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USER MANUAL

FOXMAN-UN

WebUI

Annex

Hitachi Energy

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1 Preface

The usage for this document is to gather all symbols and graphical indicators in one place for easy reach for users of the new Web UI for FOXMAN-UN.

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2 Entities - visual language

2.1 Device icon

Device icon is an icon that represents a single node in the network. It consists of three elements:

1 Service icon – visible only when a service is selected or pinned in right panel;

2 NE icon – representing a device on the visualized network map, content of which can be changed based on customers' icon library;

3 Name plate – scalable element containing the name of the device in client's network, set during creation of the NE element;

Table1 contains listed elements. More detailed states are presented in further sections.

NE icon	Service icon	Name plate

Figure 1: Elements of device icon

2.2 States of device icon related to user actions

Different styling of this icon indicates the state a device can be in (Figure 2). There are 4 main states related to the user actions:

- Default – device in the network visible on a map. It indicates the absence of alarms;
- Inactive – device in the network that is not part of a service selected by the user on a map or in the entity browser;
- Non-manageable – NMS lost connection to this device and all data about this device may be obsolete;
- Disabled – the user cannot perform any actions on a disabled device;

All listed states can be in "selected" form if a user selects the device on the map or in the entity browser. A selected device does not equal a selected service.

Alarm states are described in section 3 Alarms (on page 8) of this document.

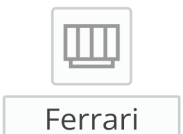
Selected	Default	Inactive	Non-manageable	Disabled
No				
Yes				

Figure 2: Aggregated states of NE icon

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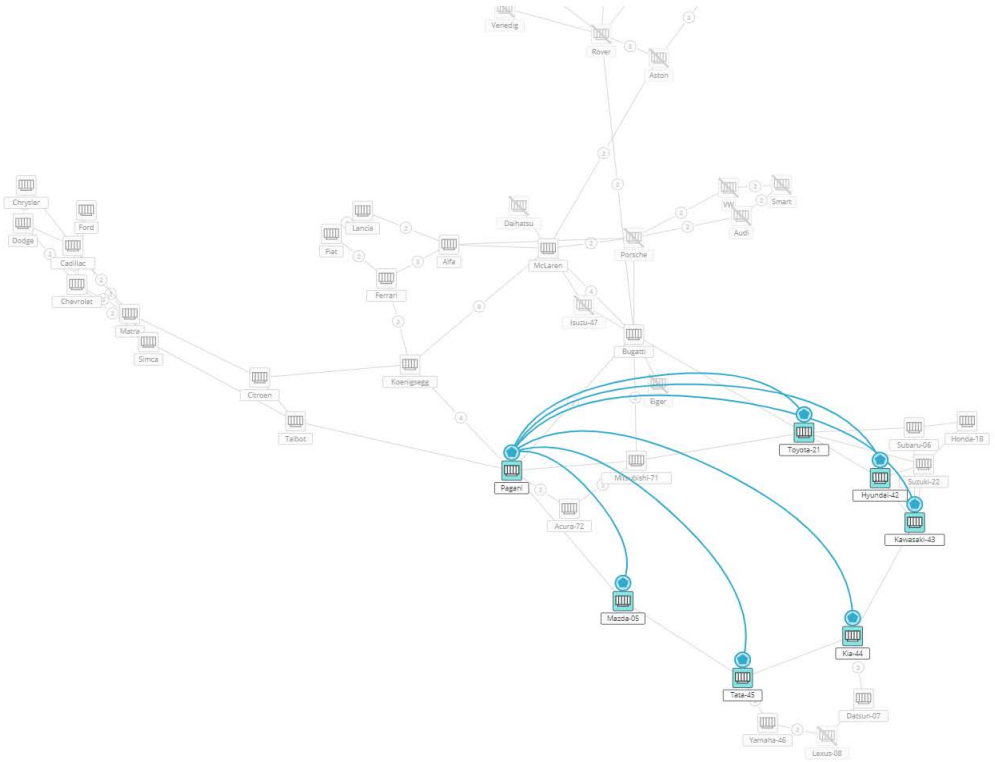

Figure 3: Service selected - example of all described states of device icon

2.3 Service icon

Service icon is an additional icon added on top of NE icon. It is only visible when a service is selected or if the previously selected service was pinned. It gives the user information about the role of VPLS node or numbers of services selected.

Hub on active device	Spoke on active device	PE - dual home on active device	E-Tree Root	E-Tree Leaf	Terminator	Initiator

Working/Protecting	2 services shared on 1 active device	3 services shared on 1 active device	Working	Counter	Protecting

Figure 4: Service type, service role, number or protection type icons

2.3.1 Changing visibility

The visibility of each element in the device icon can be switched on or off based on user's preferences on network display. It can be performed from visibility options which can be accessed from "options" on the map in the top right corner.

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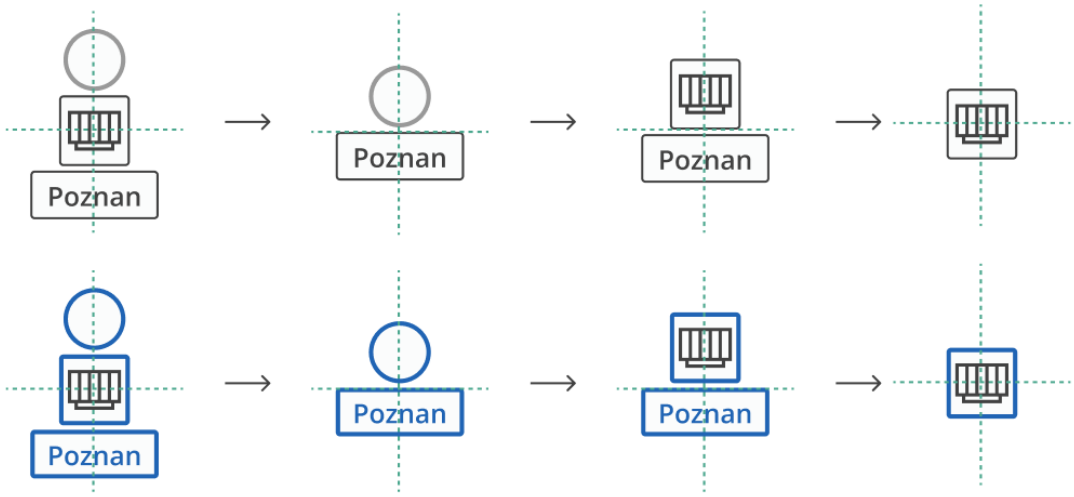


Figure 5: Behavior of icon when visibility of elements is changed

Additionally, next to NE icon can appear port indicator with amount of ports that are in particular device. Visibility of port amount can be switched on/off by the user in visibility options.

2.3.2 Port count

Port count icon is additional icon visible on NE icon. It displays the number of ports that are on the device. Its visibility can be switched off in Visibility Panel.

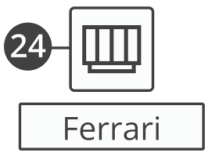
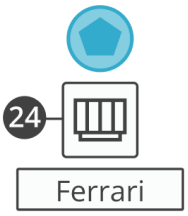
Empty port	Port count	Example of NE in active mode with visible port count	Example of NE in active mode with visible port count + selected service
			

Figure 6: Port count visible on device icon

2.4 Elements of a network

Symbols in default state are in transparent background. They indicate different elements of a network. They are used as supporting icons all around the application, e.g., in Ribbon, in View Modes, in Detail Page.

VPLS	VPWS	PW	Tunnel	Network Element	Section

Figure 7: Elements of a network

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3 Alarms

Alarms are indicators of abnormal state on the device or service. There are four alarm indicators that categorize the alarms in terms of their importance: Critical, Major, Minor, Warning.

Critical	Major	Minor	Warning

Figure 8: Types of alarms

3.1 Alarms on device icon

Alarms can be visible on two parts of the device icon – NE icon and Service icon. The placement of alarm tells the user whether the alarm is on a logical or physical layer. To see all the alarms in the application users can access the Alarm Mode by clicking on Alarms in global header.

3.1.1 NE icon

NE icon not only indicates not only what kind of device it is but also if there are any problems with it. The visual problems icons and their meanings are aggregated in Figure 9.

All possible problems and alarms are presented in table4, based on state when none of the services are selected.

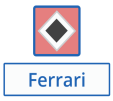
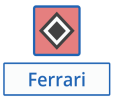
Selected	Critical alarm	Major alarm	Minor alarm	Warning alarm	Admin down	Operational down	Admin + Operational down
No							
Yes							

Figure 9: Aggregated problems indicators on NE icon

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3.1.2 Service icon

Service icon also can indicate whether there is a problem with service. Different state of service icon can be combined with different NE icons. In case of many information that are connected to one service, the service icon goes into dynamic mode and will appear interchangeably. Potential problems that can be visualized on service icons are presented in Figure 10.

Selected	Critical Alarm on service	Critical alarm on service on indicator node	Critical alarm on service on terminator node	Critical alarm + counter
No				
Yes				

Figure 10: Aggregated potential problem indicators on service icon

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4 Logical connections

“Logical connection” is a connection made by the user between devices in network that make service, transport, pseudowire or any connection that transport data in non-physical way. They are represented on a map in form of arch that goes from one service icon to another.

4.1 Services

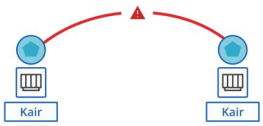
Default service connection	Service connection with major alarm	Service connection with critical alarm
		

Figure 11: States of service

4.2 Transport connections

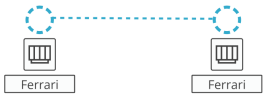
Tunnel path working	Tunnel path protecting	Protecting path with alarm	Working path with alarm
			

Figure 12: States of tunnel connections

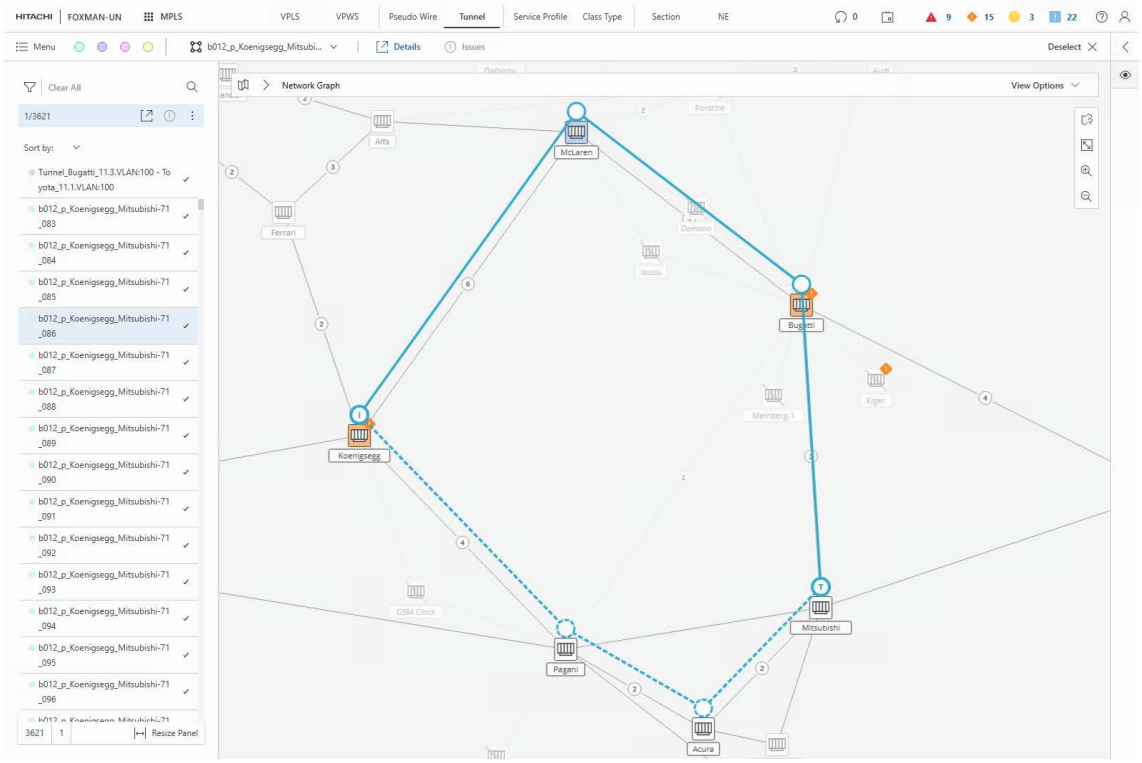


Figure 13: Example of selected tunnel (working and protecting path) on a map

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5 Physical Connections

5.1 Physical Layer

Physical connections are connections between devices, e.g. cables. They are represented on a map in form of a line that connects two NE icons.

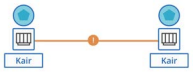
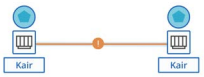
Selected	Service selected	Service selected (4 connections)	Service selected – Alarm Critical on connection	Service selected – Alarm Major on connection	Service selected – Alarm Warning
No					
Yes					

Figure 14: Physical connections

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6 Time Synchronization Map

6.1 Symbols

Symbols in Time Synchronization Map tell the user about states related to clocks, e.g., operational modes or source.

6.1.1 Clock Operation Mode

Each symbol indicates a different operation mode, and based on their color the user can see if it is neutral or indicating an alarm (red color) as shown in Figure 15.

Phase Locked	Hold Over	Free Running	Frequency Locked	Acquiring	Unknown

Figure 15: PTP clock operation modes

6.1.2 Clock Source

Each clock source type has a separate icon. The significance of the icons is shown in Figure 16.

Other	Atomic	GPS	Terrestrial Radio	PTP	NTP	Handset	Internal Oscillator

Figure 16: PTP clock source types

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7 Annex

7.1 Associated Documents

[1KHW002499] Release Note “FOXMAN-UN”

[1MRC000084] User Manual “FOXMAN-UN Web UI”

7.2 Document History

Table 1: Document History

Document ID	FOXMAN-UN Release	Rev	Date	Changes since previous version
1MRC000084A0001	R16B	A	July 2023	First version.
1MRC000084A0001	R18	A	May 2025	Updated some icons and/or colors.

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