



ECCM Overview

Eltex Cloud
Configuration Manager



What is ECCM?



ECCM (Eltex Cloud Configuration Manager) is a cloud system for Eltex networking equipment. Designed for monitoring and management

Simple installation using the scripts

What tasks can be solved with ECCM?



**Network equipment
inventory**



**Network device
monitoring**



**Device configuration
management**



**Device firmware
management**



**User and system
access management**



Managing system licenses

System licenses are used to determine the required amount of equipment that must be serviced by the system, set the limit of the devices in the system

ELTEX

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License

en

Ecom E. E.

SuperAdmin

Dashboard

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Network maps

Network

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Users and roles

Authorization

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Monitoring

Params

Event generation rules

Problem generation rules

MIB

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Device licenses

↻

Import

Export

Active license

Type: Flex

ID: 0

Issuer: Eltex

Product ID: ECMF0000777

Issue date: 2024-05-04 11:20:00

Expiration date: Unlimited

Validity period: 2024-06-06 07:00:00

Models: 165

ESR

Balance: 1000 units (used: 21, available: 979)

GENERIC

Balance: 1000 units (used: 0, available: 1000)

ME

Balance: 1000 units (used: 0, available: 1000)

MES

Balance: 1000 units (used: 48, available: 952)

SMG

Balance: 1000 units (used: 0, available: 1000)

WLC

Balance: 1000 units (used: 0, available: 1000)

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Managing device licenses



Devices licenses are required to activate necessary functionality such as BGP or EVPN on MES switches

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Import

Install

Delete

☐	Name	Serial number	Date	Features	On device	Show
☐	(0)					
☐	ES7A000644 (2).license	ES7A000644	2024-05-27 19:41:28	EVPN,BGP		
☐	ES8B000023.lic	ES8B000023	2024-05-27 19:41:28	BGP		
☐	ES7A000812 (2).license	ES7A000812	2024-05-27 19:41:28	EVPN,BGP		
☐	ES8C000100 (2).lic	ES8C000100	2024-05-27 19:41:28	EVPN,BGP		
☐	ES8C000373 (2).lic	ES8C000373	2024-05-27 19:41:28	EVPN,BGP		
☐	ES8C000303 (2).lic	ES8C000303	2024-05-27 19:41:28	EVPN,BGP		
☐	ES8C000427 (2).lic	ES8C000427	2024-05-27 19:41:28	EVPN,BGP		
☐	ES8C000428 (2).lic	ES8C000428	2024-05-27 19:41:28	EVPN,BGP		
☐	ES32020001_fake.lic.lic	ES32020001	2024-05-27 19:41:28	BGP		
☐	ES32023387.lic	ES32023387	2024-05-27 19:41:28	BGP	✓	

Items per page

10

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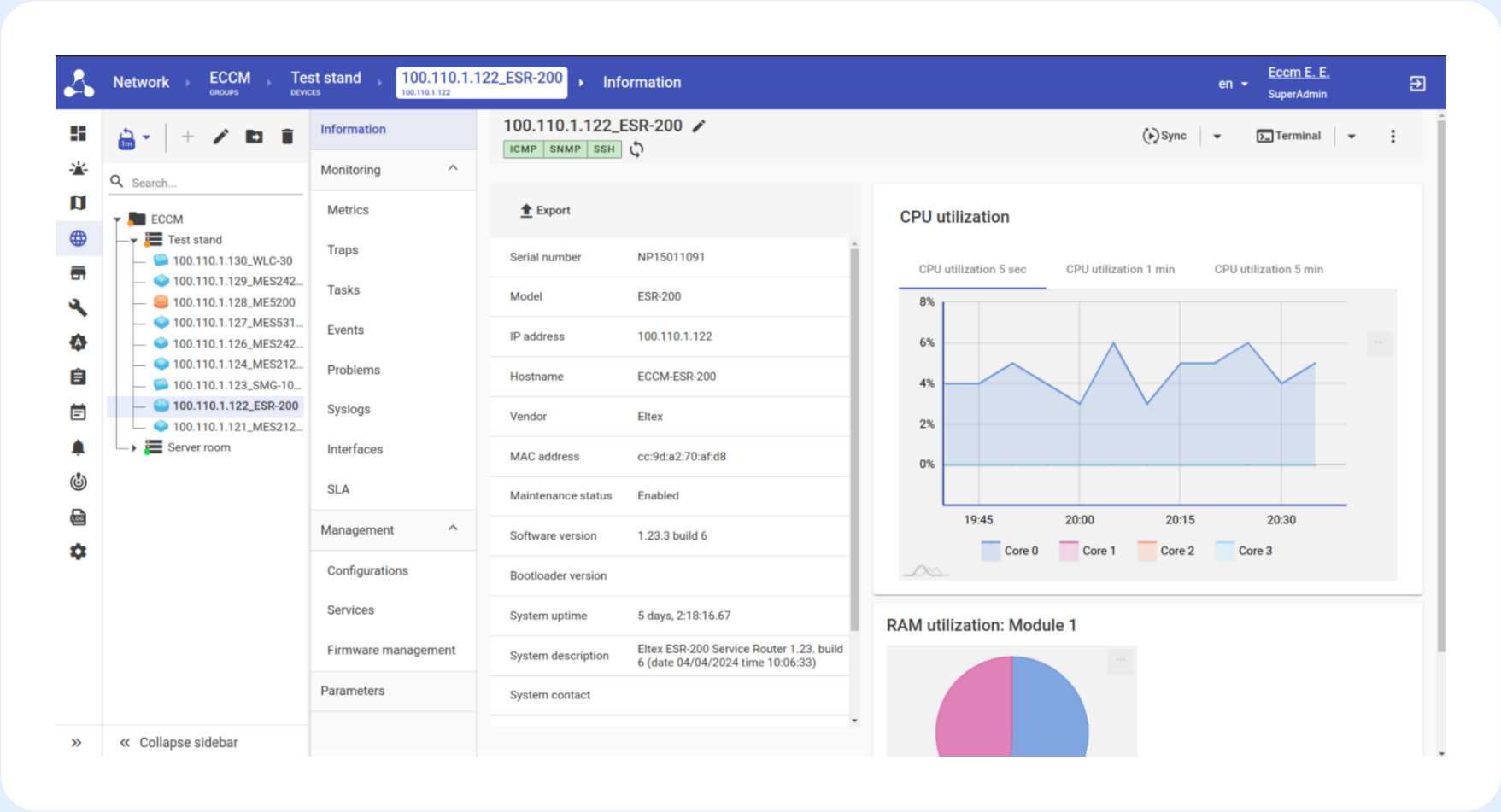
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Storing equipment inventory information

ECCM stores inventory information: serial number, software version, model, etc.



This information is collected over the SNMP protocol using polling

Grouping devices using a tree structure

Grouping devices allows configuring access policies for these devices and restrict access for a particular user

Network > ECCM GROUPS > Test stand DEVICES

en | Eccm E. E. SuperAdmin

1m

+

Find device...

Search...

ECCM

- Test stand
 - 100.110.1.122_ESR-200
 - 100.110.0.130_ESR-10
 - 100.110.0.10_MES3124
 - 100.110.0.9_MES3124
 - 100.110.0.6_MES3124
 - 100.110.0.3_MES3124
- Server room

☐	ID	Serial number	Label	IP address	Hostname	MAC address	Series	Model	Software version	Maintenance	Availability	Group	Problems
☐	(0)												
☐	109	NP15011091	100.110.1.122_ESR-200	100.110.1.122	ECCM-ESR-200	cc:9d:a2:70:af:d8	ESR-100/200	ESR-200	1.23.3 build 6	Enabled	ICMP SNMP SSH	eccm/Test stand	0
☐	105	ES02001716	100.110.0.6_MES3124	100.110.0.6	ANNA_MES3124-1_0.6	a8:f9:4b:f7:d3:40	MES31xx/MES3124 rev.C	MES3124	2.5.48.14	Enabled	ICMP SNMP SSH	eccm/Test stand	0
☐	104	ES02001828	100.110.0.9_MES3124	100.110.0.9	PETR_MES3124_0.9	a8:f9:4b:f7:ef:40	MES31xx/MES3124 rev.C	MES3124	2.5.48.14	Enabled	ICMP SNMP SSH	eccm/Test stand	0
☐	103	ES02001225	100.110.0.10_MES3124	100.110.0.10	DEN_MES-3124	a8:f9:4b:86:fa:80	MES31xx/MES3124 rev.C	MES3124	2.5.48.2	Enabled	ICMP SNMP SSH	eccm/Test stand	0
☐	102	ES02001007	100.110.0.3_MES3124	100.110.0.3	Ilon_MES3124-2_0.3	a8:f9:4b:84:e9:00	MES31xx/MES3124 rev.C	MES3124	2.5.48.15	Enabled	ICMP SNMP SSH	eccm/Test stand	0
☐	101	NP05004783	100.110.0.130_ESR-10	100.110.0.130	ESR10-TST	a8:f9:4b:ac:67:96	ESR-1x	ESR-10	1.23.x build 109	Enabled	ICMP SNMP SSH	eccm/Test stand	0

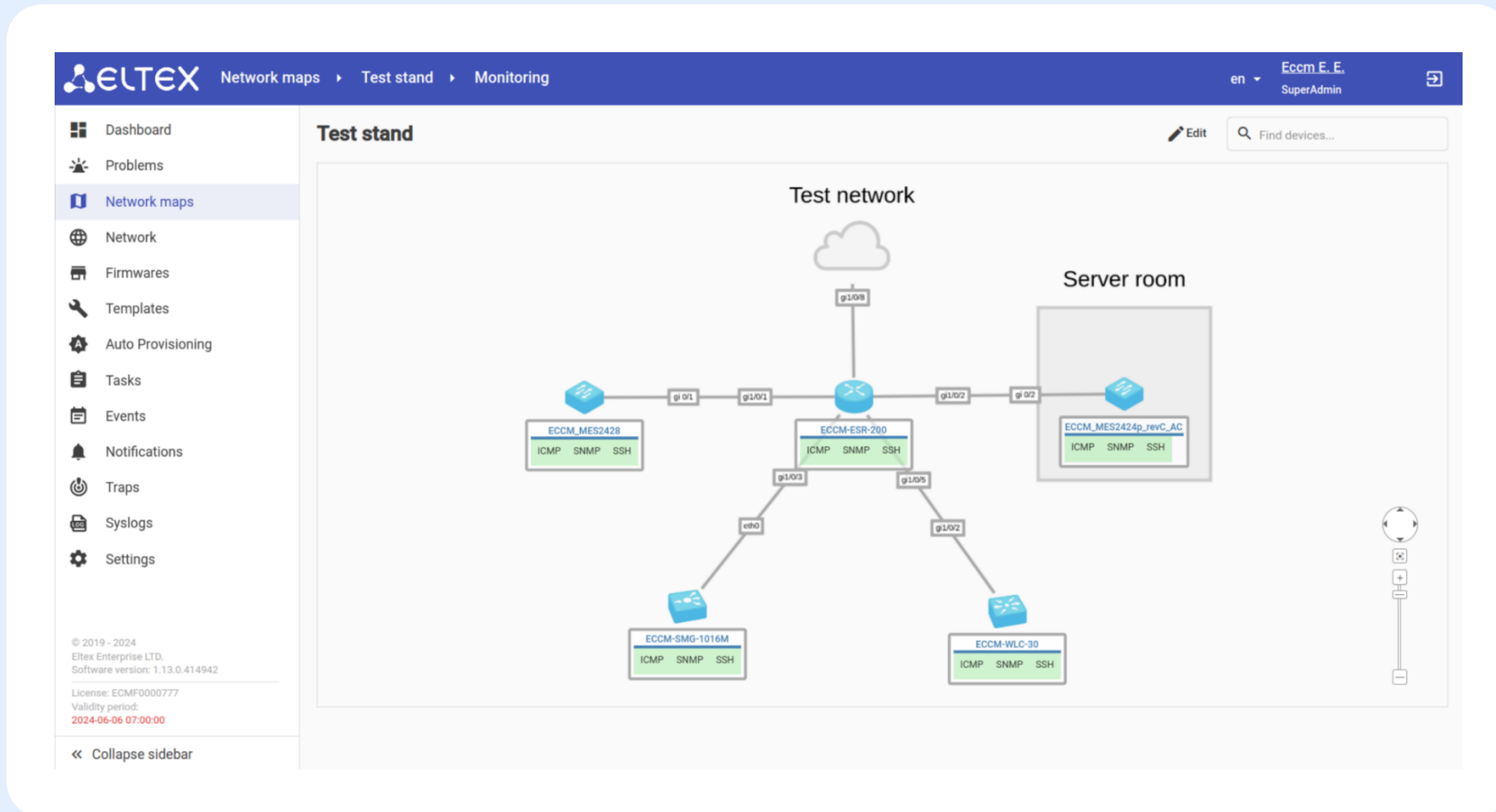
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The devices can be united into logical structures

Network maps



It is a tool for displaying the physical topology of a network using a graphical designer



It also shows the availability statuses of the devices

Device availability polling

ECCM performs periodic availability polling via ICMP/TCP, SNMP, SSH

Network

ECCM

GROUPS

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Find device...

IP address	Availability	Hostname	Model	Problems
100.110.1.130	ICMP SNMP SSH	ECCM-WLC-30	WLC-30	0
100.110.1.129	ICMP SNMP SSH	ECCM_MES2424p_revC_AC	MES2424P rev.C1 AC	0
100.110.1.123	ICMP SNMP SSH	ECCM-SMG-1016M	SMG-1016M	0
100.110.1.126	ICMP SNMP SSH	ECCM_MES2428	MES2428 AC	0
100.110.1.127	ICMP SNMP SSH	ECCM_MES5316A	MES5316A	0
100.110.1.124	ICMP SNMP SSH	ECCM_MES2124M	MES2124M AC	0
100.110.1.121	ICMP SNMP SSH	ECCM_MES2124M_hub	MES2124M AC	0
100.110.1.128	TCP SNMP SSH	ECCM_ME5200	ME5200	2
100.110.1.122	ICMP SNMP SSH	ECCM-ESR-200	ESR-200	0
100.110.0.145	ICMP SNMP SSH	1200-ipsec	ESR-1200	0

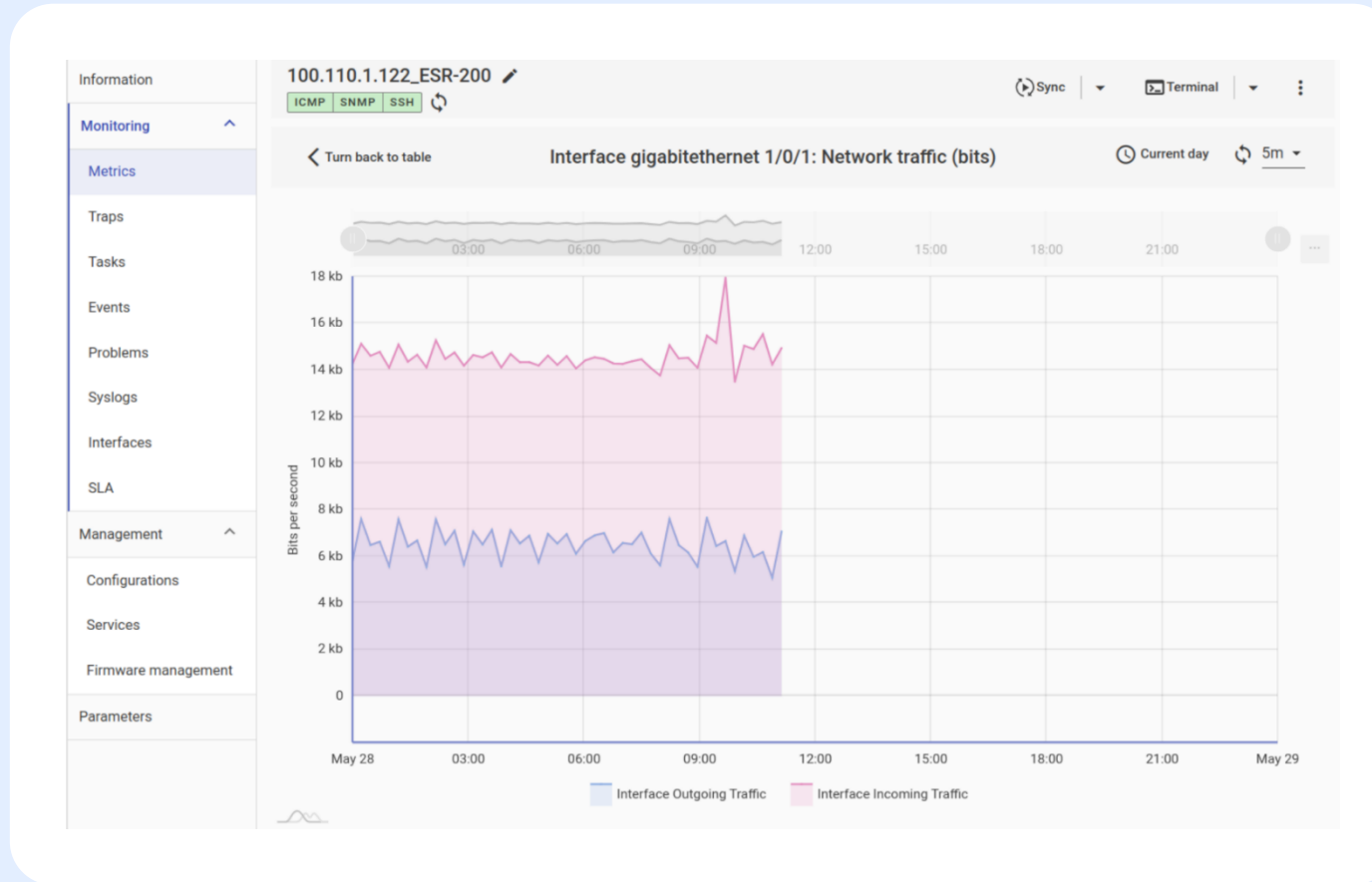
Items per page 101 - 10 of 12

The availability status is displayed in small cells with color indicators

Collecting metrics via SNMP



ECCM conducts polling of metrics using the SNMP protocol and periodically collects metrics from devices



The system provides tools for configuring the period of this polling



Receiving and processing SNMP traps

ECCM processes SNMP traps from devices, analyzes their contents and can generate events based on their parameters

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Traps

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Source IP	Received at	SNMP Version	OID
192.168.50.65	2024-05-27 20:07:12	V2C	1.3.6.1.4.1.35265.1.23.79.0.1 (eltAAAUerTrap)
192.168.50.65	2024-05-27 20:07:09	V2C	1.3.6.1.4.1.35265.1.23.79.0.1 (eltAAAUerTrap)
192.168.50.65	2024-05-27 20:07:03	V2C	1.3.6.1.4.1.35265.1.23.79.0.1 (eltAAAUerTrap)
192.168.50.65	2024-05-27 20:04:02	V2C	1.3.6.1.4.1.35265.1.23.79.0.1 (eltAAAUerTrap)
192.168.50.65	2024-05-27 20:03:40	V2C	1.3.6.1.4.1.35265.1.23.79.0.1 (eltAAAUerTrap)
192.168.50.65	2024-05-27 20:03:25	V2C	1.3.6.1.4.1.35265.1.23.79.0.1 (eltAAAUerTrap)
192.168.50.65	2024-05-27 20:03:15	V2C	1.3.6.1.4.1.35265.1.23.79.0.1 (eltAAAUerTrap)
192.168.50.65	2024-05-27 20:02:45	V2C	1.3.6.1.4.1.35265.1.23.79.0.1 (eltAAAUerTrap)

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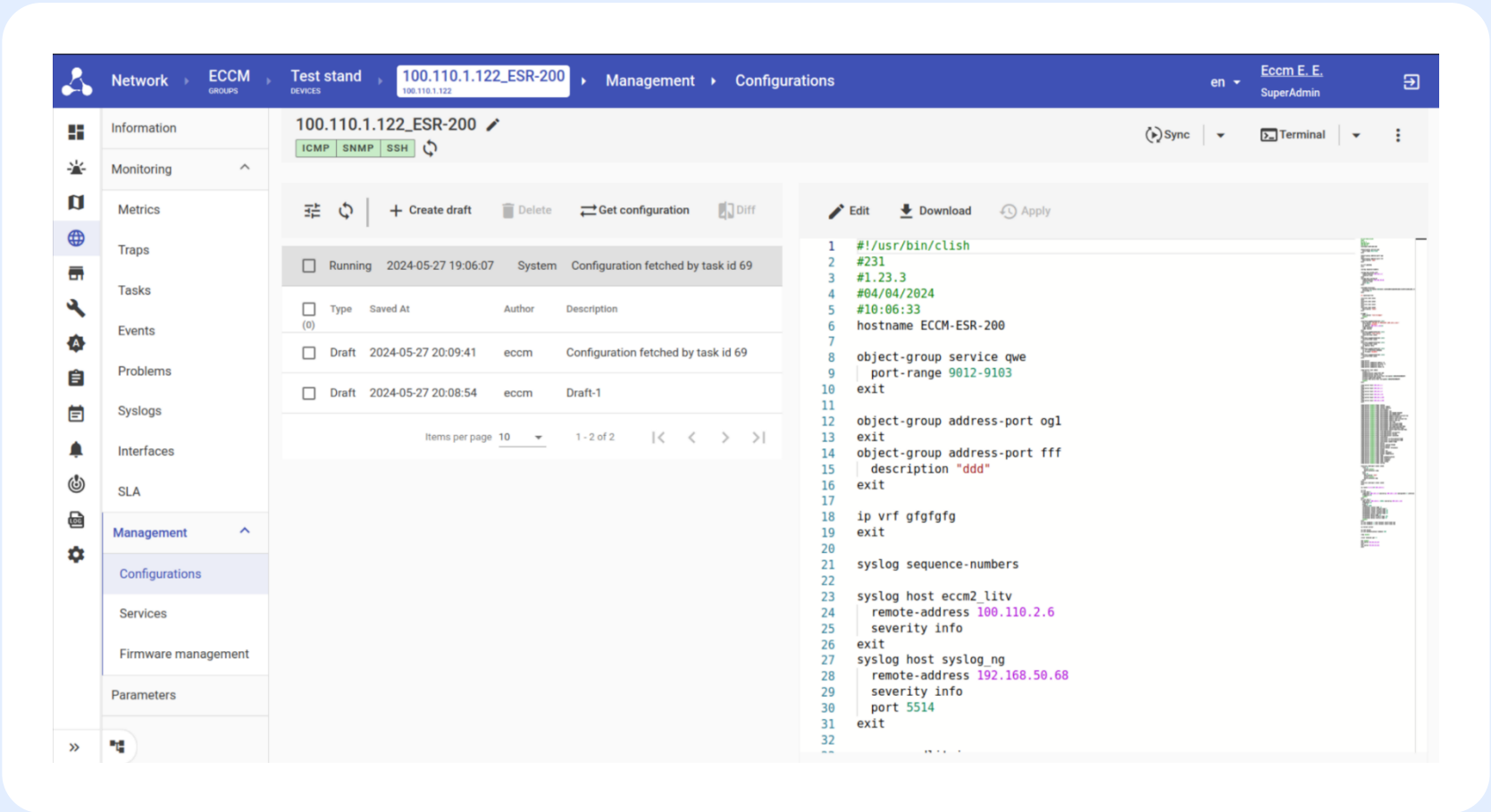
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The system periodically detects the entities of devices: CPU, RAM ROM (non-volatile memory) interfaces

Collection and storage of configurations



ECCM provides tools for collecting, storing, viewing and editing device configurations



Configuration comparison



provides a configuration comparison tool through a convenient graphical tool that displays the configuration differences of one device

Compare configurations

ESR-200: 100.110.1.122

DRAFT: 2024-05-27 20:14:36

ESR-200: 100.110.1.122

RUNNING: 2024-05-27 19:06:07

37

38 no spanning-tree

39

40 security zone zone1

41 exit

42 security zone zone2

43 exit

44 security zone zone3

45 exit

46 security zone zone4

47 description "ewew"

48 exit

49

50

51 interface gigabitethernet 1/0/1

52 description "UPLINK to MES2124M (100.110.1.121)"

53 ip firewall disable

54 ip address 100.110.1.122/23

55 lldp transmit

56 lldp receive

57 exit

58 interface gigabitethernet 1/0/2

59 description "test desc2"

60 security-zone zone1

61 exit

62 interface gigabitethernet 1/0/3

37

38 no spanning-tree

39

40 security zone zone1

41 exit

42 security zone zone2

43 exit

44 security zone zone3

45 exit

46 security zone zone4

47 description "ewew"

48 exit

49

50+bridge 1

51+ description "test-bridgel"

52+ enable

53+exit

54

55 interface gigabitethernet 1/0/1

56 description "UPLINK to MES2124M (100.110.1.121)"

57 ip firewall disable

58 ip address 100.110.1.122/23

59 lldp transmit

60 lldp receive

61 exit

62 interface gigabitethernet 1/0/2

63 description "test desc2"

64 security-zone zone1

65 exit

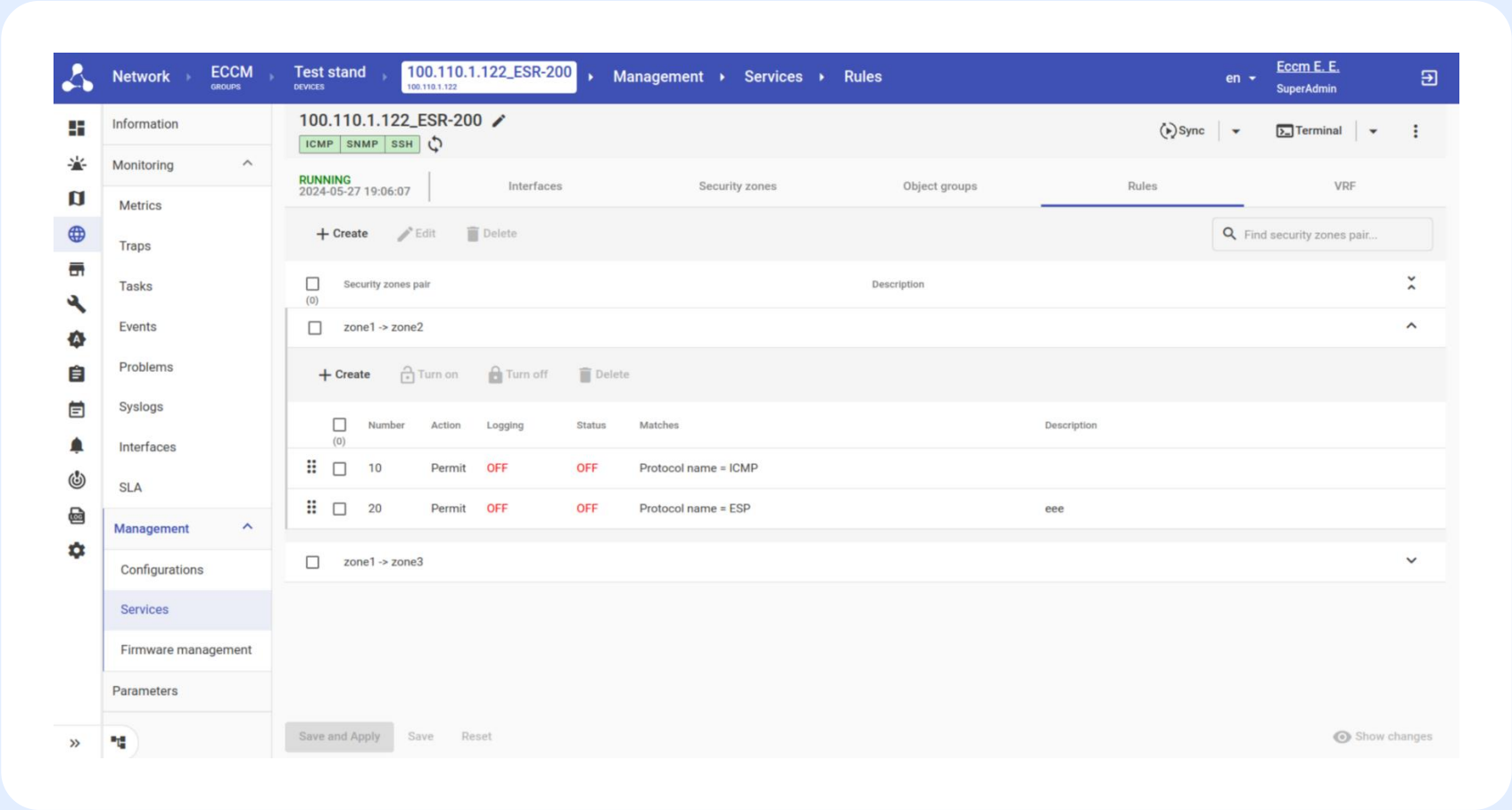
66 interface gigabitethernet 1/0/3

Close

GUI for firewall configuration



ECCM supports graphical Firewall configuration.
This feature is available for ESR routers and WLC controllers



Using this tool, the system validates parameter changes in the form of object model configuration

Group configuration



The system supports group configuration of devices. The basis of group configuration is the application of configuration templates for a group of devices

1 Template selection

2 Filling variables

3 Schedule setting

4 Apply

⌵ ↺

	ID	Name	Author	UpdatedAt	Created at
☐	11	default_ESR_hostname	system	2024-05-27 16:40:12	2024-05-27 16:40:12
☐	12	default_ESR_NTP	system	2024-05-27 16:40:12	2024-05-27 16:40:12
☐	13	default_ESR_DNS	system	2024-05-27 16:40:12	2024-05-27 16:40:12
☒	14	default_ESR_SNMPv2	system	2024-05-27 16:40:12	2024-05-27 16:40:12
☐	15	default_ESR_SNMPv3	system	2024-05-27 16:40:12	2024-05-27 16:40:12
☐	16	default_ESR_add_syslog_remote_serv	system	2024-05-27 16:40:12	2024-05-27 16:40:12
☐	17	default_ESR_add_syslog_system_jour	system	2024-05-27 16:40:12	2024-05-27 16:40:12
☐	18	default_ESR_banners	system	2024-05-27 16:40:12	2024-05-27 16:40:12
☐	19	default_ESR_users	system	2024-05-27 16:40:12	2024-05-27 16:40:12
☐	20	default_WLC_ap_pool	system	2024-05-27 16:40:13	2024-05-27 16:40:13

Items per page 10 11 - 20 of 34 < < > >|

1 snmp-server
2 snmp-server community {{community_ro}} ro
3 snmp-server community {{community_rw}} rw

Cancel

Next

A configuration template is a set of CLI commands that will be applied to each device

Firmware storage

ECCM stores information about device firmware in a database

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Filter

Refresh

Settings

Upload

Delete

All

Actual

Not actual

☐ Filename (0)	Series	Software version	Description	Size	Bootloader version	Bootloader version x- loader	Date	Actuality
☐ test_fw_me5200_2	MES5200	3.10.0.6T	test_fw_me5200_2	20 bytes	3.10.0.6T	3.10.0.6T	2024-05-27 20:20:23	☒
☐ test_fw_smg-1016_2	SMG-1016	3.20.0.1	test_fw_smg-1016_2	20 bytes			2024-05-27 20:20:23	☒
☐ test_fw_mes21xx_ros2.5_2	MES11xx/MES21xx/MES22xx	1.1.48.14	test_fw_mes21xx_ros2.5_2	20 bytes			2024-05-27 20:20:23	☒
☐ test_fw_mes23xx_ros4_2	MES23xx/MES33xx/MES35xx/ MES36xx	4.0.19 R3	test_fw_mes23xx_ros4_2	20 bytes			2024-05-27 20:20:23	☒
☐ test_fw_mes2400_iss_2	MES14xx/MES24xx/MES3708	10.3.1 R3	test_fw_mes2400_iss_2	20 bytes	10.3.1 R3		2024-05-27 20:20:23	☒
☐ test_fw_mes5448A_fp_2	MES5448/MES7048	8.4.0.8[2]	test_fw_mes5448A_fp_2	20 bytes	8.4.0.8[2]		2024-05-27 20:20:23	☒
☐ test_fw_mes53xxA_ros5+_ 2	MES53xxA	6.4.1.3 R2	test_fw_mes53xxA_ros5+_ 2	20 bytes			2024-05-27 20:20:23	☒
☐ test_fw_esr1700_2	ESR-1700	1.17.8 build 2	test_fw_esr1700_2	20 bytes			2024-05-27 20:20:23	☒
☐ test_fw_esr1500_2	ESR-15xx	1.17.8 build 2	test_fw_esr1500_2	20 bytes			2024-05-27 20:20:23	☒
☐ test_fw_esr1000_2	ESR-1000	1.17.8 build 2	test_fw_esr1000_2	20 bytes			2024-05-27 20:20:23	☒

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The repository contains firmware parameters, their description, the version of the loaders, and the relevance

Device firmware upgrade

ECCM provides tools for collecting information about installed software and updating software on a schedule

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Firmware management

Parameters

100.110.1.122_ESR-200

ICMPSNMPSSH

Sync

Terminal

Upgrade Firmware

Switch Firmware

30s

Image	Status	Software version	Upload date	Is active after reboot
1	UP	1.23.3 build 6	2024-04-04 17:06:33	✓
2	DOWN	1.20.4 build 6	2023-10-25 21:24:29	

The device stores two versions of the firmware, the current one and the backup one

Group firmware upgrade



ECCM allows firmware upgrading for device groups with setting up a task schedule and execution strategy

Firmware selection

Task parameters

3 Apply

Summary

Firmware for: MES23xx/MES33xx/MES35xx/MES36xx: Eltex 4.0.19 R3

Firmware for: ESR-100/200: Eltex 1.18.8 build 3

Date: 2024-05-28 20:00:00 - 2024-05-28 21:20:00

Strategy: Sequential

Number of devices: 2

Make an active firmware: Yes

Reboot device: Yes

Serial number	IP address	Hostname	MAC address	Series	Model	Software version	Maintenance	Availability	Group
NP15011091	100.110.1.122	ECCM-ESR-200	cc:9d:a2:70:af:d8	ESR-100/200	ESR-200	1.23.3 build 6	Enabled	ICMP SNMP SSH	eccm /Test stand
ES32023387	100.110.1.125	ECCM_MES2324B	e4:5a:d4:86:b8:80	MES23xx/MES33xx/MES35xx/MES36xx	MES2324B AC	4.0.19 R3	Enabled	ICMP SNMP SSH	eccm /Server room

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Back

Apply

Role and user management



Flexible configuration of system user roles allows you to provide secure access to device groups and the user to the system

Edit role

Role Name *

Operator

Description

The role is intended for monitoring the operation of equi

Privileges

✓ Select all

✗ Deselect all

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Selected 2 of 2

View

Management

Network maps

Selected 1 of 2

Network

Selected 4 of 17

Cancel

Save

Create user

User account

LDAP

Username *

ivan.ivanov

12345

Role *

Operator

12345

Personal data

Last name *

Ivanov

First name *

Ivan

Language *

Russian

Timezone *

Africa/Abidjan

Middle name or Patronymic

E-mail *

ivan@example.com

Phone number

88005553535

Access groups

+ Add

Name

ECCM access group

Group names

eccm

✗

Cancel

Create

You can flexibly edit the role by setting the privileges

LDAP authentication



ECCM provides LDAP authentication

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Allowed authentication methods

LDAP

Local

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LDAP

Server connect

Server address *
slapd.eltex.loc

Port *
389

Authorized access

Secure connection

Disable server identity check

Use custom root certificate

Import

Certificate has not been uploaded

Check connect

Users search

Search user base DN *
dc=eltex,dc=loc

Username attribute *
uid

Check authentication

LDAP attribute matching

First name attribute
givenName

Last name attribute
sn

Middle name attribute
patronymic

Email attribute
mail

Phone attribute
phone

Check getting attributes

SaveReset

Set up access to the LDAP server, create a user, and log in and log in with an account

Device monitoring configuration



The system allows configuration of device monitoring: device status polling intervals, metrics collection and device discovery intervals, entity lifetimes

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Determination of device statuses via SNMP/TCP/ICMP

Polling interval, s *

30

Timeout of requests, ms *

300

Number of retries *

0

Save

Reset

Checking SSH access

Polling interval, s *

3600

Timeout of requests, ms *

10000

Number of retries *

3

☐ Enable checking by SSH status

Save

Reset

Metric intervals

Device types

ESR

Metric interval name	Interval, sec
Discover CPU/RAM/ROM	3600
Discover SLA tests	3600
Discover interfaces	3600
Collect SLA tests metrics	300
Collect CPU/RAM/ROM metrics	300

Metric rotation periods

Device metric group	Rotation period, days
CPU	60
Memory	60
Availability	60
Interface	60
SLA	60
Ping Time	60

Save

Reset

Traps lifetime

Traps lifetime, days *

7

Save

Reset

Syslogs lifetime

Syslogs lifetime, days *

90

Save

Reset

These tools allow you provide to receive comfortable and sufficiently detailed report

What else ECCM can do?



Managing network events and problems



Notifying users about network problems via e-mail, Telegram



Managing IP factories



ZTP



Managing user MIBs



Displaying summary information using dashboards

Creation of user by LDAP account



ECCM.PASSPORT

Логин

Пароль

Войти

Adding devices. Interface overview.



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Software version: 1.12.3.411494

License: demo
Validity period:
Validity period is not limited

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Personal information

Full name
Литвинов Дмитрий Константинович

Email
dmitriy.litvinov@eltex.loc

Phone number

Timezone
Asia/Novosibirsk

Language
English

Username
dmitriy.litvinov

Account type
LDAP

Role
SuperAdmin

Edit

Notification channels

No available notification channels.

Save Reset

Show available privileges

Groups

- eccm



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