



ribbon™

**Ribbon Academy
Partners Course Catalog
NPT**

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About us

In today’s competitive market, businesses and individuals must acquire knowledge of leading-edge tools to stay ahead. By learning the latest technologies, all companies and their personnel gain the expertise needed to attain this goal.

Ribbon’s Packet and Optical Training Services is responsible for training company personnel as well as a broad spectrum of Ribbon’s Packet and Optical customers.

We offer excellent training for people like you, covering the complete range of the company’s hardware products and dedicated software.

We offer tailor-made training courses and workshops, which provide in-depth instruction in the operation, maintenance, and troubleshooting of our network systems and components.

The courses and workshops are held either at our training centers, or at the customer premises, depending on the session requirements.

Our resources extend to online training sessions, as well as self-learning movies on our Intranet site, regarding global subjects such as the technologies themselves.

Our instructors are all certified with many years of industry and teaching experience. Recognized as industry experts, they lecture worldwide and are able to deliver courses in many languages such as English, Spanish, Russian, German, as well as a bevy of other languages.



Course Delivery Methods

Courses can be given in one of the three delivery methods listed below. The courses are offered both as dedicated courses and as part of the ongoing yearly partner program. Take a look at any course page to find out if it can be given as a webinar or only as frontal.

Frontal in a Ribbon facility: This type of course is given in a classroom at one of our training centers world wide by a certified Ribbon instructor. The course will usually involve a mixture of theoretical sessions and practical exercises. Most courses are limited to 8 students.

Frontal in a customer facility: This type of course is given by a Ribbon certified instructor at the customer`s facility. The customer is responsible to make the necessary arrangements as detailed below. Please contact us in order to arrange such a course. Most courses are limited to 8 students.

Webinar course: Some courses can be given in webinar form. Remote connection for the theoretical sessions is done via MS Teams while practical exercises are done via a remote connection to the lab. It is necessary to make sure you have a working headset (earphones and a microphone) before the session and a good internet connection. Number of students per class is determined per course.

Note that some courses offer a part that can be done via a webinar and a part that can only be frontal.

Accreditation criteria and certificate

Eligibility for the Ribbon official accreditation certificate will be based on meeting all the following criteria: participation to all the lectures and hands on practice exercises as well as successful completion of the course exam.

The official certificate is granted to the participant only and it will include: the participant name, company name, course name and accreditation level.

Per seat or dedicated course

Our yearly partner training program offers courses from this catalog several times a year. These courses offer you the option to register only one or two people – per seat.

An alternative option is to purchase a complete dedicated course for your company.



Prerequisites When Performing Courses at the Customer's Site:

For Theoretical Sessions or the Theoretical Parts of Management Sessions:

- Projectors supporting HD resolution
- Whiteboard or flipchart, with markers

For Management Sessions:

Using a local lab for network management courses:

- Management software
- At least 4 PCs connected to the management station to be used as clients
- At least 2 to 3 elements connected to the management station
- No live traffic

Using a remote lab for network management courses:

- At least 4 PCs connected to an unfirewalled high speed internet connection, to be used as clients

For installation courses at the customer's site:

- At least 2 elements not carrying live traffic

Neptune Programs

The partner catalog includes two programs for the Neptune product line. Each program covers the expertise required to deliver professional services successfully. These services include (A) installation, (B) configuration and (C) handle potential support scenarios. The programs differ by the supported protocols (MPLS-TP, IP-MPLS) and the related application.

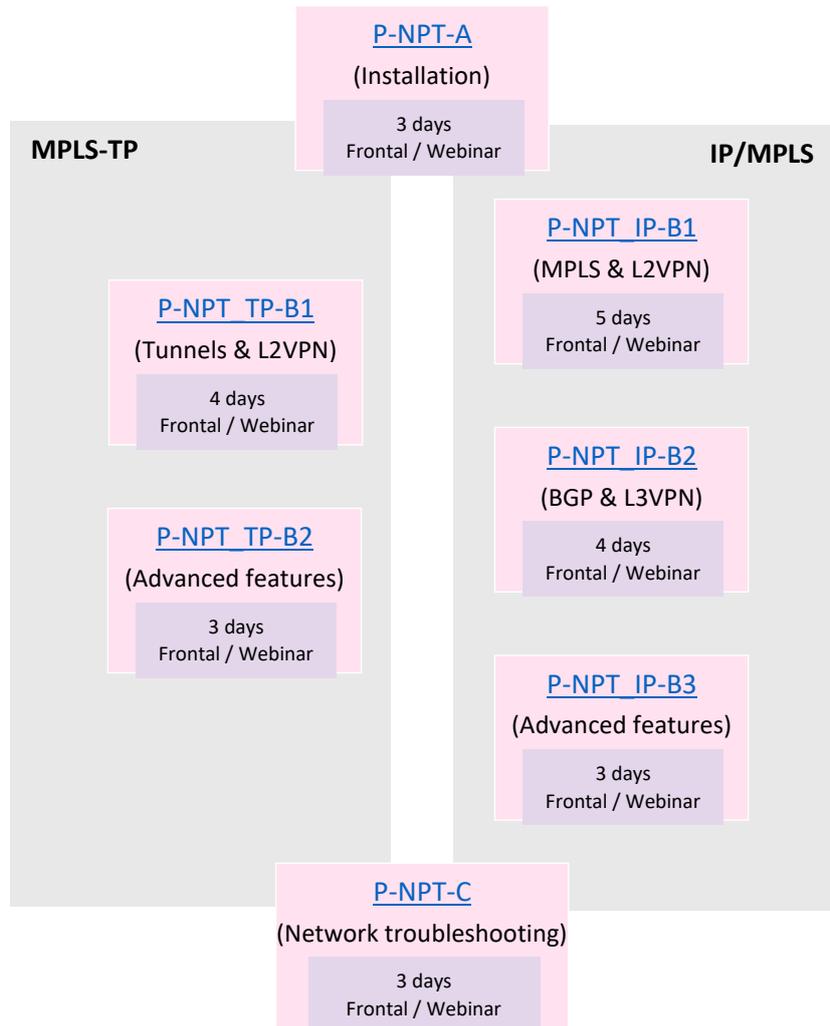
Neptune with MPLS-TP

This program covers Neptune based MPLS-TP implementation. The various training courses on this program cover all professional services aspects for levels A, B and C Described above.

Neptune with IP/MPLS

This program covers Neptune based IP/MPLS implementation. The various training courses on this program cover all professional services aspects for levels A, B and C Described above.

Recommended Course Path



In order to be NPT certified – partners must undertake a 10 OJT (to be quoted separately)





Neptune Level A (HW & Initial Configuration)

Course Duration (frontal / webinar): 3 days

Course Code: P-NPT-A

Course Content:

This course introduces you to NPTi family, NPTi installation and management Topics include:

- NPTi HW - cards and modules (one NVM based, one USB based)
- NVM loader application:
 - NVM burning
 - USB installation
- Introduction to CLI
- Initial configuration using CLI and LCT
 - Slot assignment
 - Switch configuration
 - Port configuration
- Connection to management overview (DCN)

Goals:

Upon completion of this course, you will be able to:

- Describe the Neptune chassis and different Neptune cards
- Perform installation and commissioning on an Neptune

Target Audience:

- Field personnel
- NOC personal
- Anyone wishing to get acquainted with the Neptune product line
- NOC operators (as a prerequisite for a Level B course)

Prerequisites:

- Basic TCP/IP
- Basic Layer 2
 - Frame Structure
 - VLANs
- Basic Layer 3
 - Static Routing
 - Basic Addressing/Subnetting
 - Distance Vector/Link State Protocol
 - Routing Information Base(RIB), Forwarding Information Base(FIB)



Neptune & MPLS-TP – Level B1 (Basic MPLS-TP Networking)

Course Duration (frontal / webinar): 4 days

Course Code: P-NPT_TP-B1

Course Content:

- Ethernet and MPLS-TP Technology overview
- Switch & port configuration (IP networks creation)
- Tunnel configuration
- Linear protection
- CAC and QoS
- L2VPN services – P2P, MP2MP, P2MP

Goals:

Upon completion of this course, you will be able to:

- Operate an MPLS-TP network composed of Neptune products
- Provision a L2VPN service over MPLS-TP network, including Tunnels configuration, and services

Target Audience:

- NOC operators
- Network administrators
- Network and/or System engineers
- Network Engineers, Designers and Administrators

Prerequisites:

Neptune Level A [[P-NPT-A](#)]



Neptune & MPLS-TP – Level B2 (Advanced MPLS-TP Networking)

Course Duration (frontal / webinar): 3 days

Course Code: P-NPT_TP-B2

Course Content:

- CES Service – configuration of TDM services over MPLS network
- Pseudo Wire Redundancy (PWR) – concept and configuration of service protection
- Multi Segment Pseudo Wire (MS-PW) – concept and configuration of a service over multiple tunnel segments
- H-VPLS
- CFM – configuration and uses of CFM tool
- Tunnel consistency tool
- L2VPN consistency tool

Goals:

Upon completion of this course, you will be able to:

- Provision advance L2VPN services over MPLS-TP network, including CES, MS-PW, PWR
- Troubleshoot inconsistencies in databases in the level of MPLS-TP tunnels and L2VPN services

Target Audience:

- NOC operators
- Network administrators
- Network and/or System engineers
- Network Engineers, Designers and Administrators

Prerequisites:

Neptune & MPLS-TP Level B1 [[P-NPT_TP-B1](#)]



Neptune & IP/MPLS – Level B1 (IP/MPLS Networking L2VPN)

Course Duration (frontal / webinar): 5 days

Course Code: P-NPT_IP-B1

Course Content:

- Ethernet and IP/MPLS Technology overview
- Switch & port configuration (IP networks creation)
- IGPs: OSPF, ISIS – theory and configuration
- LDP and FRR
- L2VPN services – P2P, MP2MP, P2MP
- L2VPN consistency tool
- IGP and LDP troubleshooting
- CES services

Goals:

Upon completion of this course, you will be able to:

- Operate an IP/MPLS network composed of Neptune products
- Describe IGP routing protocols concepts
- Describe the LDP neighbor discovery mechanism and session establishment process
- Provision a L2VPN service over IP/MPLS network, including IGP configuration, LDP, and services
- Troubleshoot inconsistencies in databases in the level of L2VPN services

Target Audience:

- NOC operators
- Network administrators
- Network and/or System engineers
- Network Engineers, Designers and Administrators

Prerequisites:

Neptune Level A [[P-NPT-A](#)]



Neptune & IP/MPLS – Level B2 (IP/MPLS Networking L3VPN)

Course Duration (frontal / webinar): 4 days

Course Code: P-NPT_IP-B2

Course Content:

- BGP protocol
 - iBGP, eBGP
 - BGP attributes, decision algorithm, message types
 - Route reflector
- iBGP configuration
- BGP policies
- L3VPN concept and configuration
- CE-PE connectivity
 - OSPF
 - eBGP
 - Static routes
- L3VPN consistency tool
- BGP troubleshooting

Goals:

Upon completion of this course, you will be able to:

- Operate an IP/MPLS networks with L3VPN
- Establish and manage EBGP connectivity between ASs
- Understand and configure L3VPN

Target Audience:

- NOC operators
- Network administrators
- Network and/or System engineers
- Network Engineers, Designers and Administrators

Prerequisites:

Neptune & MPLS/IP Level B1 [[P-NPT_IP-B1](#)]



Neptune & IP/MPLS – Level B3 (IP/MPLS Advance Networking)

Course Duration (frontal / webinar): 3 days

Course Code: P-NPT_IP-B3

Course Content:

- BGP-PIC
- BGP-LU
- BGP prefix SID
- TI-LFA
- VRRP
- 6VPE
- ISIS multi-topology
- PHT and IRB (MPLS-TP courses as a prerequisite)

Goals:

Upon completion of this course, you will be able to:

- Describe and configure BGP advance features
- Understand the solutions for co-existence of IPv6 with IPv4

Target Audience:

- NOC operators
- Network administrators
- Network and/or System engineers
- Network Engineers, Designers and Administrators

Prerequisites:

Neptune & MPLS/IP Level B1 [[P-NPT_IP-B2](#)]



Neptune, IP/MPLS & MPLS-TP Level C

Course Duration (frontal / webinar): 2 days

Course Code: P-NPT-C

Course Content:

This course teaches advanced troubleshooting in an IP/MPLS network composed of Neptunes

Topics include:

- Logs and processes
- IGP timers
- Advanced command line tools
- Fault management
- Performance monitoring

Goals:

Upon completion of this course, you will be able to detect and solve issues on an IP/MPLS network using GUI and CLI

Target Audience:

- NOC operators
- Network administrators
- Network and/or System engineers
- Network Engineers, Designers and Administrators

Prerequisites:

Neptune, MPLS/IP or MPLS-TP Level B courses

[\[P-NPT IP-B3\]](#) or [\[P-NPT TP-B2\]](#)

