}, 40-MUX-C or 40-DMX-C is not supported.
Amplifier Placement	In {0}, required {1} is in restricted equipment list
Amplifier Placement	In {0}, cannot force a demux if it is not supported by site type.
Amplifier Placement	In {0}, cannot force a mux if it is not supported by site type.
Amplifier Placement	In {0}, cannot force an in-line attenuator if it is not supported by site type.
Amplifier Placement	In {0}, cannot force an in-line attenuator because of presence of OADMs in the other side.

Table C-1 Error Messages (continued)

Message Type	Error Message
Amplifier Placement	Node {0} is set as Pass-through and therefore no hardware or setpoint can be forced
Amplifier Placement	Node {0} faces a raman amplified span, forcing not feasible
Amplifier Placement	Forcing of Raman on {0} is not compatible with the amplifier forcing done in Node {1}. Please correct the forcings done.
Amplifier Placement	Selection of OPT-BST or OPT-BST-E units as pre-amplifier is allowed only if Raman is used on {0}. Please correct the forcings done.
Amplifier Placement	Raman Amplifier configuration for {0} is not allowed by restricted equipment list
Amplifier Placement	Raman post amp forcing is not allowed for {0}
Amplifier Placement	In {0}, OSC card cannot be set to "none"
Amplifier Placement	In {0}, cannot force OSCM card in hybrid node
Amplifier Placement	In {0}, cannot force output power or tilt setpoint without the related amplifier forced.
Amplifier Placement	Invalid forcing in amplifier node of {0} because of Pass-through site forcing.
Amplifier Placement	In {0}, cannot force unplaced OSC card in a non Pass-through site.
Amplifier Placement	In {0}, cannot force OSCM without an amplifier forced.
Amplifier Placement	Cannot force input attenuator in {0} without the related amplifier forced.
Amplifier Placement	Cannot force DCUs in {0} without forcing an amplifier that supports them.
Amplifier Placement	Incompatible types for DCU couple in {0}.
Amplifier Placement	Incompatible dispersion modules in {0}
Amplifier Placement	In {0}, output power is out of limits of amplifier selected.
Amplifier Placement	In {0}, amplifier tilt is out of allowed range.
Amplifier Placement	Couple between {1} and {2} has an invalid value in {0}
Amplifier Placement	Couple between {0} and {1} is of invalid type
Amplifier Placement	Fiber between {1} and {2} has an invalid value in {0}
Amplifier Placement	Fiber between {0} and {1} has SOL total loss greater than EOL total loss.
Amplifier Placement	Span {0} is forced as Raman but no traffic is present
Amplifier Placement	In {0} interfaces selected for add channels cannot be equalized with 40-MUX-C.
Amplifier Placement	Try selecting fewer or more similar interface types, and/or do not use the 40-MUX-C card
Amplifier Placement	Can't respect forcing on {0} attenuator (on channel {1}) in {2} {3} {4}. No A/D ports are available

Table C-1 Error Messages (continued)

Message Type	Error Message
Amplifier Placement	Tilt forced on {0} in {1} {2} {3} when no-tilt design option is selected
Amplifier Placement	DMX-O is suggested as drop unit in {0} instead of the forced DMX.
Amplifier Placement	DMX might cause problems during channels provisioning and or in case of equipment failures.
Amplifier Placement	Fail low channel threshold cannot be set in {0} {1} {2}; please allow placement of booster amplifier.
Amplifier Placement	In {0}, {1} is working with a gain of {2} dB: this value is below its minimum allowed gain.
Amplifier Placement	In {0}, {1} in EOL condition will be working with a gain of {2} dB: this value is below its minimum allowed gain.
Amplifier Placement	In {0}, {1} is working with a gain of {2} dB: this value exceeds its maximum allowed gain.
Amplifier Placement	In {0}, {1} in EOL condition will be working with a gain of {2} dB: this value exceeds its maximum allowed gain.
Amplifier Placement	Site {0} cannot be installed without Cisco Transport Planner configuration file.
Amplifier Placement	Unsupported configuration due to excessive number of amplifiers (max {0} per directions).
Amplifier Placement	Unsupported configuration due to excessive number of OSC regen sites (max {0}).
Amplifier Placement	In {0}, channel power is near the fail low threshold.
Amplifier Placement	In {0}, minimum channel power is below the fail low threshold.
Amplifier Placement	In {0}, OSC channel power is below the fail low threshold.
Amplifier Placement	Network cannot be installed as one or more OSC links are unfeasible.
Amplifier Placement	If possible, try selecting DCN extension option on the longest spans.
Amplifier Placement	Try to unfreeze amplifier or DCUs in site {0}, interface {1}, {2} position.
Amplifier Placement	Transmission error. Please contact custom design.
Amplifier Placement	Transmission error on channel {0}. Please contact custom design.
Amplifier Placement	Excessive ROADM crossTalk penalty on channel {0}. Try to lower the output power of the preamplifier in the ROADM site in which the failed channels are added.
Amplifier Placement	Excessive filtering penalty on channel {0}. Please contact custom design
Amplifier Placement	Filtering problem on channel {0}. Please contact custom design
Amplifier Placement	Excessive PMD on channel {0}. Please contact custom design.
Amplifier Placement	Excessive SC on channel {0}. Please contact custom design.

Table C-1 Error Messages (continued)

Message Type	Error Message
Amplifier Placement	In site {0} the Pass Through forcing and DCN Extension option are incompatible
Amplifier Placement	In {0}, DCN Extension option have to be set on both fiber couples facing a Pass-Through node
Amplifier Placement	Automatic Node Turn-Up: node {0} mandatory requires preamplifiers (otherwise this node must be set as Pass-Through).
Amplifier Placement	Automatic Node Turn-Up: In {0}, amplifier output power cannot be forced.
Amplifier Placement	Automatic Node Turn-Up: In {0}, Fiber Switch protection scheme is not supported.
Amplifier Placement	Automatic Node Turn-Up: In {0}, only "32 Chs +5 dbm/Ch" and "40 Chs +4 dbm/Ch" design rules are supported.
Amplifier Placement	Automatic Node Turn-Up: In {0}, only "32 Chs +5 dbm/Ch" design rule is supported.
Amplifier Placement	Automatic Node Turn-Up: In {0}, C + L band upgradeability is not supported.
Amplifier Placement	Automatic Node Turn-Up: In {0}, OADM output power cannot be forced.
Amplifier Placement	Automatic Node Turn-Up: node {0} cannot be set as OADM full mux/demux.
Dithering Generation	Lower Dithering limit ({0}) cannot be less than {1}
Dithering Generation	Upper Dithering limit ({0}) cannot be greater than {1}
Dithering Generation	Lower Dithering limit ({0}) cannot exceed Upper Limit ({1})
Dithering Generation	Site {0} Dithering value cannot be less than Lower Dithering limit {1}
Dithering Generation	Site {0} Dithering value cannot be greater than Upper Dithering limit {1}
Dithering Generation	Sites {0} and {1} cannot have the same Dithering value
Dithering Generation	Number of available Dithering values {0} cannot be less than number of MultiDegree sites {1}
Dithering Generation	Cannot find available Dithering value for site {0}
Dithering Generation	Cannot force Dithering value different from 0 in site {0}
Layout	MSTP shelves number in site {0} exceeds maximum MultiShelf configuration ({1})
Layout	No linecards placed in Hybrid site {0} optical shelf
Layout	Release 4.7/5.0 does not support MultiShelf
Layout	No PRE/BST card present with OSCM in site {0}
Layout	Layout not feasible for {0} Individual Shelf configuration - No room in the optical shelf to host all the OTS units
Layout	No space for DCU: unlock Site {0} layout

Table C-1 Error Messages (continued)

Message Type	Error Message
Layout	Hybrid Layout in Site {0} is allowed with Individual Shelf only
Layout	Node protection is not allowed in Terminal Site {0}
Layout	DCC Chain in Site {0} is allowed with Individual Shelf only
Layout	Node protection in Site {0} is not allowed with Individual Shelf
Layout	Cable DB part not identified in Site {0}
Layout	Site {0} layout must be unlocked to allow Patch Panel/DCU insertion
Layout	Layout in site {0} cannot be built due an internal error. Other reports for the same site may be wrong or incomplete. Please contact support.
Layout	{0} site layout must be unlocked to apply modified properties
Layout	A/D cards configuration in site {0} is not allowed: please select "Multi Shelf External Switch" or force 32-DMX card
Layout	Units equipped in site {0} shelf {1} need FTA4. Please replace current fan tray before equipping the units into the shelf
Layout	Only card Layout position can be changed (Site {0})
Layout	Card in Rack {0} - Shelf {1} - Slot {2} cannot be moved to Rack {3} - Shelf {4} - Slot {5} (Site {6})
Layout	Just one move is allowed for Card in Rack {0} - Shelf {1} - Slot {2} (Site {3})
Layout	Cards in Rack {0} - Shelf {1} - Slot {2} and Rack {3} - Shelf {4} - Slot {5} (Site {6}) belong to a YCable Protection Group and must be moved to the same destination shelf
Layout	Multidegree topology in site {0} is not supported with Individual Shelf configuration
Layout	Y cable protection with GE XP / 10GEXP / GE EXP / 10GE EXP traffic demand in site {0} is not supported with Osmine Configuration
Layout	Y cable protection with GE XP / 10GEXP traffic demand in site {0} is not supported with Osmine Configuration
Layout	Network not managed by Osmine: Site {0} with WXC and WSS is not admitted.
Amplifier algorithm	In {0}, can't force a demux if it is not supported by site type.
Amplifier algorithm	In {0}, can't force an inline attenuator if it is not supported by site type.
Amplifier algorithm	In {0}, can't force an inline attenuator because of presence of OADMs in the other side.
Amplifier algorithm	Invalid forcing in amplifier node of {0} because of Pass-through site forcing.
Amplifier algorithm	In {0}, can't force unplaced OSC card in a non Pass-through site.
Amplifier algorithm	In {0}, can't force OSCM without an amplifier forced.

Table C-1 Error Messages (continued)

Message Type	Error Message
Amplifier algorithm	Can't force power output or tilt in {0} without the related amplifier forced.
Amplifier algorithm	Cannot force input attenuator in {1} without the related amplifier forced.
Amplifier algorithm	Can't force DCUs in {0} without forcing an amplifier that supports them. See the “C.5.1 Incompatible DCUs (C-Band)” section on page C-25.
Amplifier algorithm	Incompatible types for DCU couple in {0}. See the “C.5.1 Incompatible DCUs (C-Band)” section on page C-25.
Amplifier algorithm	Incompatible dispersion modules in {0}. See the “C.5.1 Incompatible DCUs (C-Band)” section on page C-25.
Amplifier algorithm	In {0}, MMU presence requires OPT-AMP-L forcing in bst and pre position. See the “C.5.2 MMU Does Not Have Correct Amplifier (L-Band)” section on page C-25.
Amplifier algorithm	In {0}, MMU presence requires OPT-PRE and OPT-BST-E forcing. See the “C.5.3 MMU Does Not Have Correct Amplifier (C-Band)” section on page C-26.
Amplifier algorithm	In {0}, output power setting is not supported by the amplifier. See the “C.5.4 Output Power or Tilt are Out of Range” section on page C-26.
Amplifier algorithm	In {0}, amplifier tilt is out of limits. See the “C.5.4 Output Power or Tilt are Out of Range” section on page C-26.
Amplifier algorithm	Couple between {1} and {2} has an invalid value in {0}. See the “C.5.5 Invalid Fiber Values, Types, and Loss Values” section on page C-27.
Amplifier algorithm	Couple between {0} and {1} is of invalid type. See the “C.5.5 Invalid Fiber Values, Types, and Loss Values” section on page C-27.
Amplifier algorithm	Fiber between {1} and {2} has an invalid value in {0}. See the “C.5.5 Invalid Fiber Values, Types, and Loss Values” section on page C-27.
Amplifier algorithm	Fiber between {0} and {1} has SOL total loss greater than EOL total loss. See the “C.5.5 Invalid Fiber Values, Types, and Loss Values” section on page C-27.
Amplifier algorithm	A {0} attenuator (on channel {1}) in {2} {3} {4} was present, but A/D ports on this channel are no longer available. See the “C.5.7 Unavailable Add/Drop Channels” section on page C-28.
Amplifier algorithm	Tilt forced on {0} in {1} {2} {3} when no-tilt design option is selected. See the “C.5.8 Tilt Forced When No Tilt Design Is Selected” section on page C-28.
Amplifier algorithm	Can't change DMX with DMX-O as needed in {1} because user forcing. See the “C.5.9 Cannot Replace 32-DMX with 32DMX-O” section on page C-29.

Table C-1 Error Messages (continued)

Message Type	Error Message
Amplifier algorithm	Low threshold on channels power in {0} {1} {2} because passive user forcing on OPT-BST position.
Amplifier algorithm	In {0}, {1} is working in an invalid mode. See the “C.5.10 Preamplifier Working in Invalid Mode” section on page C-29.
Amplifier algorithm	In {0}, {1} is working with a gain of {2} dBm: this is too low. See the “C.5.11 Gain Too Low for an Amplifier” section on page C-30.
Amplifier algorithm	In {0}, {1} will be work (in EOL condition) with a gain of {2} dBm: this is too low. See the “C.5.11 Gain Too Low for an Amplifier” section on page C-30.
Amplifier algorithm	In {0}, {1} is working with a gain of {2} dBm: this is too high. See the “C.5.12 Gain Too High for an Amplifier” section on page C-30.
Amplifier algorithm	In {0}, {1} will be work (in EOL condition) with a gain of {2} dBm: this is too high. See the “C.5.12 Gain Too High for an Amplifier” section on page C-30.
Amplifier algorithm	In {0}, {1} cannot respect user forcing. See the “C.5.13 User Forcing Overridden” section on page C-31.
Amplifier algorithm	In {0}, {1} cannot respect user forcing due to {2}. See the “C.5.13 User Forcing Overridden” section on page C-31.
Amplifier algorithm	Unsupported configuration due to excessive number of amplifiers (max {0} per directions). See the “C.5.14 Unsupported Configuration” section on page C-32.
Amplifier algorithm	Unsupported configuration due to excessive number of OSC regen sites (max {0}). See the “C.5.14 Unsupported Configuration” section on page C-32.
Amplifier algorithm	In {0}, channel power is near the fail threshold. See the “C.5.15 Channel Power Near the Fail Threshold” section on page C-32.
Amplifier algorithm	In {0}, channel power is below the fail threshold. See the “C.5.16 Channel Power Below the Fail Threshold” section on page C-32.
Amplifier algorithm	In {0}, OSC channel power is near the fail threshold. See the “C.5.15 Channel Power Near the Fail Threshold” section on page C-32.
Amplifier algorithm	In {0}, OSC channel power is below the fail threshold. See the “C.5.17 OSC Channel Power Below the Fail Threshold” section on page C-33.
Amplifier algorithm	Network unfeasible due to OSC channel. See the “C.5.17 OSC Channel Power Below the Fail Threshold” section on page C-33.
Amplifier algorithm	Try to unfreeze amplifier or dcus in site {0}, interface {1}, {2} position
Amplifier algorithm	Transmission error. Please contact custom design.
Amplifier algorithm	Transmission error on channel {0}. Please contact custom design.

Table C-1 Error Messages (continued)

Message Type	Error Message
Amplifier algorithm	Excessive ROADM crossTalk penalty on channel {0}. Try to lower the output power of the preamplifier in the Roadm site in which the failed channels are added.
Amplifier algorithm	Excessive filtering penalty on channel {0}. Please contact custom design.
Amplifier algorithm	Filtering problem on channel {0}. Please contact custom design.
Amplifier algorithm	One or more demands present unexpected results at the end of the analysis. Refer to channels errored on system.
Amplifier algorithm	Excessive PMD on channel {0}. Please contact custom design.
Amplifier algorithm	Node {0} is set as Pass-Through and therefore no hardware or setpoint can be forced
Amplifier algorithm	Forcing of tilt in {0} is not allowed in case of Raman amplified span
Amplifier algorithm	Forcing of Raman ({0}) is not allowed in PSM Topology. Please correct the forcings done.
Amplifier algorithm	In {0} Raman embedded amplifier has dispersion modules with MAL greater then supported
Amplifier algorithm	In {0} Raman post amplifier has total dispersion modules with MAL greater then supported
Amplifier algorithm	Network analysis must be validated. Please contact custom design.
Amplifier algorithm	In network with PSM-Line protection and different fiber types, DCU placement must be validated.
Amplifier algorithm	Site {0} connected to duct with DCN extension property enabled must have functionality Add/Drop.
Amplifier algorithm	Couple under duct {0} must have DCN extension property disabled
Amplifier algorithm	In site {0} between fibers DCN extension, no OSC and no Booster are allowed
Amplifier algorithm	In Add/Drop site {0}, OSC cannot be forced since the facing fiber has DCN extension enabled
Amplifier algorithm	In Add/Drop site {0} facing a fiber with DCN extension enabled, Booster cannot be forced as None
Amplifier algorithm	The DCN path from {0} to {1} contains too many Line Amplifier sites
Amplifier algorithm	In interfaces tagged as Omnidirectional Entry Point is not allowed set Mux or Demux
Amplifier algorithm	In interfaces tagged as Omnidirectional Entry Point a Terminal site must be connected
Amplifier algorithm	Node {0} refers to an interface tagged as Omnidirectional Entry Point and therefore no amplifier can be forced
Amplifier algorithm	Node {0} refers to an interface tagged as Omnidirectional Entry Point and therefore no OSC card can be forced
Amplifier algorithm	Raman Amplifier module is required in node {0}. Unlock it

Table C-1 Error Messages (continued)

Message Type	Error Message
Amplifier algorithm	Forcing of amplifier in {0} is not allowed in case of Raman amplified span.
Amplifier algorithm	Node {0} faces a raman amplified span, only OPT-BST unit can be forced.
Amplifier algorithm	Span {0} must be configured as Raman to allow Raman amplifier {1} in node {2}.
Amplifier algorithm	Forcing of Raman on {0} is not compatible with the amplifier forcing done in Node {1}. Please correct the forcings done.
Amplifier algorithm	Selection of OPT-BST or OPT-BST-E units as pre-amplifier is allowed only if Raman is used on {0}. Please correct the forcings done.
Amplifier algorithm	Raman Amplifier configuration for {0} is not allowed by restricted equipment list.
Amplifier algorithm	Raman post amp forcing is not allowed for {0}
Amplifier algorithm	Node {0} faces a raman amplified span, only OPT-BST unit can be forced.
Amplifier algorithm	Span {0} must be configured as Raman to allow Raman amplifier {1} in node {2}.
Amplifier algorithm	Forcing of Raman on {0} is not compatible with the amplifier forcing done in Node {1}. Please correct the forcings done.
Amplifier algorithm	Selection of OPT-BST or OPT-BST-E units as pre-amplifier is allowed only if Raman is used on {0}. Please correct the forcings done.
Amplifier algorithm	Raman Amplifier configuration for {0} is not allowed by restricted equipment list.
Amplifier algorithm	Raman post amp forcing is not allowed for {0}
Amplifier algorithm	Span {0} is forced as Raman but no traffic is present.
Amplifier algorithm	In {0} is not allowed forcing a booster or setting DCN extension enabled.
Amplifier algorithm	In Add/Drop site {0} facing a fiber with DCN extension enable, OSC cannot be forced
Amplifier algorithm	Site {0} is facing spans with different optical design rules: an Add/Drop functionality is required.
Amplifier algorithm	{0} is an hybrid 15454 MSTP site : selection of OPT-BST or OPT-BST-E units as pre-amplifiers is not allowed.
Amplifier algorithm	Span is too short for Raman amplification. If possible, lower the output power setpoint of the booster.
Amplifier algorithm	Raman optical amplifiers are not available in L Band.
Amplifier algorithm	In {0} is not allowed forcing a pre-amplifier or setting DCN extension enabled.
Amplifier algorithm	In {0}, cannot force OSCM card without an amplifier or SMR forced.

Table C-1 Error Messages (continued)

Message Type	Error Message
Amplifier algorithm	Forcing of T-DCU on both {0} is not allowed. Please remove T-DCU forcing either from {1}.
Amplifier algorithm	{0} - side {1} is connected to a span not used by any Service Demand.
Amplifier algorithm	In multidegree site {0} configured as SMR2 type with Individual Shelf, only first two sides can have OSC-CSM unit forcing.
Amplifier algorithm	{0} has OSC functionality : side {1} can't face a fiber with DCN extension enabled.
Amplifier algorithm	Raman amplification is not supported on duct {0}, connecting two hybrid sites.
Amplifier algorithm	Some circuit exceeded the maximum number of allowed amplified spans. Please contact Custom Design team for validating the design.
Layout messages	MSTP shelves number in site {0} exceeds maximum MultiShelf configuration (12).
Layout messages	No linecards placed in Hybrid site {0} optical shelf.
Layout messages	Release 4.7/5.0 does not support MultiShelf.
Layout messages	No PRE/BST card present with OSCM in site {0}.
Layout messages	Layout not feasible for {0} Individual Shelf configuration - No room in the optical shelf to host all the OTS units.
Layout messages	No space for DCU: unlock Site {0} layout.
Layout messages	Hybrid Layout in Site {0} is allowed with Individual Shelf only.
Layout messages	Node protection is not allowed in Terminal Site {0}.
Layout messages	DCC Chain in Site {0} is allowed with Individual Shelf only.
Layout messages	Node protection in Site {0} is not allowed with Individual Shelf.
Layout messages	Cable DB part not identified in Site {0}.
Layout messages	Site {0} layout must be unlocked to allow Patch Panel/DCU insertion.
Layout messages	Layout in site {0} cannot be built due an internal error. Other reports for the same site may be wrong or incomplete. Please contact support.
Layout messages	Y cable protection with GE XP / 10GEXP traffic demand in site {0} is not supported with Osmine Configuration
Layout messages	Network not managed by Osmine: Site {0} with WXC and WSS is not admitted.
Layout messages	Invalid Alien Shelf Height for site {0} , Alien Shelves Could not be added.
Layout messages	Alien Shelf Height is more than Rack Height for site {0} , Alien Shelves Could not be added.

Table C-1 Error Messages (continued)

Message Type	Error Message
Layout messages	SMR with Raman Amplification is Not Supported on Side {0} for Site {1}.
Layout messages	SMR2 in Separate Shelf is not Feasible for Site {0} due to cable unavailable with appropriate length.

C.2 Warning Messages

Warning Messages for Cisco Transport Planner are listed in [Table C-2](#):

Table C-2 Warning Messages

Message Type	Warning Message
Traffic mapping	Wavelength {0} may require additional ASE filtering.
Traffic mapping	In {0}, add/drop input power must be modified from {2} to {1}
Amplifier algorithm	Can't respect forcing on {0} attenuator (on channel {1}) in {2} {3} {4}. No A/D ports are available. See the “C.5.6 Attenuator Forcing Not Allowed” section on page C-27 .
Amplifier algorithm	In {0}, minimum channel power is near the fail low threshold
Amplifier algorithm	Dcu design not optimized due to "Run Quick Analysis" option
Amplifier algorithm	In {0}, 32-DMX might have problem as drop unit. If supported by node type try 32-DMX-O.
Amplifier algorithm	32-DMX might cause problems during channels provisioning and/or in case of equipment failure.
Amplifier algorithm	In {0}, 40-DMX might have problem as drop unit.
Amplifier algorithm	40-DMX might cause problems during channels provisioning and/or in case of equipment failure.
Amplifier algorithm	PSM switching threshold on port {0}-RX {1} is close to minimum channel power
Amplifier algorithm	PSM switching on port {0}-RX {1} might not be completely reliable
Amplifier algorithm	PSM switching on port {0}-RX is based on EDFA safety shutdown procedure and might be longer than 50 ms
Amplifier algorithm	PSM unit might not correctly switch on port {0}-RX in case of fiber cut
Amplifier algorithm	OPT-RAMP-C on {0} side is facing a span with an excessive loss.
Amplifier algorithm	OPT-RAMP-CE on {0} side is facing a span with an excessive loss.
Amplifier algorithm	Forcing of T-DCU on {0} in L-Band network is not allowed. Please check the TDCU forcing in Options Explorer.
Amplifier Placement	In {0}, MMU mandatory requires OPT-PRE and OPT-BST-E. Please remove any other amplifier type forcing
Amplifier Placement	In {0} an external DCN access must be provided for DCN functionality
Amplifier Placement	In {0}, OSC channel power is near the fail low threshold.

Table C-2 Warning Messages

Message Type	Warning Message
Amplifier Placement	A {0} attenuator (on channel {1}) in {2} {3} {4} was present, but A/D ports on this channel are longer available
Amplifier Placement	In {0}, control mode of {3} amplifier must be modified from {2} to {1}
Amplifier Placement	Output tilt is forced on {0} in {1} {2} {3} but no-tilt design option is selected
Amplifier Placement	In {0}, MMU mandatory requires OPT-AMP-L in booster and pre position. Please remove any other amplifier type forcing
Amplifier Placement	In {0}, bypass power must be modified from {2} to {1}
Amplifier Placement	In {0}, drop power must be modified from {2} to {1}
Amplifier Placement	In {0}, RX amplifier power fail threshold must be modified from {2} to {1}
Amplifier Placement	In {0}, TX amplifier power fail threshold must be modified from {2} to {1}
Amplifier Placement	In {0}, channel LOS threshold must be modified from {2} to {1}.
Amplifier Placement	In {0}, OSC LOS threshold must be modified from {2} to {1}
Amplifier Placement	In {0}, minimum expected span loss must be modified from {2} to {1}
Amplifier Placement	In {0}, maximum expected span loss must be modified from {2} to {1}
Amplifier Placement	In {0}, OSC TX power must be modified from {2} to {1}
Amplifier Placement	In {0}, band drop power at {3} must be modified from {2} to {1}
Amplifier Placement	In {0}, channel drop power at {3} must be modified from {2} to {1}
Amplifier Placement	In {0}, 32-DMX might have problem as drop unit. If supported by node type try 32-DMX-O
Amplifier Placement	32-DMX might cause problems during channels provisioning and/or in case of equipment failure
Amplifier Placement	In {0}, 40-DMX might have problem as drop unit
Amplifier Placement	40-DMX might cause problems during channels provisioning and/or in case of equipment failure
Amplifier Placement	In {0}, {1} is working in power control mode.
Amplifier Placement	In case of fiber cut or equipment failure, channels survivability might not be guaranteed
Amplifier Placement	In {0}, {1} cannot respect user forcing. See C.5.13 User Forcing Overridden, page C-31 .
Amplifier Placement	The forced setpoint/item has been overwritten by CTP with a feasible value.
Amplifier Placement	In {0}, {1} cannot respect user forcing due to {2}
Amplifier Placement	The forced setpoint/item has been overwritten by CTP with a feasible value.
Amplifier Placement	Between nodes {0} and {1}, {2} gain equalizer node(s) is (are) suggested for an optimal design
Amplifier Placement	Excessively long chains of OLA nodes (>{0}) might cause problems in LOS detection at receivers in case of channels failure.

Table C-2 Warning Messages

Message Type	Warning Message
Amplifier Placement	In {0}, 32-DMX-O is suggested as drop unit in instead of the forced 32-DMX.
Amplifier Placement	32-DMX might cause problems during channels provisioning and/or in case of equipment failure.
Amplifier Placement	Osmine configuration in site {0} is not supported with L-Band
Amplifier Placement	Hybrid Site Config in a Single-Shelf configuration is only supported for an OADM Site Type
Layout	Osmine configuration in site {0} is not supported with L-Band
Layout	Hybrid Site Config in a Single-Shelf configuration is only supported for an OADM Site Type
Layout	Unit in the Rack {0} - Shelf {1} - Slot {2} for site {3} requires FAN TRAY 4.

C.3 Information Messages

Information Messages for Cisco Transport Planner are listed in [Table C-3](#):

Table C-3 Information Messages

Message Type	Information Message
Traffic Mapping	No specific anti-ASE node is required for this traffic matrix requirement
Layout messages	Layout for Site {0} is unlocked to add Fiber Storage
Layout messages	The generated BOM does not include SONET/SDH units(OC192LR and OC48ELR will be included if applicable)
Amplifier algorithm	In {0}, the attenuator {1} is placed between fiber interface and port {2} of {3}.
Amplifier algorithm	This attenuator is present both in BOM and Project Explorer but not in internal connections.

C.4 Traffic Mapping Troubleshooting

The following procedures help you resolve traffic mapping problems with the network design.

C.4.1 Wavelength Exceeded

Symptom Cisco Transport Planner warns you that all network analysis solutions exceed the wavelengths.

[Table C-4](#) describes the potential causes of the symptom and the solution.

Table C-4 Wavelength Exceeded

Possible Problem	Solution
A span in the ring must carry more than 32 wavelengths to implement the traffic demands.	Remove the forced path routing on unprotected channels: <ol style="list-style-type: none"> 1. In the Project Explorer under the Service Demands folder, right-click the appropriate demand and choose Edit from the shortcut menu. 2. In the Path column, choose Auto from the drop-down list. 3. Reanalyze the network.
A span in the ring must carry more than 16/8 wavelengths.	Change the traffic mapping design rules under the related subnet and choose an option that allows a greater number of channels: <ol style="list-style-type: none"> 1. In the Project Explorer under the Subnets folder, expand Traffic Mapping and click System Release. 2. In the Properties pane, choose the new rules option from the C-Band Rules or L-Band Rules drop-down list. 3. Reanalyze the network.

C.4.2 Invalid Routing

Symptom Cisco Transport Planner warns you of invalid routing (out of network boundary).

[Table C-5](#) describes the potential causes of the symptom and the solution.

Table C-5 Invalid Routing

Possible Problem	Solution
In a linear network, the direction of each service demand is restricted by the topology but the user applied an unfeasible direction forcing.	Remove the forced path routing: <ol style="list-style-type: none"> 1. In the Project Explorer under the Service Demands folder, right-click the appropriate demand and choose Edit from the shortcut menu. 2. In the Path column of the Edit <demand> dialog box, choose Auto from the drop-down list. 3. Reanalyze the network.

C.4.3 Cannot Find Alternate Route

Symptom Cisco Transport Planner warns you that it cannot find an alternate route due to multiple hub nodes along the path.

[Table C-6](#) describes the potential causes of the symptom and the solution.

Table C-6 *Cannot Find Alternate Route*

Possible Problem	Solution
Because a hub node does not allow express channels, if multiple hub nodes are present, not all point-to-point connections are possible.	Remove the hub functionality constraints: <ol style="list-style-type: none"> 1. In the Project Explorer under the Sites folder, click C-Band or L-Band for the appropriate site. 2. In the Properties pane, choose Auto from the Functionality drop-down list. 3. Reanalyze the network.

C.4.4 Cannot Route Service

Symptom Cisco Transport Planner warns you that it cannot route service through a hub node.

[Table C-7](#) describes the potential causes of the symptom and the solution.

Table C-7 *Cannot Route Service*

Possible Problem	Solution
Since a hub node does not allow express channels, not all service routes are possible.	Remove the path routing forcing or the hub functionality constraints. <p>To remove the path routing forcing:</p> <ol style="list-style-type: none"> 1. In the Project Explorer under the Service Demands folder, right-click the appropriate demand and choose Edit from the shortcut menu. 2. In the Path column of the Edit <demand> dialog box, choose Auto from the drop-down list. 3. Reanalyze the network. <p>To remove the hub functionality constraints:</p> <ol style="list-style-type: none"> 1. In the Project Explorer under the Sites folder, click C-Band or L-Band for the appropriate site. 2. In the Properties pane, choose Auto from the Functionality drop-down list. 3. Reanalyze the network.

C.4.5 Overlapped Services Assigned to the Same Wavelength

Symptom Cisco Transport Planner warns you that overlapped services are assigned to the same wavelength.

[Table C-8](#) describes the potential causes of the symptom and the solution.

Table C-8 *Overlapped Services Assigned to the Same Wavelength*

Possible Problem	Solution
Some unprotected channels with assigned wavelengths and directions overlap along the ring.	Remove path routing forcing and/or wavelengths on the specific channels. To remove the path routing forcing: <ol style="list-style-type: none"> 1. In the Project Explorer under the Service Demands folder, right-click the appropriate demand and choose Edit from the shortcut menu. 2. In the Path column of the Edit <demand> dialog box, choose Auto from the drop-down list. 3. Reanalyze the network. To remove the wavelength forcing: <ol style="list-style-type: none"> 1. In the Project Explorer under the Service Demands folder, right-click the appropriate demand and choose Edit from the shortcut menu. 2. In the Wavelength column of the Edit <demand> dialog box, choose Auto from the drop-down list. 3. Reanalyze the network.

C.4.6 Protected Services Assigned to the Same Wavelength

Symptom Cisco Transport Planner warns you that protected services are assigned to the same wavelength.

[Table C-9](#) describes the potential causes of the symptom and the solution.

Table C-9 *Protected Services Assigned to the Same Wavelength*

Possible Problem	Solution
In ring networks, each protected/P-ring request allocates one wavelength. If more than one protected service is forced on the same wavelength and aggregation is not possible, the network is not feasible.	Remove forced wavelengths on the specific channels: <ol style="list-style-type: none"> 1. In the Project Explorer under the Service Demands folder, right-click the appropriate demand and choose Edit from the shortcut menu. 2. In the Wavelength column of the Edit <demand> dialog box, choose Auto from the drop-down list. 3. Reanalyze the network.

C.4.7 Cannot Route Service Because of Add/Drop Constraints

Symptom Cisco Transport Planner warns you that it cannot route service because of add/drop equipment constraints.

[Table C-10](#) describes the potential causes of the symptom and the solution.

Table C-10 Cannot Route Service Because of Add/Drop Constraints

Possible Problem	Solution
Add/drop equipment forcing might prevent express channels in a node, which makes unfeasible some channel routes.	<p>Remove add/drop equipment constraints.</p> <ol style="list-style-type: none"> 1. In the Project Explorer under the Sites folder, click C-Band or L-Band for the appropriate site. 2. In the Properties pane, choose Auto from the Functionality drop-down list. 3. Reanalyze the network.

C.4.8 Design Requires a ROADM or Full Mux/Demux Site

Symptom Cisco Transport Planner warns you that the design requires a ROADM or full multiplexer/demultiplexer site, but no valid site was found.

[Table C-11](#) describes the potential causes of the symptom and the solution.

Table C-11 Cannot Route Service Because of Add/Drop Constraints

Possible Problem	Solution
The traffic mapping algorithm might not be able to find a valid solution that respects both the user forcing and the system specifications (in terms of maximum site losses and layout constraints). In such cases, the only possible countermeasure for the algorithm is to upgrade one node to a full capacity node (ROADM or full Mux/Demux). If no valid node is found due to user forcing or equipment locking, the process stops and the network is unfeasible.	<p>Remove any forcing/locking that prevents at least one node from being upgraded to ROADM or full multiplexer/demultiplexer. Conditions that prevent upgrading a node to ROADM or full multiplexer/demultiplexer are:</p> <ul style="list-style-type: none"> • Site functionality is forced to Add/Drop and site type is forced to OADM • During an upgrade procedure, OADM equipment is locked if the site <p>To change site functionality and type forcing:</p> <ol style="list-style-type: none"> 1. In the Project Explorer under the Sites folder, click C-Band or L-Band for the appropriate site. 2. In the Properties pane, choose Auto from the Functionality drop-down list. 3. Choose Auto from the Type drop-down list. 4. Reanalyze the network. <p>To unlock OADM equipment:</p> <ol style="list-style-type: none"> 1. In the Project Explorer under the Sites folder, click Add/Drop under the appropriate site. 2. In the Properties pane, choose Auto from the OADM Forcing drop-down list. 3. Reanalyze the network.

C.5 Amplifier Troubleshooting

The following procedures help you resolve amplifier-related problems with the network design.

C.5.1 Incompatible DCUs (C-Band)

Symptom Cisco Transport Planner warns you that DCUs are incompatible.

[Table C-12](#) describes the potential causes of the symptom and the solution.

Table C-12 *Incompatible DCUs (C-Band)*

Possible Problem	Solution
If the DCUs in the same site are both SMF slope compensating, the cumulative negative dispersion should not be over 1600 ps/nm.	Remove or change one of the forced DCUs: <ol style="list-style-type: none"> 1. In the Project Explorer, click C-Band Amplifiers. 2. In the Properties pane, choose the desired DCU from the DCU1 and/or DCU2 drop-down lists. 3. Reanalyze the network.
If the DCUs in the same site belong to different types, only the following DCU combinations are allowed: DCU-E-200 and DCU-100, or DCU-E-350, and DCU-100.	
Two E-LEAF slope compensating DCUs are not allowed at the same site.	

C.5.2 MMU Does Not Have Correct Amplifier (L-Band)

Symptom Cisco Transport Planner warns you that an L-band node with an MMU requires that the OPT-AMP-L card is forced as the preamplifier (PRE) and booster amplifier (BST).

[Table C-13](#) describes the potential causes of the symptom and the solution.

Table C-13 *MMU Does Not Have the Correct Amplifier (L-Band)*

Possible Problem	Solution
In L-band, a node with an MMU installed has amplifier forcing other than two OPT-AMP-L amplifier units, one as PRE and one as BST.	Remove any amplifier forcing in the node: <ol style="list-style-type: none"> 1. In the Project Explorer under the Sites folder, click L-Band Amplifiers for the appropriate site. 2. In the Properties pane, choose Auto from the PRE and BST drop-down lists. 3. Reanalyze the network.

C.5.3 MMU Does Not Have Correct Amplifier (C-Band)

Symptom Cisco Transport Planner warns you that a C-band node with an MMU requires both a preamplifier (OPT-PRE) and a booster (OPT-BST).

[Table C-14](#) describes the potential causes of the symptom and the solution.

Table C-14 *MMU Does Not Have the Correct Amplifier (C-Band)*

Possible Problem	Solution
In C-band, a node with an MMU installed requires both OPT-PRE and OPT-BST.	Remove any amplifier forcing in the node: <ol style="list-style-type: none"> 1. In the Project Explorer under the Sites folder, click C-Band Amplifiers for the appropriate site. 2. In the Properties pane, choose Auto from the PRE and BST drop-down lists. 3. Reanalyze the network.

C.5.4 Output Power or Tilt are Out of Range

Symptom Cisco Transport Planner warns you that the output power or tilt are out of range for the amplifier selected.

[Table C-15](#) describes the potential causes of the symptom and the solution.

Table C-15 *Output Power or Tilt are Out of Range*

Possible Problem	Solution
The output power or tilt forced by the user is not within the allowed range based on the algorithm selected and the type of amplifier selected.	Remove or change the forced value: <ol style="list-style-type: none"> 1. In the Project Explorer under the Sites folder, click C-Band Amplifiers or L-Band Amplifiers for the appropriate site. 2. In the Properties pane, choose Auto from the Tilt drop-down list in the From Fiber and To Fiber areas. If you force a value, the tilt value limits are -3.0 to +3.0. 3. Reanalyze the network.

C.5.5 Invalid Fiber Values, Types, and Loss Values

Symptom Cisco Transport Planner warns you of one of the following:

- Fiber pairs are of invalid types or values
- Fibers have a start of life (SOL) total loss greater than an end of life (EOL) total loss

Table C-16 describes the potential causes of the symptom and the solution.

Table C-16 Invalid Fiber Values, Types, and Loss Values

Possible Problem	Solution
An attenuator is forced in a site where there is no place to connect.	<p>Remove the attenuator forcing or verify that the attenuator is inserted on the correct side and wavelength:</p> <ol style="list-style-type: none"> 1. In the Project Explorer under the Sites folder, click C-Band Amplifiers or L-Band Amplifiers for the appropriate site. 2. In the Properties pane, complete one of the following: <ul style="list-style-type: none"> • Choose Auto from the Attenuator drop-down list in the From Fiber area to remove the forcing. • Verify that the attenuator is inserted on the correct side and wavelength. If not, revise accordingly. 3. Reanalyze the network.

C.5.6 Attenuator Forcing Not Allowed

Symptom Cisco Transport Planner warns you that attenuator forcing on channels is not allowed; no add/drop ports are available.

Table C-17 describes the potential causes of the symptom and the solution.

Table C-17 Attenuator Forcing Not Allowed

Possible Problem	Solution
Cisco Transport Planner has an attenuator forced in a site where there is no place to connect.	<p>Remove the attenuator forcing or verify that the attenuator is inserted on the correct side and wavelength:</p> <ol style="list-style-type: none"> 1. In the Project Explorer under the Sites folder, click C-Band Amplifiers or L-Band Amplifiers for the appropriate site. 2. In the Properties pane, complete one of the following: <ul style="list-style-type: none"> • Choose Auto from the Attenuator drop-down list for the appropriate amplifier. • Verify that the attenuator is inserted on the correct side and wavelength. If not, revise accordingly. 3. Reanalyze the network.

C.5.7 Unavailable Add/Drop Channels

Symptom Cisco Transport Planner warns you that an attenuator was present, but add/drop channels are no longer available.

Table C-18 describes the potential causes of the symptom and the solution.

Table C-18 Unavailable Add/Drop Channels

Possible Problem	Solution
After a network upgrade, a client was removed but the add/drop attenuator is still forced.	Unlock the add/drop attenuator: <ol style="list-style-type: none"> 1. In the Project Explorer under the Sites folder, click Client for the appropriate site. 2. In the Properties pane, choose Auto from the drop-down list for the appropriate Rx and Tx attenuator. 3. Reanalyze the network.

C.5.8 Tilt Forced When No Tilt Design Is Selected

Symptom Cisco Transport Planner warns you that tilt is forced for an amplifier although No Tilt Design was selected for the network.

Table C-19 describes the potential causes of the symptom and the solution.

Table C-19 Tilt Forced When No Tilt Design is Selected

Possible Problem	Solution
The user forced one or more amplifier tilt setting, but the No Tilt Design option is also selected. Note To view that No Tilt Design is selected in the Project Explorer, click the appropriate system release under DWDM Design Rules settings in the Subnets folder.	Remove forced tilt for the amplifier: <ol style="list-style-type: none"> 1. In the Project Explorer under the Sites folder, click C-Band Amplifiers or L-Band Amplifiers for the appropriate site. 2. In the Properties pane, choose Auto from the Tilt drop-down list for the appropriate amplifier. 3. Reanalyze the network.

C.5.9 Cannot Replace 32-DMX with 32DMX-O

Symptom Cisco Transport Planner warns you that 32-DMX cannot be replaced with 32DMX-O as needed because of user forcing.

Table C-20 describes the potential causes of the symptom and the solution.

Table C-20 *Cannot Replace 32-DMX with 32DMX-O*

Possible Problem	Solution
Cisco Transport Planner attempts to use the 32DMX-O card but the 32-DMX card is forced by the user. This could cause an overload of alarms or, if no channel is alarmed, problems during network installation.	<p>If channels dropped at the site are alarmed, allow the use of add/drop attenuators:</p> <ol style="list-style-type: none"> 1. In the Project Explorer under the Subnets folder, expand DWDM Design Rules and click System Release. 2. In the Properties pane, uncheck No TXT/Line-Card RX Bulk Attenuator Design. 3. Reanalyze the network. <p>If no channel is alarmed, remove the 32-DMX forcing:</p> <ol style="list-style-type: none"> 1. In the Project Explorer under the Sites folder, click Add/Drop for the appropriate site. 2. In the Properties pane, choose Auto from the Demux drop-down list. 3. Reanalyze the network.

C.5.10 Preamplicifier Working in Invalid Mode

Symptom Cisco Transport Planner warns you that a preamplifier is working in an invalid mode.

Table C-21 describes the potential causes of the symptom and the solution.

Table C-21 Preamplifier Working in Invalid Mode

Possible Problem	Solution
A preamplifier is working in power control mode. Based on the traffic matrix, channel survivability might not be guaranteed if the fiber is cut or the equipment fails.	<p>If the booster amplifier preceding the preamplifier is forced as None by the user, remove the None forcing on the booster amplifier:</p> <ol style="list-style-type: none"> 1. In the Project Explorer under the Sites folder, click C-Band Amplifiers or L-Band Amplifiers for the appropriate site. 2. In the Properties pane, choose Auto from the Tilt drop-down list for the From Fiber (BST) amplifier. 3. Reanalyze the network. <p>If the span preceding the preamplifier is within the 27 to 30 dB range, use a higher powered C- or L-band rules algorithm (such as, 32 Chs + 5 dBm/ch):</p> <ol style="list-style-type: none"> 1. In the Project Explorer under the Subnets folder, expand Traffic Mapping and click System Release. 2. In the Properties pane, choose the new rules option from the C-Band Rules or L-Band Rules drop-down list. 3. Reanalyze the network. <p>If span is greater than 30 dB, the error is unavoidable.</p>

C.5.11 Gain Too Low for an Amplifier

Symptom Cisco Transport Planner warns you that an amplifier is working with a gain that is too low.

[Table C-22](#) describes the potential causes of the symptom and the solution.

Table C-22 Gain Too Low for an Amplifier

Possible Problem	Solution
An amplifier is working with a gain lower than its minimum capabilities. This could be caused by a span that is too short or by compensation problems (L-band only) coupled with the “Use in-line attenuator” option not selected.	<p>If attenuators are forced or inline attenuators were disabled, remove the forcing on the attenuators:</p> <ol style="list-style-type: none"> 1. In the Project Explorer under the Sites folder, click Add/Drop for the appropriate site. 2. In the Properties pane, choose Auto from the Attenuator drop-down list. 3. Reanalyze the network.

C.5.12 Gain Too High for an Amplifier

Symptom Cisco Transport Planner warns you that an amplifier is working with a gain that is too high.

[Table C-23](#) describes the potential causes of the symptom and the solution.

Table C-23 Gain Too High for an Amplifier

Possible Problem	Solution
An amplifier is working with a gain that is greater than its physical capabilities.	Remove the forcing on the attenuators: <ol style="list-style-type: none"> 1. In the Project Explorer under the Sites folder, click Add/Drop for the appropriate site. 2. In the Properties pane, choose Auto from the Attenuator drop-down list. 3. Reanalyze the network.

C.5.13 User Forcing Overridden

Symptom Cisco Transport Planner warns you that user forcing will not be allowed.



Note

This is a warning and does not prevent the network from being fully functional. The message is displayed in situations where a forcing configured by the user cannot be respected due to physical constraints since the problem may appear only after several calculation steps. The algorithm notifies the user and ignores the setting to avoid interrupting the analysis.

[Table C-24](#) describes the potential causes of the symptom and the solution.

Table C-24 User Forcing Overridden

Possible Problem	Solution
If the warning appears during a network upgrade, this means the installation parameters must be updated because the upgrade is traffic affecting. This warning could also appear after importing a Cisco MetroPlanner 2.5.x network with all output as forcings.	For a network upgrade, unlock the site with the warning. For a 2.5.x import, if you cannot update the installation parameters, open the design in Cisco MetroPlanner 2.5.x.



Note

In the upgrade mode, Cisco Transport Planner remembers all the parameters from last analysis and not from its parent network. A warning with respect to the installation parameters is displayed only when there is a difference between the new values and the values from previous analysis. For example: Create a network design and analyse it. Upgrade the network design and modify some spans. Analyse the upgraded network. A warning message is displayed since some of the installation parameters have changed. Re-analyse the network with making modifications. The warning is no longer displayed since none of the installation parameters have changed. You can create a diff report to identify all the modified installation parameters, see [“3.2.14 Viewing Report Differences” section on page 3-31](#).

C.5.14 Unsupported Configuration

Symptom Cisco Transport Planner warns you that the configuration is unsupported because of an excessive number of amplifiers or OSC regeneration sites.

[Table C-25](#) describes the potential causes of the symptom and the solution.

Table C-25 *Unsupported Configuration*

Possible Problem	Solution
The system is working over its specifications.	Revise the design and reanalyze.

C.5.15 Channel Power Near the Fail Threshold

Symptom Cisco Transport Planner warns you that the channel power is near the fail threshold.

[Table C-26](#) describes the potential causes of the symptom and the solution.

Table C-26 *Channel Power Near the Fail Threshold*

Possible Problem	Solution
Some thresholds are set to the minimum value allowed; this could lead to some false alarms during network life.	Remove the forcing: <ol style="list-style-type: none"> 1. In the Project Explorer under the Sites folder, click C-Band Amplifiers or L-Band Amplifiers for the appropriate site. 2. In the Properties pane, choose Auto from the PRE and BST drop-down lists. 3. Reanalyze the network.

C.5.16 Channel Power Below the Fail Threshold

Symptom Cisco Transport Planner warns you that the channel power is below the fail threshold.

[Table C-27](#) describes the potential causes of the symptom and the solution.

Table C-27 Channel Power Below the Fail Threshold

Possible Problem	Solution
The channel power received by the site is too low, and the fail threshold cannot be set.	Remove the forcing: <ol style="list-style-type: none"> 1. In the Project Explorer under the Sites folder, click C-Band Amplifiers or L-Band Amplifiers for the appropriate site. 2. In the Properties pane, choose Auto from the PRE and BST drop-down lists. 3. Reanalyze the network.

C.5.17 OSC Channel Power Below the Fail Threshold

Symptom Cisco Transport Planner warns you that the OSC channel power is below the fail threshold and that the network is not feasible.

[Table C-28](#) describes the potential causes of the symptom and the solution.

Table C-28 OSC Channel Power Below the Fail Threshold

Possible Problem	Solution
The OSC channel is not working.	Remove the forcing: <ol style="list-style-type: none"> 1. In the Project Explorer under the Sites folder, click C-Band Amplifiers or L-Band Amplifiers for the appropriate site. 2. In the Properties pane, choose Auto from the OSC drop-down list. 3. Reanalyze the network. <p>If the span where the OSC fails is longer than 37 dB, the error is unavoidable.</p>

