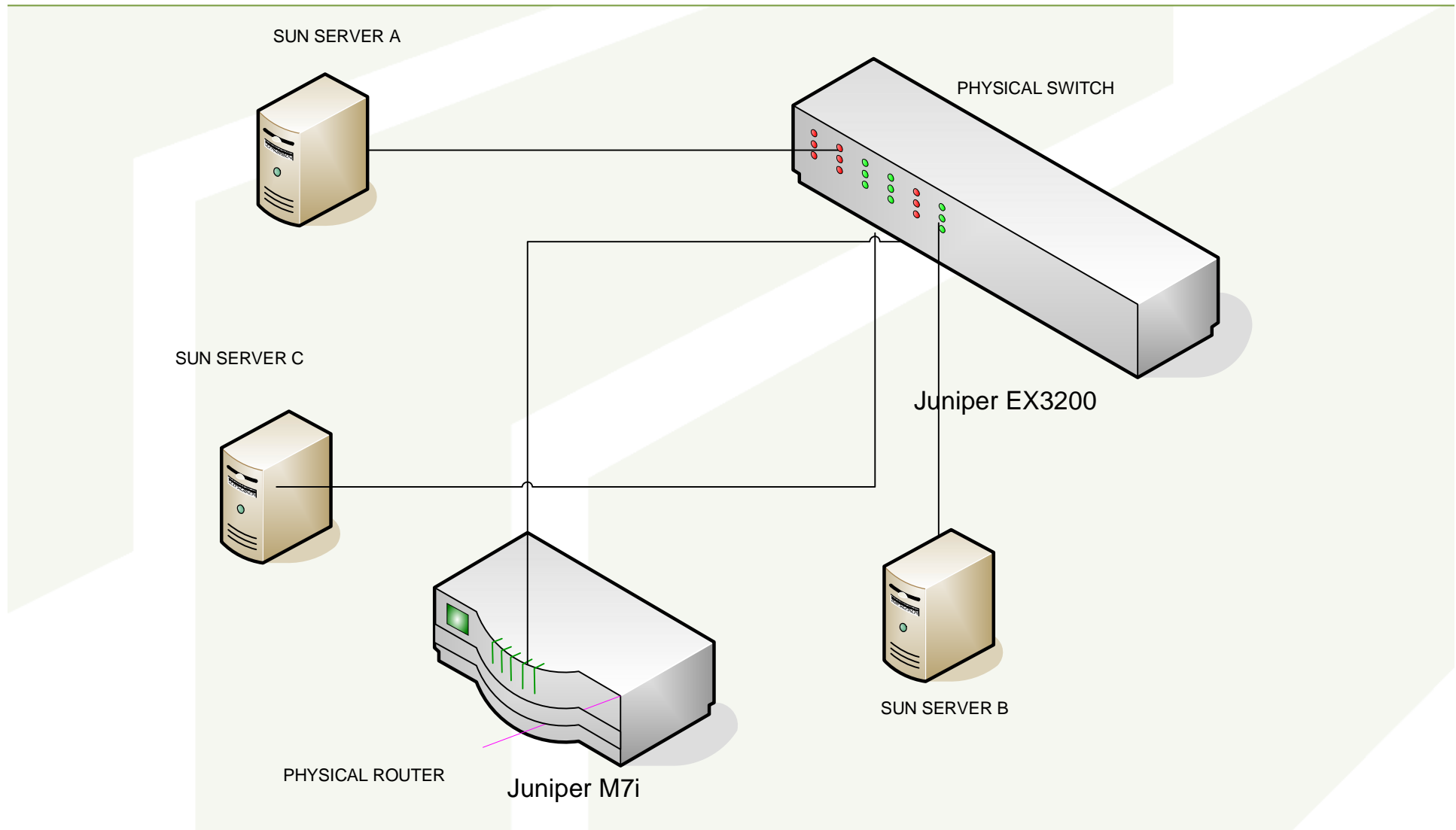


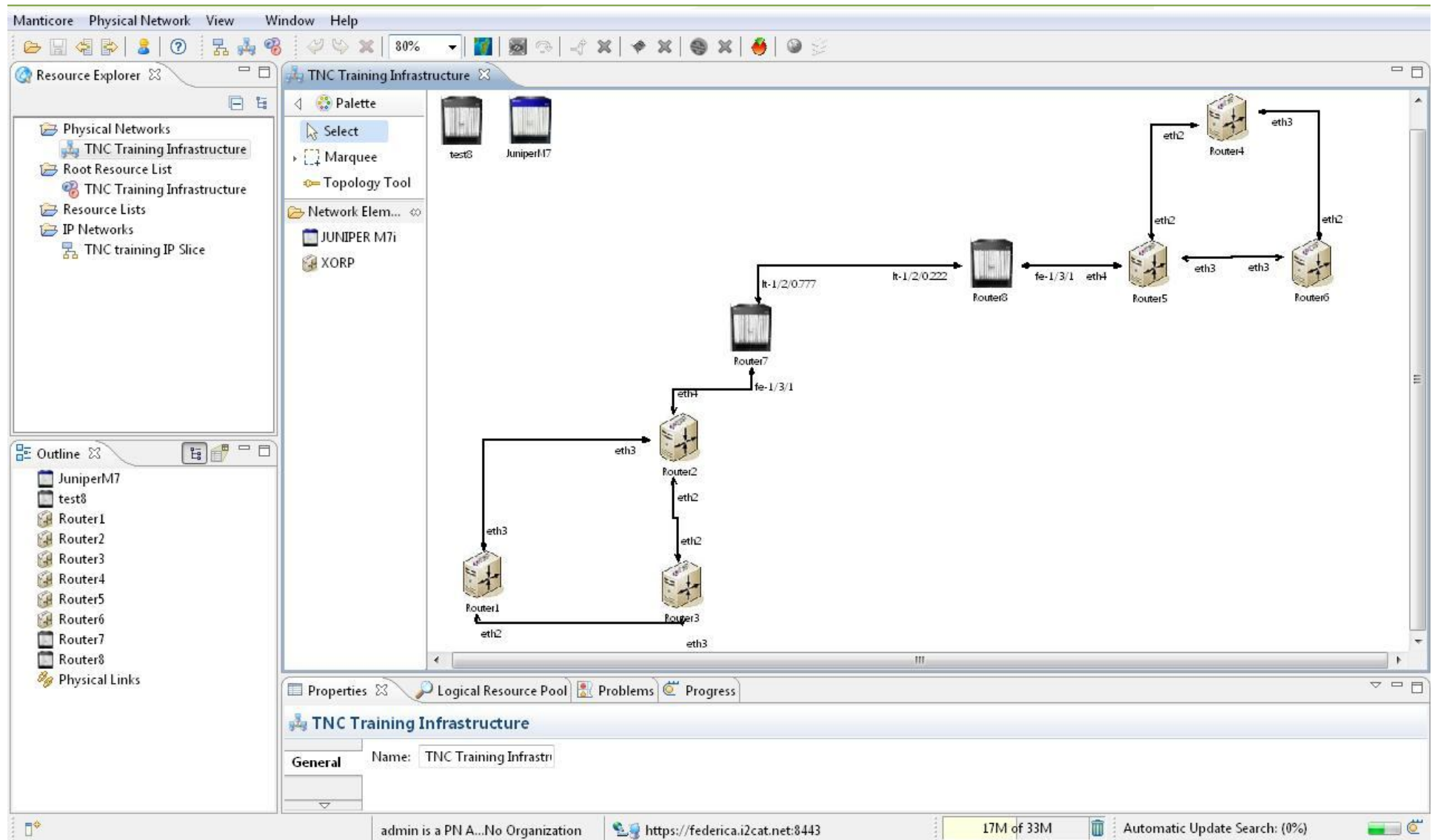
07/06/2009

TNC `09
VIRTUALIZATION
AND SLICE
SERVICE

Physical Infrastructure



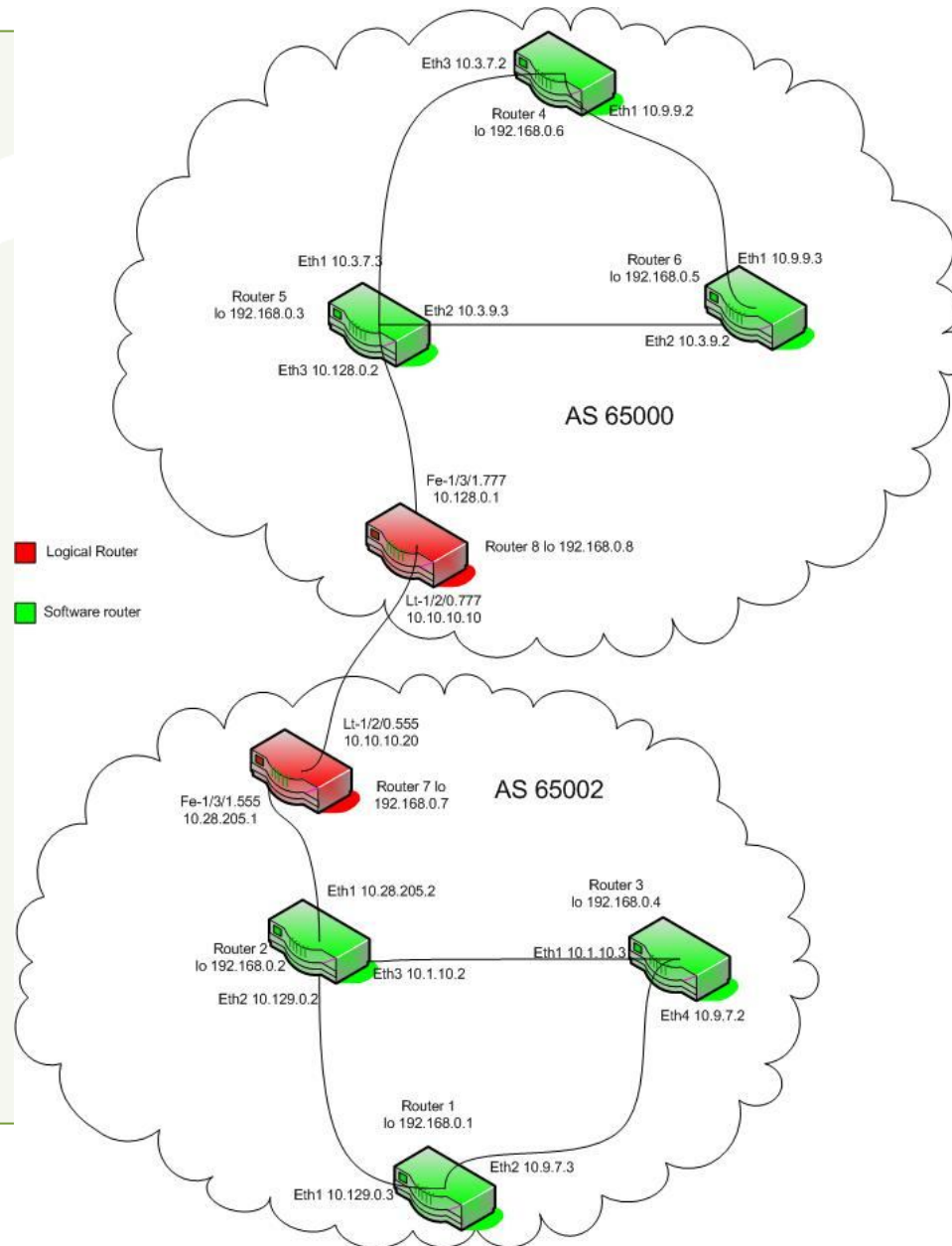
Virtualization and Slice Service physical infrastructure view



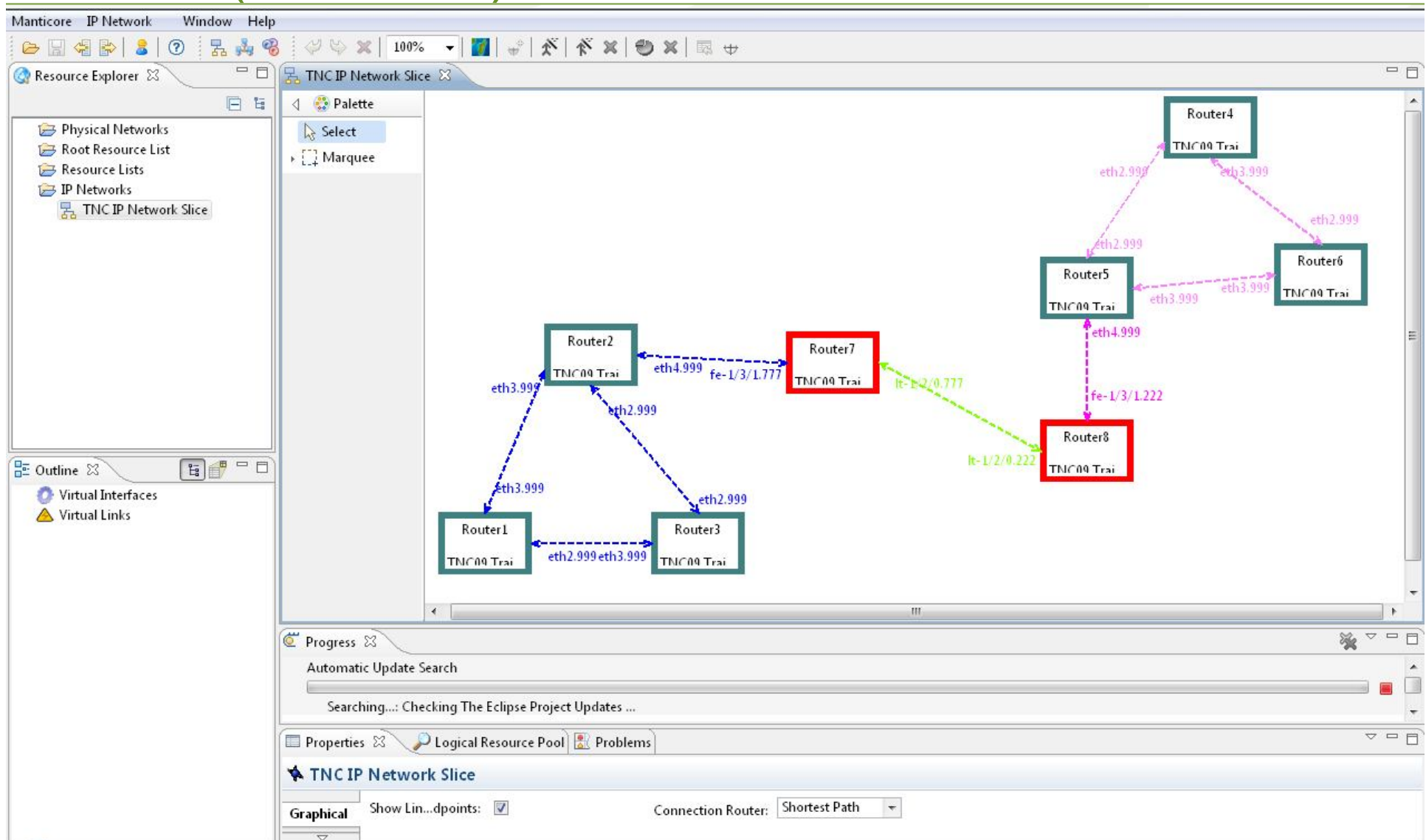
Virtualization and Slice Service resource list view (to be subleased to end users)

The screenshot displays the Manticore software interface. The main window shows a network diagram titled "TNC09 Training FEDERICA". The diagram consists of eight routers, labeled Router1 through Router8, each represented as a box containing "TNC09 Trai". The routers are interconnected with dashed lines, forming a hierarchical structure: Router1 and Router3 are connected to Router2; Router2 and Router7 are connected to Router4; Router4 is connected to Router5 and Router6; Router5 and Router6 are connected to Router8; and Router7 and Router8 are connected to each other. On the left side, there is a "Resource Explorer" pane with a tree view showing "Physical Networks", "Root Resource List", "TNC09 Training FEDERICA", "Resource Lists", and "IP Networks". Below it is an "Outline" pane with "Virtual Interfaces" and "Virtual Links". A "Palette" on the right contains "test8 TNC09 Trai" and "JuniperM7 TNC09 Trai". At the bottom, a "Properties" pane shows details for "TNC09 Training FEDERICA": Name: TNC09 Training FEDERICA, Type: Logical Network, Owner: No Organization, and Leasor: (empty).

IP slice requested by the end user



Virtualization and Slice Service IP slice view (end user)



Modifying IPv4 addresses

The screenshot displays the Manticore IP Network application interface. A central dialog box titled "Modify IPv4 Address" is open, allowing for the configuration of a new IPv4 address and netmask for a selected resource. The dialog is divided into two columns: "Source resource" and "Target resource".

Field	Source resource	Target resource
ID	eth4.999	fe-1/3/L777
Old IPv4 Ad	Not assigned	Not assigned
Old Netmask	Not assigned	Not assigned
New IPv4 Ad	192.168.0.4	192.168.0.5
New Netmask	24	24

The background network diagram shows several routers (Router4, Router5, Router6, Router8) connected via virtual links. Router8 is highlighted with a red border. The network slice is identified as "TNC IP Network Slice".

At the bottom of the application, the "Properties" pane shows details for the selected "VirtualLink":

Property	Value
Resource ID	vlink-Router2-Router7-1244133324165
Owner	No Organization
Source...twork	TNC09 Training FEDERICA
Source Ne...ork Type	Logical Network

Configuring OSPF 1

The screenshot displays the Manticore - RMC interface with the OSPF configuration dialog box open. The dialog is titled "Open-Shortest Path First" and prompts the user to "Select the IP networks to announce".

IP Network selection

Available interfaces

- vlink-Router2-Router7-1244133324165
- vlink-Router7-Router8-1244133527698
- vlink-Router6-Router4-1244133776791
- vlink-Router4-Router5-1244133769216
- vlink-Router2-Router3-1244133316818
- vlink-Router5-Router6-1244133761305
- vlink-Router8-Router5-1244133680957
- vlink-Router1-Router3-1244133309219
- vlink-Router1-Router2-1244133271973

Selected interfaces

- vlink-Router2-Router7-1244133324165
- vlink-Router6-Router4-1244133776791

The background network diagram shows several routers (Router4, Router5, Router6, Router8) and their connections. Links are labeled with interface names like eth2.999 and eth3.999. A red box highlights a specific router in the diagram.

Buttons at the bottom of the dialog: < Back, Next >, Finish, Cancel.

Bottom status bar: TNC IP Network Slice, Graphical, Show Lin...dpoints: , Connection Router: Shortest Path

Configuring OSPF 2

The screenshot displays the Manticore RMC interface with the OSPF configuration dialog box open. The dialog is titled "Open-Shortest Path First" and shows "OSPF general configuration parameters".

Required fields:

- Networks announced: [Empty field]
- Area: 0.0.0.0

Optional fields:

- Integer Priority: 5
- Cost: 0
- Hello interval: 10 (Restore Default)
- Dead interval: 40 (Restore Default)
- Redistribute Static Route:
- Redistribute Dynamic Route:
- Protocol: [Dropdown menu] (Restore Default)
- Passive interface: (Restore Default)
- Authentication type:

DR Node:

- v.node_Router2
- v.node_Router7
- v.node_Router8
- v.node_Router6
- v.node_Router4
- v.node_Router5
- v.node_Router3
- v.node_Router1

BDR Node:

- v.node_Router2
- v.node_Router7
- v.node_Router8
- v.node_Router6
- v.node_Router4
- v.node_Router5
- v.node_Router3
- v.node_Router1

The background network diagram shows a mesh of routers: Router4, Router6, and TNC00 Trai. Connections are labeled with interface names and IP addresses, such as eth2.999 and eth3.999. A red box highlights a specific router in the diagram.

At the bottom of the interface, the "TNC IP Network Slice" is selected, and the "Connection Router" is set to "Shortest Path".

Configuring BGP

Border Gateway Protocol

Invalid IP Address for the neighbor

General configuration

Peer AS: 65002 Name: ebgp Export Policy: exportPolicy
AS number: 65000 Type: IBGP EBGP Import Policy: importPolicy

Addresses to import

IPv4 Address: 10.10.10/24
Netmask:

Neighbors

IPv4 Address: 190.168.0
10.10.10.10

Local IPs

IPv4 Address: 10.10.10.20

Protocols

static
rip
direct
ospf
bgp

Next hops

IPv4 Address: 10.10.10.20

Finish Cancel

Progress
Automatic Update Search
Searching...: Checking EMF Validation Framework Updates ...

Properties Logical Resource Pool Problems

Router7

Destination	Next-hop	Flags
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