Wireless devices preparation

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To the certification exam

- InfiLINK 2x2, InfiMAN 2x2, InfiLINK Evolution, InfiMAN Evolution families
 Configuration via CLI
 - Configuration via Web interface
- InfiLINK XG, InfiLINK XG 1000 families
- Quanta 5, Quanta 70 families

InfiMONITOR NEXT polls the network nodes using SNMP. This means that in order to perform management and monitoring, an SNMP agent must be started and configured on each node.

By default, the "SNMP Agent" and the "SNMP Trap" notifications are disabled. To perform monitoring using **InfiMONITOR NEXT**, perform the necessary settings in the device's configuration: enable SNMP Agent and configure the SNMP Traps.

This article provides instructions to configure devices of the each Infinet Wireless families:

- InfiLINK 2x2, InfiMAN 2x2, InfiLINK Evolution, InfiMAN Evolution families
 - Configuration via CLI
 - Configuration via Web interface
- InfiLINK XG, InfiLINK XG 1000 families
- Quanta 5, Quanta 70 families

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The InfiMONITOR NEXT monitoring system supports "authNoPriv" protected mode only.

InfiLINK 2x2, InfiMAN 2x2, InfiLINK Evolution, InfiMAN Evolution families

There are 2 ways how to change the configuration:

- 1. Using the Command Line Interface (faster way).
- 2. Using the Web GUI.

Configuration via CLI

A detailed description of the WANFleX OS commands is available in the snmpd command (SNMP daemon) article. Connect to the device using Telnet or SSH and enter the following commands (the words USERNAME and PASSWORD must be replaced with the actual values):

snmpd user USERNAME add pass PASSWORD security authNoPriv accessRights readWrite class admin

Enable the SNMP Agent and save the configuration:

snmpd start config save

To enable and configure the SNMP Agent simultaneously for all the CPE devices connected to a BS (including the BS itself), run the following commands at the Base Station:

mint rf5.0 rcmd -all -self "snmpd user USERNAME add pass PASSWORD security authNoPriv accessRights readWrite class admin" mint rf5.0 rcmd -all -self "snmpd start" mint rf5.0 rcmd -all -self "config save"

To enable SNMP Traps simultaneously for all the CPE devices connected to a BS (including the BS itself), run the following commands at the Base Station: (replace "*I P ADDRESS*" with the IP address assigned to **NEXT**):

```
mint rf5.0 rcmd -all -self "trapd start"
mint rf5.0 rcmd -all -self "trapd dst IP ADDRESS:162/v2"
mint rf5.0 rcmd -all -self "trapd type topoGroup enable"
mint rf5.0 rcmd -all -self "trapd type radioGroup enable"
mint rf5.0 rcmd -all -self "trapd type mintGroup enable"
mint rf5.0 rcmd -all -self "trapd type ospfGroup enable"
mint rf5.0 rcmd -all -self "trapd type linkEvent enable"
mint rf5.0 rcmd -all -self "trapd type trapdColdStartEvent enable"
mint rf5.0 rcmd -all -self "trapd type snmpdAuthenticationFailureEvent enable"
mint rf5.0 rcmd -all -self "trapd type syslog enable"
```

Configure the agent's IP address on each device (replace "IP ADDRESS" with the IP address of the device):

trapd agent IP ADDRESS config save

Configuration via Web interface



You can also use the Command Line section of the web interface to execute the commands described above.

Log in to the device's web interface. Go to the "Basic settings" page -> "SNMP" to the "Access" section:



Figure - SNMP section

Perform the following steps:

- Set the "*Start SNMP*" flag to enable the SNMP Agent.
- Uncheck the "Version 1 enable" flag to disable the SNMPv1 version, which is enabled by default.
- Click the "Add SNMP v3 user" and enter the authentication data for accessing the network node via SNMP in the "Username" and "Password" fields.
- For the other parameters available in this section, keep the default values.

▼ SNMP							
Access							
Help Start SNMP:	Help Start SNMP: Version 1 enable: Community public Cor			ct:	L	ocation:	
User Name	Password	Security	Readonly	Admin	Privacy Password	Privacy Protocol	
admin Add SNMP v3 Us	masterkey Au	thorization No Privacy	✓ □			DES 💙	Remove User
▶ Traps							
• QoS Options							
Traffic Shaping							
• Extra Commands							
Apply Test Preview Co	nfiguration						
	Figure - SNMP auther	ntication settings for InfiL	INK 2x2, InfiMA	N 2x2, Infil	LINK Evolution, Infi	MAN Evolution	
Go to the " <i>Traps</i> " section w	here the following field	s are available:					

- "Enable SNMP Traps" enable/disable traps. Check this flag.
- "Agent IP" enter the device's IP address.
- "Destination" the NEXT IP address and the UDP port, through which the polling subsystem receives notifications (by default it is port 162):
 - "V2" enable/disable SNMP v2. Check this flag.
 - "Traps groups" check flags for all the trap groups, that should be sent by the device.

SNMP

Access	
Traps	
Help Enabl SNM Traps	Agent IP:
Destina	ation: V2
	tana Cravin
	topoGroup
	radioGroup
	radioFreqChanged
	radioBandChanged
L	mintGroup
	ospfGroup
	ospfNBRState
Figu	re - SNMP Traps configuration for InfiLINK 2x2, InfiMAN 2x2, InfiLINK Evolution, InfiMAN Evolution

To complete the setup, click on the "Apply" button.

InfiLINK XG, InfiLINK XG 1000 families

Log in to the device's web interface. Go to the "SNMP" section.

Perform the following steps:

admin

Apply

Add SNMP v3 User

Try

- Set the "*Start SNMP*" flag to enable the SNMP Agent.
- Uncheck the "Version 1 enable" flag to disable the SNMPv1 and v2c versions, which is enabled by default.
- Click the "Add SNMP v3 user" and enter the authentication data for accessing the network node via SNMP in the "Username" and "Password" fields.
- For the other parameters available in this section, keep the default values.

General Settings									
Start SNMP: 🗹 Conta	ct:	Location:							
SNMP v1 and v2c (Read Only)									
Enable SNMP v1 and v2c:	Community: public								
SNMP v.3 Users									
User Name	Password	Security	Readonly	Admin	Privacy Password	Privacy Protocol			

Figure - SNMP authentication settings for InfiLINK XG, InfiLINK XG 1000

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Authorization No Privacy

In order to configure SNMP traps go to the "Traps" section and perform the following steps:

• Enable SNMP Traps by checking "Enable SNMP traps" flag.

masterkey

- Enter the device's IP address.
- Click the "Configure SNMP traps and destinations" button and in pop-up window fill in the followinf fields:
 - "Destination address" the **NEXT** IP address.
 - "v2c" enable/disable SNMP v2. Check this flag.
 - "Traps groups" check flags for all the trap groups, that should be sent by the device.

DES 🗸 🗸

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SNMP traps				
Enable SNMP Traps: 🗹	Source IP Address:).	×
Configure SNMP traps and destin	ations			
Edit			X	
Destination address:		v2c	^	
radioGroup				
radioFreqChanged				
radioBandChanged				
others				
linkEvent		<		
trapdColdStartEvent				
snmpdAuthenticationFailu	ureEvent			
syslog			-	
Ok Cancel Clear				

Figure - SNMP Traps configuration for InfiLINK XG, InfiLINK XG 1000

Quanta 5, Quanta 70 families

Log in to the device's web interface. Go to the "SNMP" section.

Perform the following steps:

- Enable SNMP agent by activating the corresponding flag.
- Uncheck the "Version 1 enable" flag to disable the SNMPv1 version, which is enabled by default.
- Click the "Add SNMP v3 user"

Title

Enabled:								
Contact perso	on:							
Locations								
Location.								
CNIMD v4/	120							
SINIVIP V I/V	/20							_
Enabled (read	d only):							\mathbf{O}
Community:								
public								
SNMP v3								
User Name	Password	Security	Readonly	Admin	Privacy Password	Privacy Protocol		
admin	masterkey	Auth / No privacy	No	Yes	-	DES	/	×
-		No auth / No privacy	Yes	No	-	DES	1	Ũ
+ Add SNMP v3 User								

Figure - SNMP authentication settings for Quanta 5, Quanta 70

- Select the "*Auth/No privacy*" mode
- Enter the authentication data for accessing the network node via SNMP in the "Username" and "Password" fields.
- For the other parameters available in this section, keep the default values.

Edit SNMP v3 User

User Name:

admin_122	
Password:	
admin122	
Security:	
Auth / No privacy	•
Readonly:	
Admin:	
Privacy Password:	
Privacy Protocol:	
des	*
	Close

Figure - SNMP v3 settings for Quanta 5, Quanta 70

In order to configure SNMP traps go to the "Traps" section and perform the following steps:

- Enable SNMP Traps by checking "Enable SNMP traps" flag.
- Enter the device's IP address.
- Click the "Configure SNMP trap" button

SNMP Traps	
Enable SNMP Traps:	
Source IP address:	10.10.30.21
Destination address Port	
192.168.11.26 : 162	✓ Î
+ Add SNMF	° Trap

Figure - SNMP traps settings for Quanta 5, Quanta 70

- In pop-up window fill in the followinf fields:
 - "Destination address" the **NEXT** IP address and port.
 - "Traps groups" check flags for all the trap groups, that should be sent by the device.

Edit SNMP Trap

De	estination address:	F	ort:	
	192.168.11.26	:	162	
R	adio Group			
	Radio Frequency Changed:			
	Radio Band Changed:			
0	thers			
	Link Event:			
	Trapd Cold Start Event:			
	SNMP Authentication Failure Event:			
	Syslog:			
	Close			

Figure - SNMP trap settings for Quanta 5, Quanta 70