

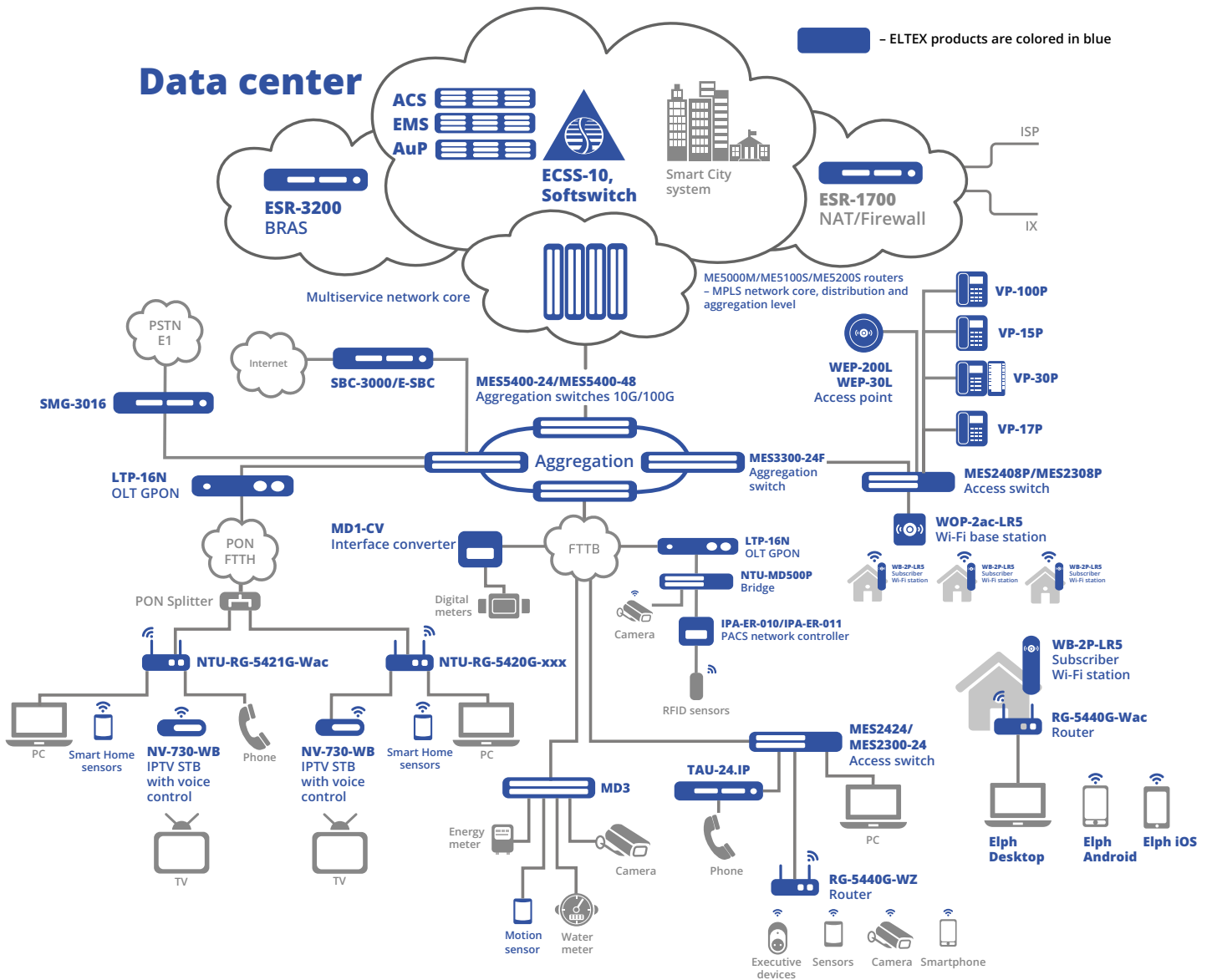
Catalog 2024



Russian designer and manufacturer
of communication equipment

Eltex products

Eltex manufactures a wide range of products for comprehensive projects



Quick delivery



Quick delivery of the equipment

Technical support



Twenty-four-hour technical support

Training



Opportunity for both off-site training and training at the Eltex training center

Customization



Rapid/custom development of various services for the equipment

Free testing



Opportunity to assess the equipment functionality and capacity specially for your business

About company



- **More than 32 years** of experience in designing and manufacturing telecommunication equipment
- **More than 1300** employees
- **14** software and hardware development laboratories
- **2** industrial complexes in Novosibirsk (Russia) and Almaty (Kazakhstan)
- **More than 100** partner companies in Russia, CIS, Europe, Asia and the Middle East
- **More than 1500** client companies

1 Development

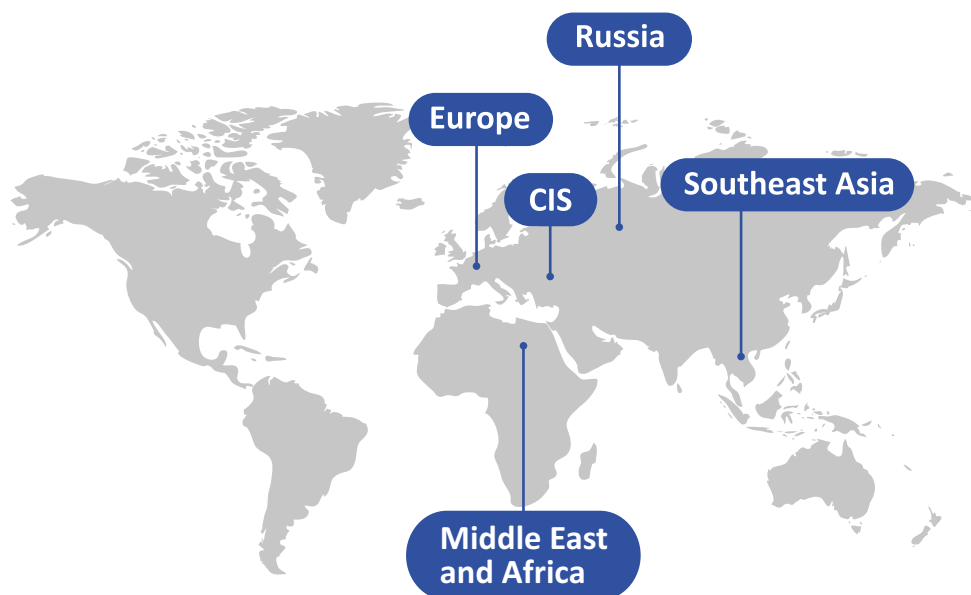
- Hardware
- Software

2 Manufacture

- Surface-mount technology
- Through-hole technology
- Assembling
- Software installation
- Testing of serial production equipment

3 Maintenance

- Technical support
- Service center
- Software updating
- Repair



12M PON OLT ports
4.5M Ethernet ports
6.1M VoIP ports
2M IPTV set-top boxes
1.2M TDM ports





PON optical line terminals (OLT)



PON solutions have the largest bandwidth capacity resource, provide the highest access speed for end users and offer unlimited services.

The OLT terminal provides PON network interconnection with external networks, splitters branch optical signal in the PON path section, and the ONT has necessary interaction interfaces from the subscriber side.

GPON



LTP-4X



LTP-8X



LTP-8N



LTP-16N



MA-4000PX

Form factor	19", 1U	19", 1U	19", 1U	19", 1U	19", 9U, modular
Crate contents					up to 16×PLC8 modules up to 2×PP4X modules
Performance	128 Gbps	128 Gbps	120 Gbps	120 Gbps	680 Gbps
Number of PON ports	4×GPON	8×GPON	8×GPON	16×GPON	up to 128×GPON
Number of Uplink ports	2×10G SFP+ 4×1G Combo	2×10G SFP+ 4×1G Combo 4×1G	4×10G SFP+	8×10G SFP+	up to 8×10G SFP+ up to 4×1G Combo
Maximum number of ONTs	512	1024	1024	2048	8192

10GPON



LTX-8



LTX-16



LTX-8C
under development

Form factor	19", 1U	19", 1U	19", 1U
Performance	300 Gbps	300 Gbps	300 Gbps
Number of PON ports	8×XGS-PON	16×XGS-PON	8×GPON/XGS-PON Combo
Number of Uplink ports	4×100G QSFP28	4×100G QSFP28	2×25G SFP28 2×100G QSFP28
Maximum number of ONTs	1024 GPON/2048 XGS-PON	2048 GPON/4096 XGS-PON	1024 GPON + 2048 XGS-PON

PON subscriber devices (ONT)



GPON

	WAN	LAN	FXS	RF	Wi-Fi	USB	PoE
NTU-1	1×GPON	1×1G					●
NTU-1C	1×GPON	1×1G		1			
NTU-52V	1×GPON	1×100M, 1×1G	1			1×USB 2.0	
NTU-52VC	1×GPON	1×100M, 1×1G	1	1		1×USB 2.0	
NTU-52W	1×GPON	1×100M, 1×1G			802.11n, MIMO 2×2, 2.4 GHz		
NTU-RG-1421G-Wac on request	1×GPON	4×1G	1		802.11ac, MIMO 3×3, 5 GHz + 802.11n, MIMO 2×2, 2.4 GHz	2×USB 2.0	
NTU-RG-1421G-WZ* on request	1×GPON	4×1G	1		802.11ac, MIMO 3×3, 5 GHz + 802.11n, MIMO 2×2, 2.4 GHz	2×USB 2.0	
NTU-RG-5402G-W	1×GPON	4×1G	2		802.11n, MIMO 2×2, 2.4 GHz	1×USB 2.0	
NTU-RG-5420G-Wac	1×GPON	4×1G			802.11ac, MIMO 2×2, 5 GHz + 802.11n, MIMO 2×2, 2.4 GHz	1×USB 2.0	
NTU-RG-5420G-WZ* on request	1×GPON	4×1G			802.11ac, MIMO 2×2, 5 GHz + 802.11n, MIMO 2×2, 2.4 GHz	1×USB 2.0	
NTU-RG-5421G-Wac	1×GPON	4×1G	1		802.11ac, MIMO 2×2, 5 GHz + 802.11n, MIMO 2×2, 2.4 GHz	1×USB 2.0	
NTU-RG-5421GC-Wac	1×GPON	4×1G	1	1	802.11ac, MIMO 2×2, 5 GHz + 802.11n, MIMO 2×2, 2.4 GHz	1×USB 2.0	
NTU-RG-5421G-WZ* on request	1×GPON	4×1G	1		802.11ac, MIMO 2×2, 5 GHz + 802.11n, MIMO 2×2, 2.4 GHz	1×USB 2.0	
NTU-RG-5440G-Wac on request	1×GPON	4×1G			802.11ac, MIMO 4×4, 5 GHz + 802.11n, MIMO 2×2, 2.4 GHz	1×USB 2.0	
NTU-RG-5440G-WZ* on request	1×GPON	4×1G			802.11ac, MIMO 4×4, 5 GHz + 802.11n, MIMO 2×2, 2.4 GHz	1×USB 2.0	
NTU-MD500P on request	1×GPON	4×1G PoE+					●
NTU-SFP-200	1×GPON SC/APC	1×1G SFP					
NTU-RG-5520G-Wax under development	1×GPON	4×1G			802.11ax, MIMO 2×2, 5 GHz + 802.11ax, MIMO 2×2, 2.4 GHz	1×USB 3.0	
NTU-RG-5520G-Wax-Z* under development	1×GPON	4×1G			802.11ax, MIMO 2×2, 5 GHz + 802.11ax, MIMO 2×2, 2.4 GHz	1×USB 3.0	
NTU-RG-5521G-Wax under development	1×GPON	4×1G	1		802.11ax, MIMO 2×2, 5 GHz + 802.11ax, MIMO 2×2, 2.4 GHz	1×USB 3.0	

10GPON

	WAN	LAN	FXS	RF	Wi-Fi	USB	PoE
NTX-1	1×XGS-PON	1×10G, 1×1G					
NTX-1F	1×XGS-PON	1×10G SFP+, 1×1G					
NTX-RG-5521-Wax-Z* under development	1×XGS-PON	1×10G + 4×1G	1		802.11ax, MIMO 2×2, 5 GHz + 802.11ax, MIMO 2×2, 2.4 GHz	1×USB 2.0 1×USB 3.0	



Ethernet switches

A wide model range of managed switches



Ethernet switches are a major part of the product range. Such devices are used by variety of companies, from small private companies to large plants, holding groups and corporations.

Access switches	Downlink interfaces	Uplink interfaces	Bandwidth	Stacking	Power supply	Battery connection possibility
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Fast Ethernet

MES1124M	24×100M	4×1G Combo	12.8 Gbps	up to 3 devices	AC / DC	
MES1124MB	24×100M	4×1G Combo	12.8 Gbps	up to 3 devices	AC / DC	●
MES1428	24×100M	4×1G Combo	12.8 Gbps		AC / DC	

Gigabit Ethernet

MES2308R	8×1G	2×1G Combo	20 Gbps	up to 8 devices	AC	
MES2300-08 <small>under development</small>	8×1G	2×1G, 2×1G SFP	24 Gbps	up to 8 devices	AC	
MES2324	24×1G	4×10G SFP+	128 Gbps	up to 8 devices	AC / DC	
MES2300-24	24×1G	4×10G SFP+	128 Gbps	up to 8 devices	AC	
MES2324B	24×1G	4×10G SFP+	128 Gbps	up to 8 devices	AC	●
MES2300B-24	24×1G	4×10G SFP+	128 Gbps	up to 8 devices	AC	●
MES2348B	48×1G	4×10G SFP+	176 Gbps	up to 8 devices	AC	●
MES2300B-48	48×1G	4×10G SFP+	176 Gbps	up to 8 devices	AC	●
MES2408	8×1G	2×1G SFP	20 Gbps		AC / DC	
MES2408B	8×1G	2×1G SFP	20 Gbps		AC	●
MES2408C	8×1G	2×1G Combo	20 Gbps		AC	
MES2428	24×1G	4×1G Combo	56 Gbps		AC / DC	
MES2428B	24×1G	4×1G Combo	56 Gbps		AC	●
MES2424	24×1G	4×10G SFP+	128 Gbps		AC / DC	
MES2424B	24×1G	4×10G SFP+	128 Gbps		AC	●
MES2448 <small>on request</small>	48×1G	4×10G SFP+	176 Gbps		DC	
MES2448B	48×1G	4×10G SFP+	176 Gbps		AC	●
MES2420B-24D <small>on request</small>	24×2.5G	4×10G SFP+	200 Gbps		AC	●

Ethernet switches



Gigabit Ethernet Fiber

MES2324F DC	20×1G SFP, 4×1G Combo	4×10G SFP+	128 Gbps	up to 8 devices	DC	
MES2300-24F DC	20×1G SFP, 4×1G Combo	4×10G SFP+	128 Gbps	up to 8 devices	DC	
MES2324FB	20×1G SFP, 4×1G Combo	4×10G SFP+	128 Gbps	up to 8 devices	AC	●
MES2300B-24F	20×1G SFP, 4×1G Combo	4×10G SFP+	128 Gbps	up to 8 devices	AC	●
MES2424FB	24×1G SFP	4×10G SFP+	128 Gbps		AC	●
MES2411X	8×1G	11×10G SFP+	236 Gbps		AC	

Access switches	Downlink interfaces	Uplink interfaces	Bandwidth	Stacking	Power supply	PoE budget
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PoE

MES2308P	8×1G PoE/PoE+	2×1G, 2×1G SFP	24 Gbps	up to 8 devices	AC / DC	240 W
MES2300-08P under development	8×1G PoE/PoE+	2×1G, 2×1G SFP	24 Gbps	up to 8 devices	AC	240 W
MES2324P	24×1G PoE/PoE+	4×10G SFP+	128 Gbps	up to 8 devices	AC / DC	380 W
MES2300-24P	24×1G PoE/PoE+	4×10G SFP+	128 Gbps	up to 8 devices	AC	380 W
MES2300D-24P under development	24×1G PoE/PoE+	4×10G SFP+	128 Gbps	up to 8 devices	1+1	720 W
MES2348P	48×1G PoE/PoE+	4×10G SFP+	176 Gbps	up to 8 devices	1+1	1450 W
MES2300-48P	48×1G PoE/PoE+	4×10G SFP+	176 Gbps	up to 8 devices	1+1	1450 W
MES2408PL	8×1G PoE/PoE+	2×1G SFP	20 Gbps		AC	65 W
MES2408P	8×1G PoE/PoE+	2×1G SFP	20 Gbps		AC / DC	240 W
MES2408CP	8×1G PoE/PoE+	2×1G Combo	20 Gbps		AC	120 W
MES2428P	24×1G PoE/PoE+	4×1G Combo	56 Gbps		AC / DC	370 W
MES2424P	24×1G PoE/PoE+	4×10G SFP+	128 Gbps		AC	370 W
MES2448P	48×1G PoE/PoE+	4×10G SFP+	176 Gbps		1+1	720 W
MES2420-48P	48×1G PoE/PoE+	4×10G SFP+	176 Gbps		1+1	1450 W
MES2410-08DP AC	8×2.5G PoE/PoE+	2×10G SFP+	80 Gbps		AC	240 W
MES2410-08DU AC under development	8×2.5G PoE/PoE+/PoE++	2×10G SFP+	80 Gbps		AC	720 W
MES2420-24DP under development	24×2.5G PoE/PoE+	4×10G SFP+	200 Gbps		AC	380 W
MES2310-48DP under development	48×2.5G PoE/PoE+	4×25G SFP28	440 Gbps	up to 8 devices	1+1	1450 W

Industrial

MES2328I	24×1G	4×1G Combo	56 Gbps	up to 8 devices	1+1	
MES2300DI-28 under development	24×1G	4×1G Combo	56 Gbps	up to 8 devices	1+1	
MES3400I-24 under development	24×1G	4×10G SFP+	128 Gbps		1+1	
MES3400I-24F under development	24×1G SFP	4×10G SFP+	128 Gbps		1+1	
MES3508	8×1G	2×1G Combo	20 Gbps		DC*	
MES3508P	8×1G PoE/PoE+	2×1G Combo	20 Gbps		DC*	240 W
MES3500I-08P under development	8×1G PoE/PoE+	2×1G Combo	20 Gbps		DC*	240 W
MES3510P	8×1G PoE/PoE+	4×1G SFP	24 Gbps		DC*	240 W

*With power supply DRS-270-56, connection to 220 V is possible



Ethernet switches

Access switches	Downlink interfaces	Uplink interfaces	Bandwidth	Stacking	Power supply	PoE budget
MES3500I-10P under development	8×1G PoE/PoE+	4×1G SFP	24 Gbps		DC*	240 W
MES3708P on request	8×1G PoE/PoE+	2×1G SFP	20 Gbps		AC	120 W
MES3710P	8×1G PoE/PoE+	4×1G SFP	24 Gbps		DC*	240 W
MES3700I-8P8F under development	8×1G PoE, 8×1G SFP	2×10G SFP+	72 Gbps		DC*	240 W

Gigabit Ethernet

Aggregation switches	Downlink interfaces	Uplink interfaces	Bandwidth	Stacking	Power supply
MES3308F	4×1G SFP, 4×1G Combo	4×10G SFP+	96 Gbps	up to 8 devices	1+1
MES3300-08F under development	4×1G SFP, 4×1G Combo	4×10G SFP+	96 Gbps	up to 8 devices	1+1
MES3316F	12×1G SFP, 4×1G Combo	4×10G SFP+	112 Gbps	up to 8 devices	1+1
MES3300-16F under development	12×1G SFP, 4×1G Combo	4×10G SFP+	112 Gbps	up to 8 devices	1+1
MES3324	20×1G, 4×1G Combo	4×10G SFP+	128 Gbps	up to 8 devices	1+1
MES3300-24	24×1G	4×10G SFP+	128 Gbps	up to 8 devices	1+1
MES3324F	20×1G SFP, 4×1G Combo	4×10G SFP+	128 Gbps	up to 8 devices	1+1
MES3300-24F	20×1G SFP, 4×1G Combo	4×10G SFP+	128 Gbps	up to 8 devices	1+1
MES3348	48×1G	4×10G SFP+	176 Gbps	up to 8 devices	1+1
MES3300-48	48×1G	4×10G SFP+	176 Gbps	up to 8 devices	1+1
MES3348F	48×1G SFP	4×10G SFP+	176 Gbps	up to 8 devices	1+1
MES3300-48F under development	48×1G SFP	4×10G SFP+	176 Gbps	up to 8 devices	1+1
MES3400-24	24×1G	4×10G SFP+	128 Gbps		1+1
MES3400-24F	24×1G SFP	4×10G SFP+	128 Gbps		1+1
MES3400-48	48×1G	4×10G SFP+	176 Gbps		1+1
MES3400-48F under development	48×1G SFP	4×10G SFP+	176 Gbps		1+1

10 Gigabit Ethernet

MES5316A on request	16×10G SFP+		320 Gbps	up to 8 devices	1+1
MES5324A on request	24×10G SFP+		480 Gbps	up to 8 devices	1+1
MES5332A	32×10G SFP+		640 Gbps	up to 8 devices	1+1
MES5324 on request	24×10G SFP+	4×40G QSFP+	800 Gbps	up to 8 devices	1+1
MES5448	48×10G SFP+	4×40G QSFP+	1.28 Tbps	up to 8 devices	1+1
MES7048	48×10G SFP+	6×100G QSFP28	2.15 Tbps	up to 8 devices	1+1
MES5400-24	24×10G SFP+	6×100G QSFP28	1.68 Tbps	up to 8 devices	1+1
MES5400-48 on request	48×10G SFP+	6×100G QSFP28	2.16 Tbps	up to 8 devices	1+1
MES5300-48 under development	48×10G SFP+	6×100G QSFP28	2.16 Tbps	up to 8 devices	1+1
MES5310-48 under development	48×10G SFP+	6×100G QSFP28	2.16 Tbps	up to 8 devices	1+1
MES5410-48	48×25G SFP28	6×100G QSFP28	3.6 Tbps	up to 8 devices	1+1
MES5500-32	2×10G SFP+	32×100G QSFP28	6.4 Tbps	up to 8 devices	1+1



ESR series service routers



Eltex develops solutions for various areas: information networks of service providers, carrier operators, large, small and medium-sized manufacturing companies. The product range includes routers with support for L2/L3 VPN and MPLS.

Eltex equipment is designed to perform a wide range of tasks related to network security.

Low-performance routers

Interfaces

	ESR-15	ESR-15R	ESR-15VF	ESR-20	ESR-21	ESR-200	ESR-30
1G RJ-45	4	4	8	2	8	4	4
1G Combo				2		4	
1G SFP	2	2	2		4		
10G SFP+							2
USB 2.0	2	2	2	1	1	1	1
USB 3.0				1	1	1	1
Slot for SD cards				●	●	●	●
FXS ports			4				
FXO ports							

Performance

	ESR-15	ESR-15R	ESR-15VF	ESR-20	ESR-21	ESR-200	ESR-30
FW/NAT/routing	1.15 Gbps 94.7K pps	1.15 Gbps 94.7K pps	1.15 Gbps 94.7K pps	3.8 Gbps 318K pps	2.6 Gbps 215K pps	1.9 Gbps 156K pps	7.9 Gbps 651K pps
IPsec VPN	249.6 Mbps 21.4K pps	509 Mbps 43.7K pps	521.9 Mbps 44.8K pps	869.8 Mbps 76.9K pps	869.8 Mbps 76.9K pps	0.47 Gbps 41K pps	838 Mbps 72K pps
VPN tunnels	10	10	10	250	250	250	250
Static routes	1K	1K	1K	11K	11K	11K	11K
Concurrent sessions	4K	4K	4K	256K	256K	256K	256K
BGP routes	1M	1M	1M	2.5M	2.5M	2.5M	2.5M
OSPF routes	30K	30K	30K	300K	300K	300K	300K
RIP routes	10K	10K	1K	10K	10K	10K	10K
FIB size	1M	1M	1M	1.4M	1.4M	1.4M	1.4M

Technical features

RAM	4 GB	4 GB	4 GB	4 GB	4 GB	4 GB	4 GB
Integrated Flash memory	8 GB	8 GB	8 GB	8 GB	8 GB	1 GB	8 GB
Power supply	AC	AC	AC	AC	AC	AC	AC



ESR service routers

Middle and high performance routers

Interfaces

	ESR-31 under development	ESR-3200L under development	ESR-3200	ESR-3300 under development
1G RJ-45	8			
1G Combo				
1G SFP	6			
10G SFP+	2	8		
25G SFP28		4	12	4
40G QSFP+				
100G QSFP28				4
USB 2.0	1	1	1	
USB 3.0	1			1
Slot for SD cards	●	●	●	●

Performance

	ESR-31 under development	ESR-3200L under development	ESR-3200	ESR-3300 under development
FW/NAT/routing	7.9 Gbps 651K pps	18.1 Gbps 1495K pps	47.4 Gbps 3906K pps	64 Gbps 8000K pps
IPsec VPN	838 Mbps 72K pps	1.1 Gbps 127K pps	2.2 Gbps 190K pps	Measurements were not made
VPN tunnels	250	500	500	500
Static routes	11K	11K	11K	11K
Concurrent sessions	256K	512K	512K	512K
BGP routes	2.5M	5M	5M	5M
OSPF routes	300K	500K	500K	500K
RIP routes	10K	10K	10K	10K
FIB size	1.4M	1.7M	1.7M	1.7M

Technical features

RAM	4 GB	16 GB	24 GB	16 GB
Integrated Flash memory	8 GB	8 GB	8 GB	8 GB
Power supply	1+1	1+1	1+1	1+1



vESR

Virtual service router

The vESR virtual service router is designed for connection of small and middle-sized offices in enterprise networks. The functionality of firewall and router allows ensuring security with various Internet connection options.



vESR supports advanced routing, WAN organization and network security functions.

Key features

- Data routing
- Multiprotocol label switching (MPLS)
- Building a secure network (NAT, Firewall)
- Intrusion Prevention and Detection System (IPS/IDS)*
- Filtering network data by various criteria, including filtering by application
- Organization of secure network tunnels between different offices of a company
- Remote connection of staff members to an office
- Management of Internet channel bandwidth allocation in the office via QoS
- Organization of redundant connection
- Termination of L2 client connections, bandwidth limitations, IPoE BRAS functions*

Technical features

Option	Performance	RIP BGP	RIP OSPF	RIB IS-IS	RIB RIP	VPN
FREE	1 Mbps	1024	1000	1000	1000	2
BASIC	100 Mbps	512k	500k	500k	10k	6
BASIC +	500 Mbps	512k	500k	500k	10k	12
STANDARD	1 Gbps	768k	500k	500k	10k	24
STANDARD +	5 Gbps	1024k	500k	500k	10k	64
ADVANCED	10 Gbps	2048k	500k	500k	10k	64
ADVANCED +	25 Gbps	4096k	500k	500k	10k	64
PREMIUM	50 Gbps	5000k	500k	500k	10k	256
PREMIUM +	100 Gbps	5000k	500k	500k	10k	256

*Available only for the vESR FREE option, support on other options will be implemented in the following versions



ME series universal routers



The routers are included in ME5000 series and have the uniform software and management interfaces.

The ME-series devices support a full range of functions — IPv4/IPv6 routing, hierarchical QoS, IP Multicast routing and L2/L3 MPLS services.



ME5000
on request



ME5000M



ME6008
under development

Performance	up to 2.8 Tbps	up to 6.1 Tbps	up to 19.2 Tbps
Crate content	<p>Management and switching modules (up to 2 pcs. per chassis) FMC16 (1.4 Tbps)</p> <p>Line modules (up to 12 pcs. per chassis) LC18XGE: 18×10G SFP+ LC20XGE: 20×10G SFP+ LC8XLGE: 4×40G QSFP+ and 4×100G QSFP28</p>	<p>Management and switching modules (up to 2 pcs. per chassis) FMC32 (3.06 Tbps)</p> <p>Line modules (up to 12 pcs. per chassis) LC20XGE: 20×10G SFP+ LC8XLGE: 4×40G QSFP+ and 4×100G QSFP28</p>	<p>Management and switching modules (up to 2 pcs. per chassis) ME6K-RCC1</p> <p>Switching fabric modules (up to 4 pcs. per chassis) ME6K-FC96-8 (4.8 Tbps)</p> <p>Line modules (up to 8 pcs. per chassis) ME6K-LC48XGE: 48×25G SFP28 ME6K-LC24CGE: 24×100G QSFP28</p>
Module orientation	vertical	vertical	LC and RCC1 – horizontal (access from front chassis side) FC96 – vertical (access from back chassis side)
Power supply	2×DC feeders	2×DC feeders	2×DC feeders
Form factor	19", 15U eurorack modular	19", 15U eurorack modular	19", 15U eurorack modular



ME5100 rev.X



ME5100S



ME5200S



ME5210S
under development



ME2001
under development

Performance	200 Gbps 300 Mpps	200 Gbps 300 Mpps	720 Gbps 720 Mpps	720 Gbps 720 Mpps	300 Gbps 300 Mpps
Interfaces	16×10G SFP+ 4×10G XFP	20×10G SFP+	32×10G SFP+ 4×100G QSFP28	32×10G SFP+ 6×100G QSFP28	16×10G SFP+ 8×25G SFP28 2×100G QSFP28
Power supply	1+1	1+1	1+1	1+1	1+1 (front access to power supply)
Form factor	19", 2U	19", 2U	19", 2U	19", 1U	19", 1U (depth up to 300 mm)



Construction of L3 core of carrier network



Objective

Construction of a distributed core/distribution network using MPLS protocol stack



Equipment

- ESR-3200
- ME5000M
- ME5100S

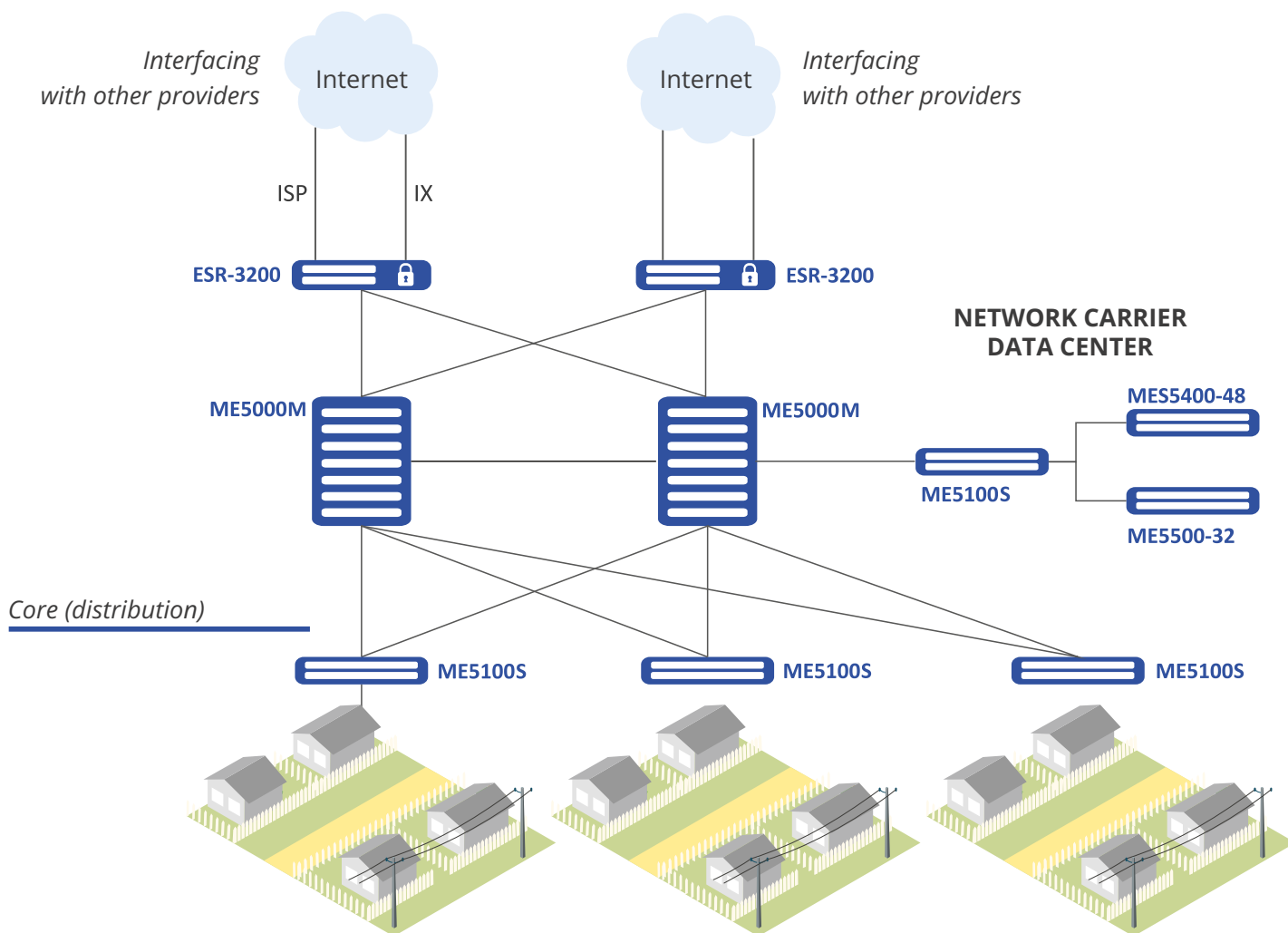


Benefits

Hardware redundancy on ME5000M core devices (management modules, line cards)

Scalability

Fault tolerance (fast failure detection and switching to reserve)





GPON network construction in apartment buildings



Objective

Construction of GPON networks in apartment buildings using existing subscriber equipment or subscriber devices provided by a carrier operator



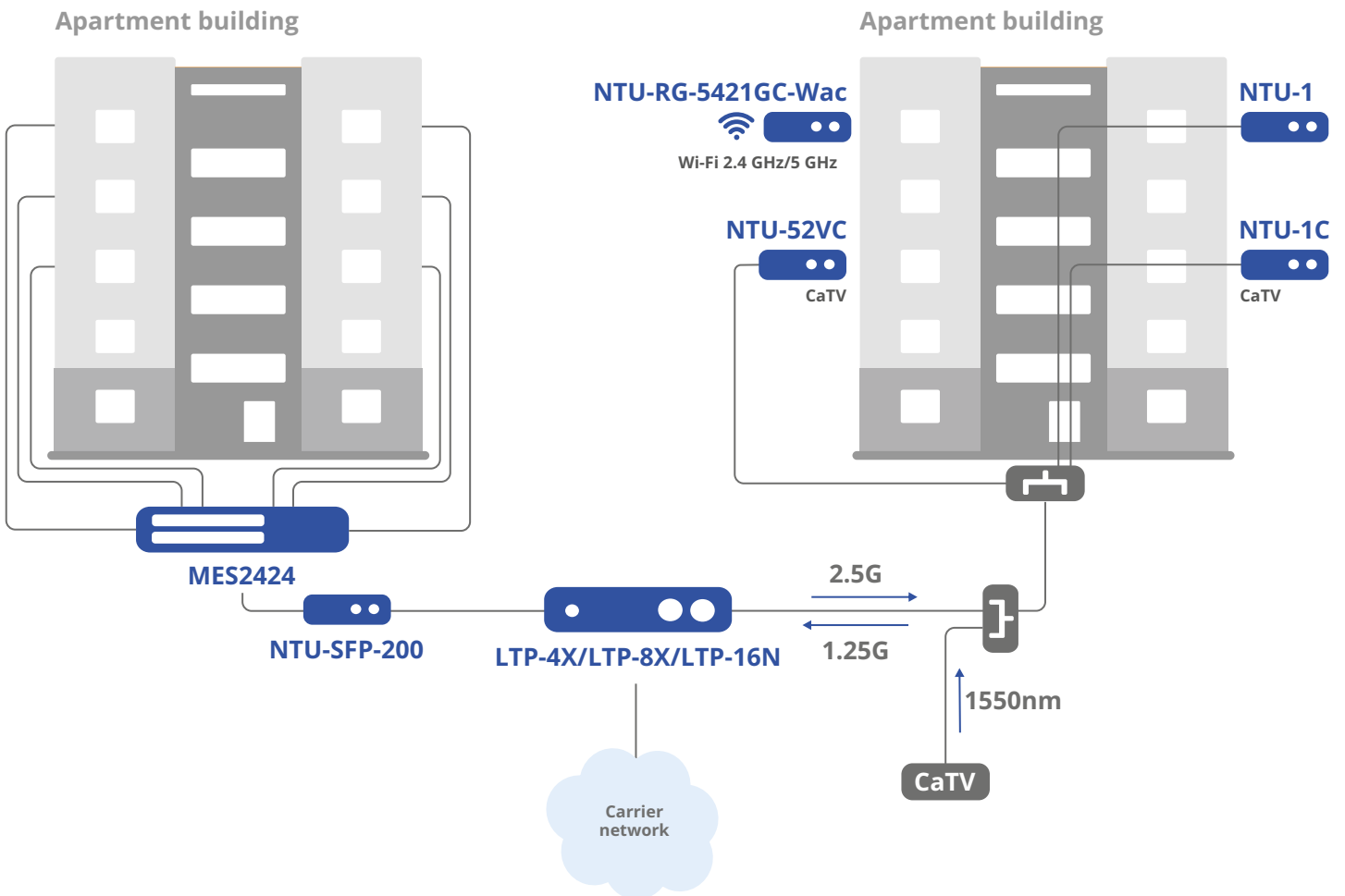
Equipment

- MES2424
- LTP-4X/LTP-8X/LTP-16N
- NTU-RG-5421GC-Wac
- NTU-52VC
- NTU-1 rev. C
- NTU-1C
- NTU-SFP-200



Benefits

- Reduction of optical passive part costs
- Reduction of network construction costs due to the use of NTU-SFP-200 in conjunction with an Ethernet switch
- High optical fiber transmission rate
- Various splitting ratios (up to 1:128)
- Centralized management and monitoring system





GPON network construction in detached houses



Objective

Detached house network coverage based on GPON technology



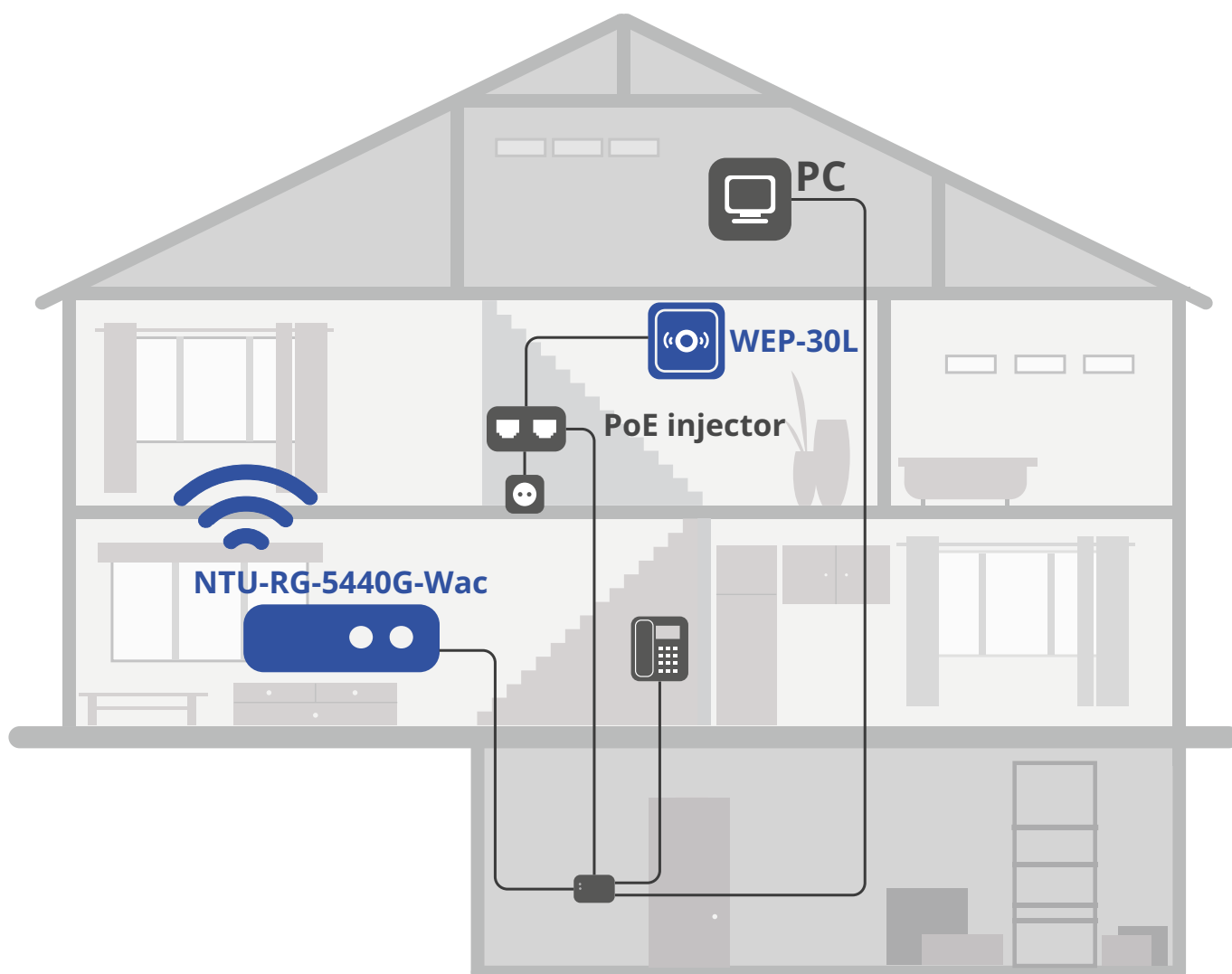
Equipment

- NTU-RG-5440G-Wac
- WEP-30L



Benefits

- Reduction of optical passive part costs
- High optical fiber transmission rate
- Provision of all services via the same cable
- Centralized management and monitoring system
- Wide range of subscriber terminals
- Construction of networks with support for EasyMesh





ESR-based network construction using BRAS



Objective

Construction of an ESR-based network using BRAS



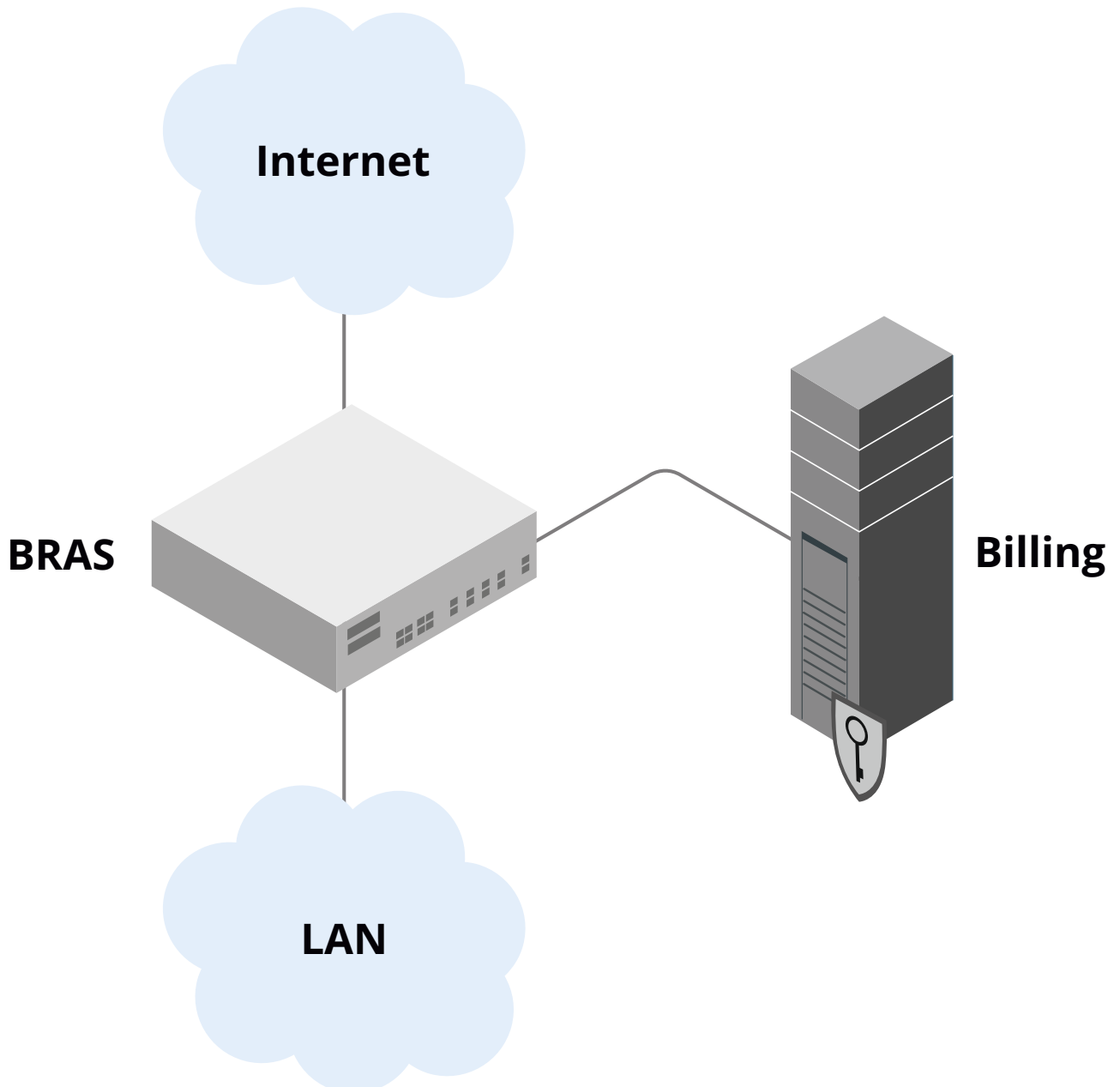
Equipment

- ESR service router



Benefits

- User authentication
- Traffic filtering and shaping
- Rate limiting for users, traffic quota
- Traffic redirection





Construction of wide area network of a company with branch structure



Objective

Consolidation of company branches' data networks into a single enterprise network



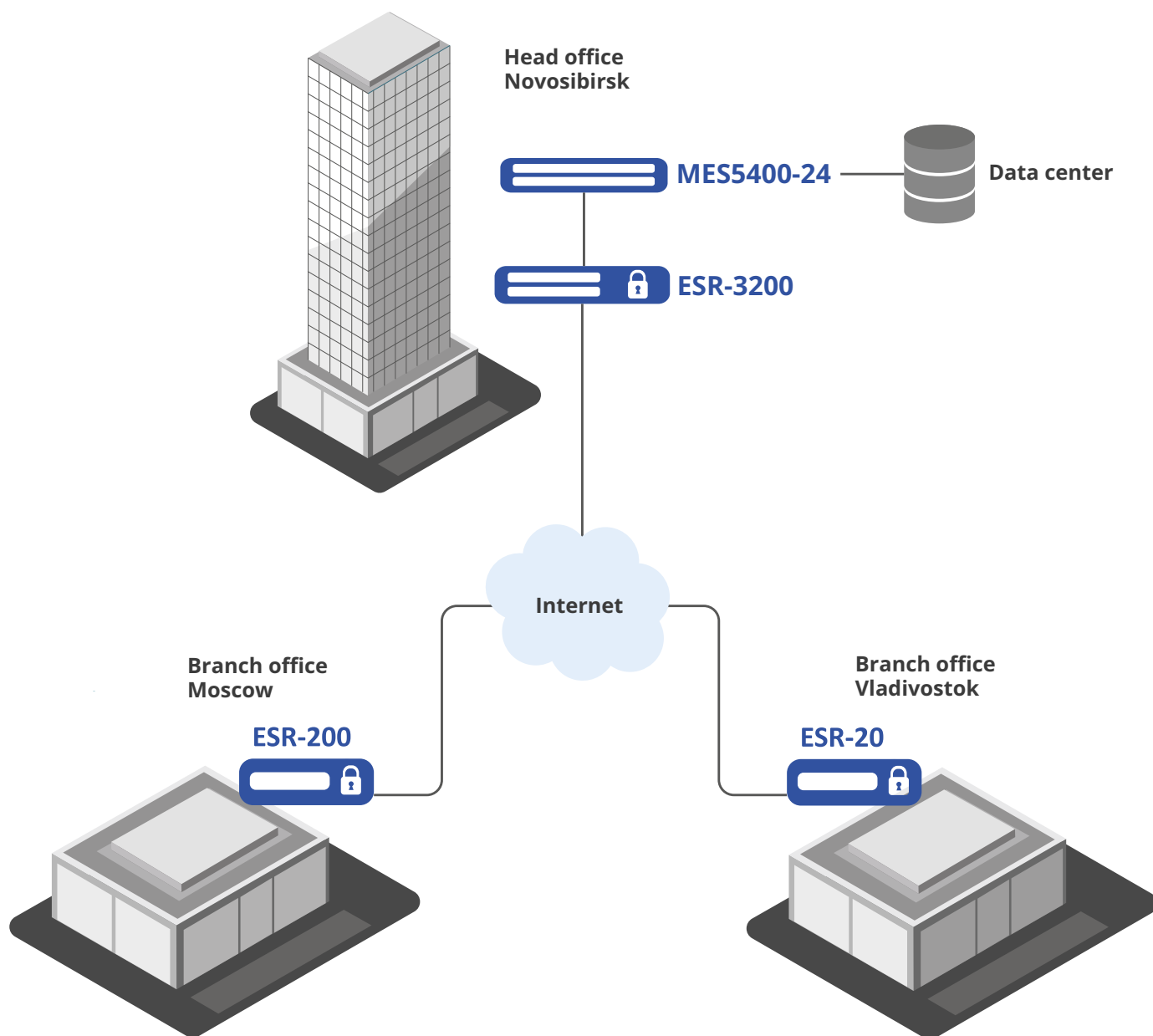
Equipment

- MES5400-24
- ESR-3200
- ESR-200
- ESR-20



Benefits

- VPN encryption for added security
- Simplified scalability
- Firewall/NAT





Construction of secure network infrastructure



Objective

Construction of infrastructure with network and computer security software system



Equipment

- ESR service router

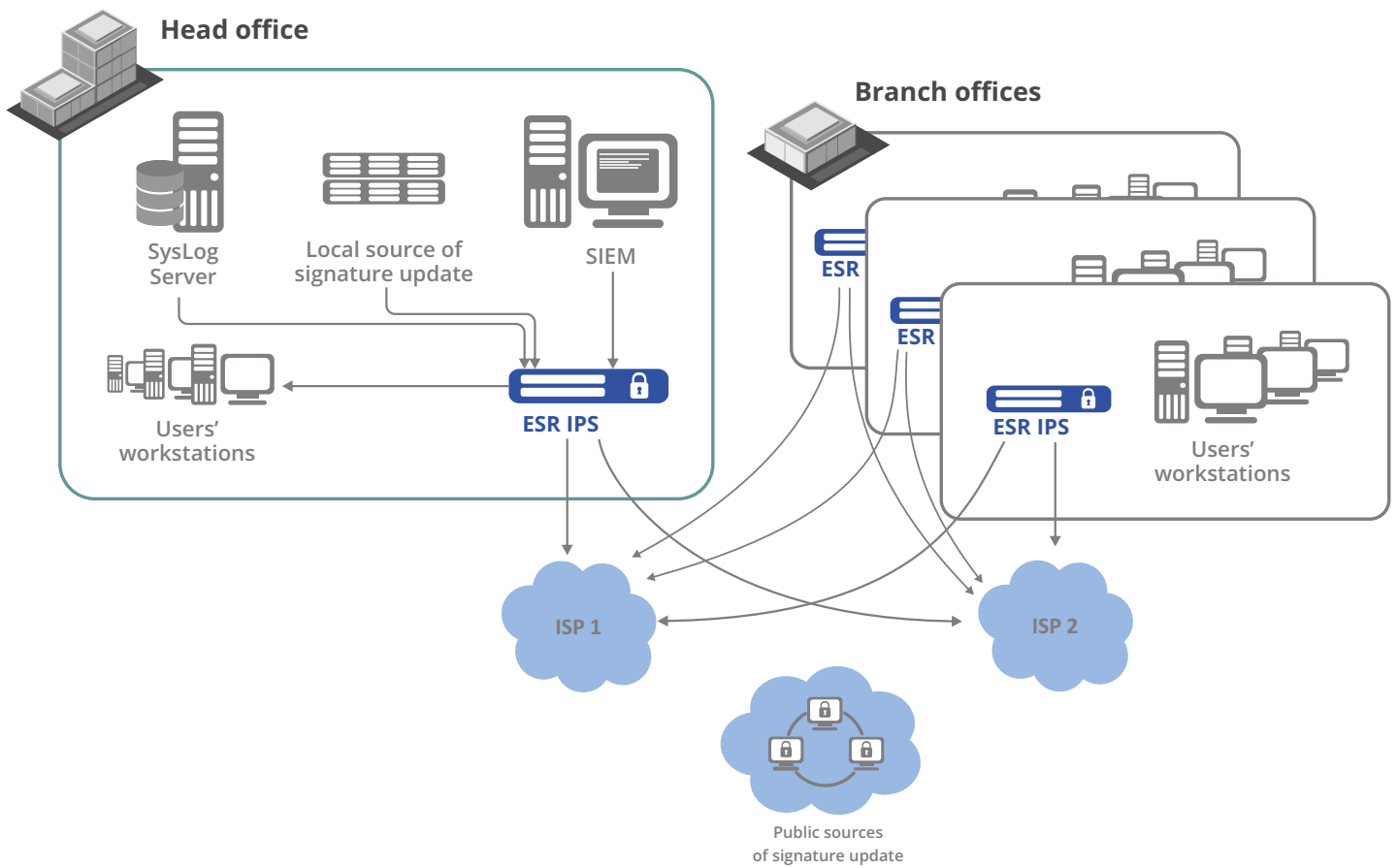


Benefits

Network attacks prevention and monitoring

High IPS performance: up to 3.1 Gbps

Flexible rule set sources configuration allows uploading signatures both from public and local network in Suricata rules format





Construction of secure network infrastructure. Joint solutions with Kaspersky Lab



Objective

Organization of "KASPERSKY LAB" rule-based streaming traffic filtering



Equipment

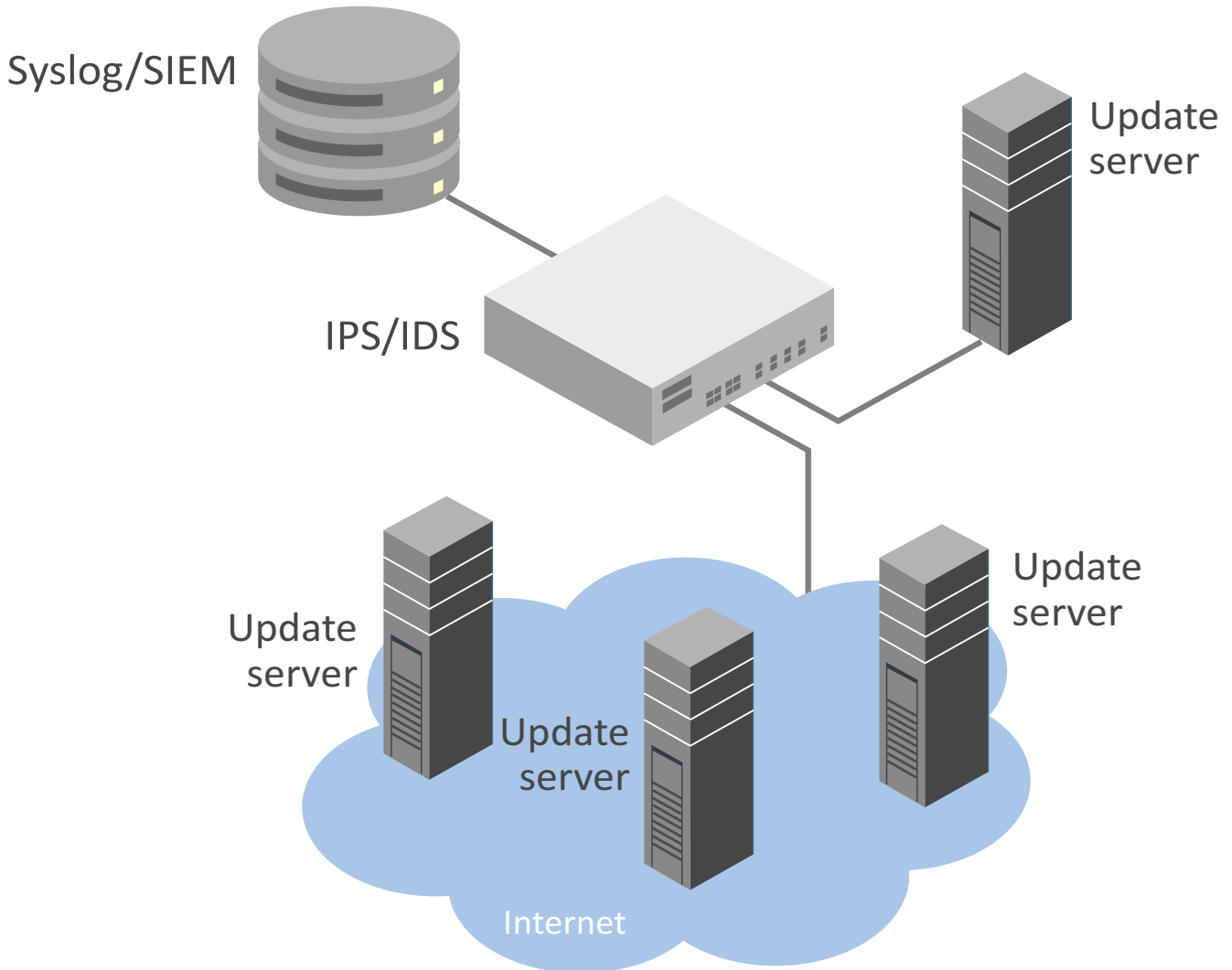
- ESR service router



Benefits

Using the rule set from leading developer "KASPERSKY LAB"

Constant automatic updating of the rules online





Construction of secure network infrastructure. Joint solutions with Kaspersky Lab



Objective

Organization of "KASPERSKY LAB" rule-based streaming traffic filtering



Equipment

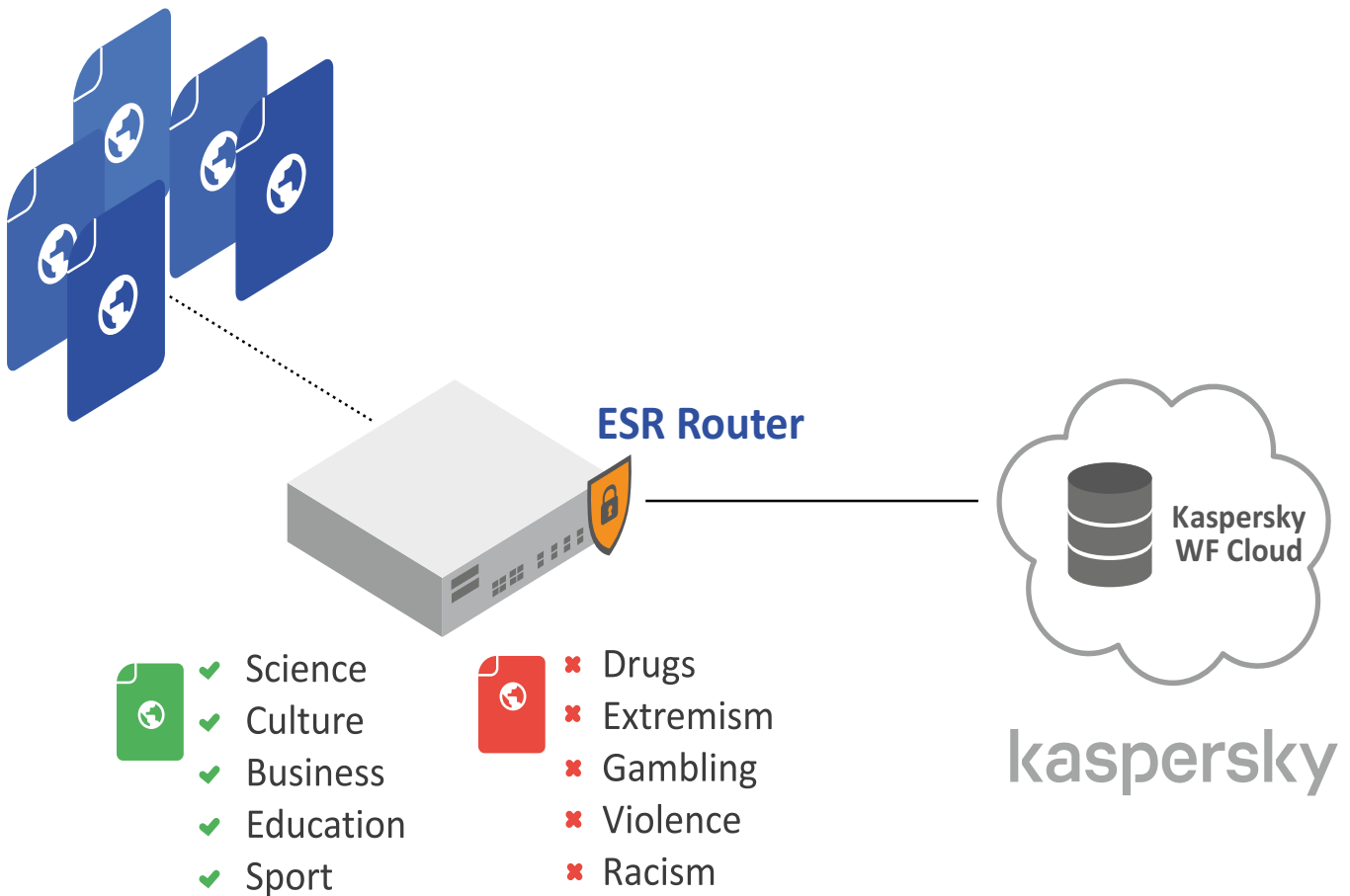
- ESR service router



Benefits

Over 70 categories, including various blocklists

Continuous automatic data update in the online mode





Fault-tolerant cluster of service routers



Objective

Combining multiple ESR service routers into a single logical device for the purpose of high availability (high-availability cluster)



Equipment

- ESR service routers
- MES switches



Benefits

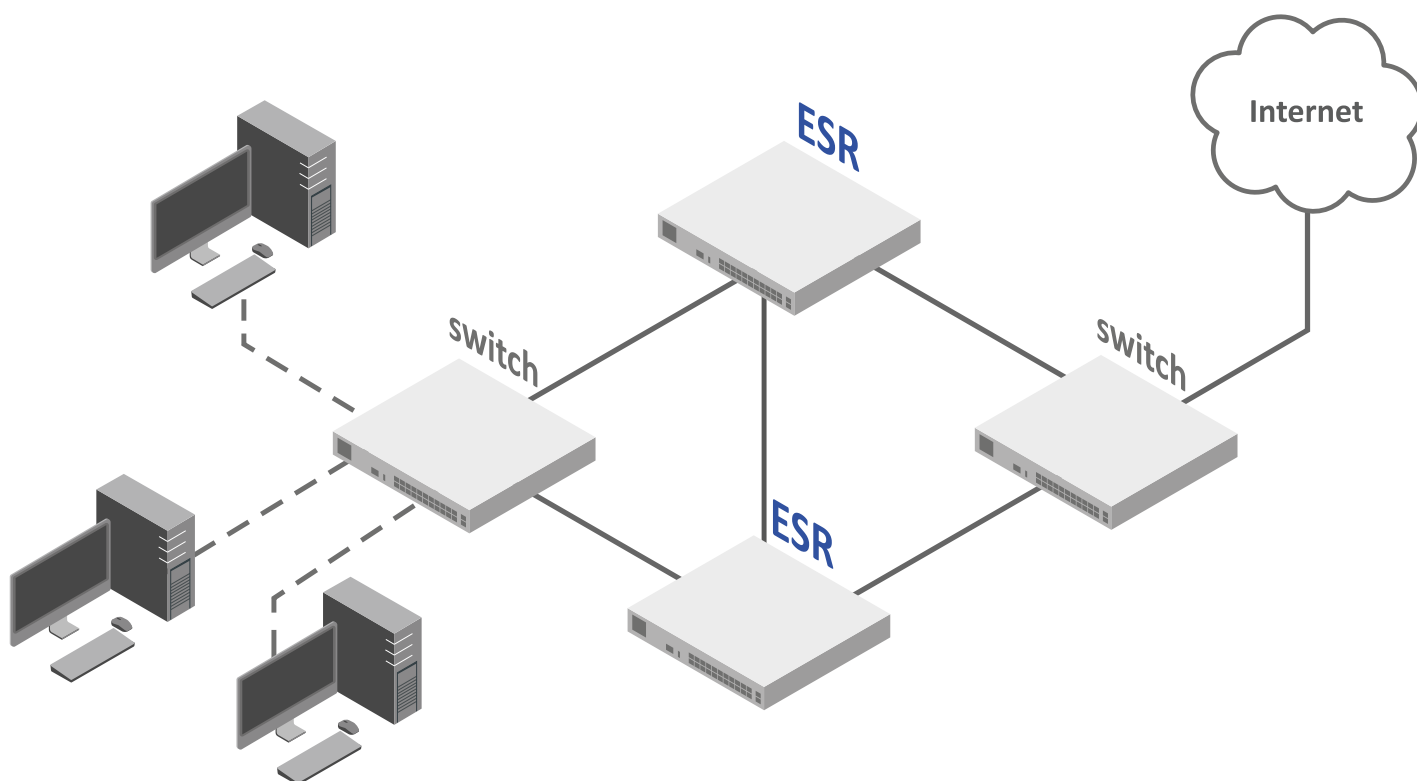
Redundancy of routers and all connections in the cluster

State synchronization for quick switchover in case of failure (failover)

Centralized management, configuration and monitoring of the cluster

Configuration synchronization

Replacing one router to a cluster does not require reconfiguration of neighboring devices





Construction of a distributed fault-tolerant network



Objective

Creation of a data transmission network within the enterprise from the access level to the core level and the interface with the Internet provider (ISP)



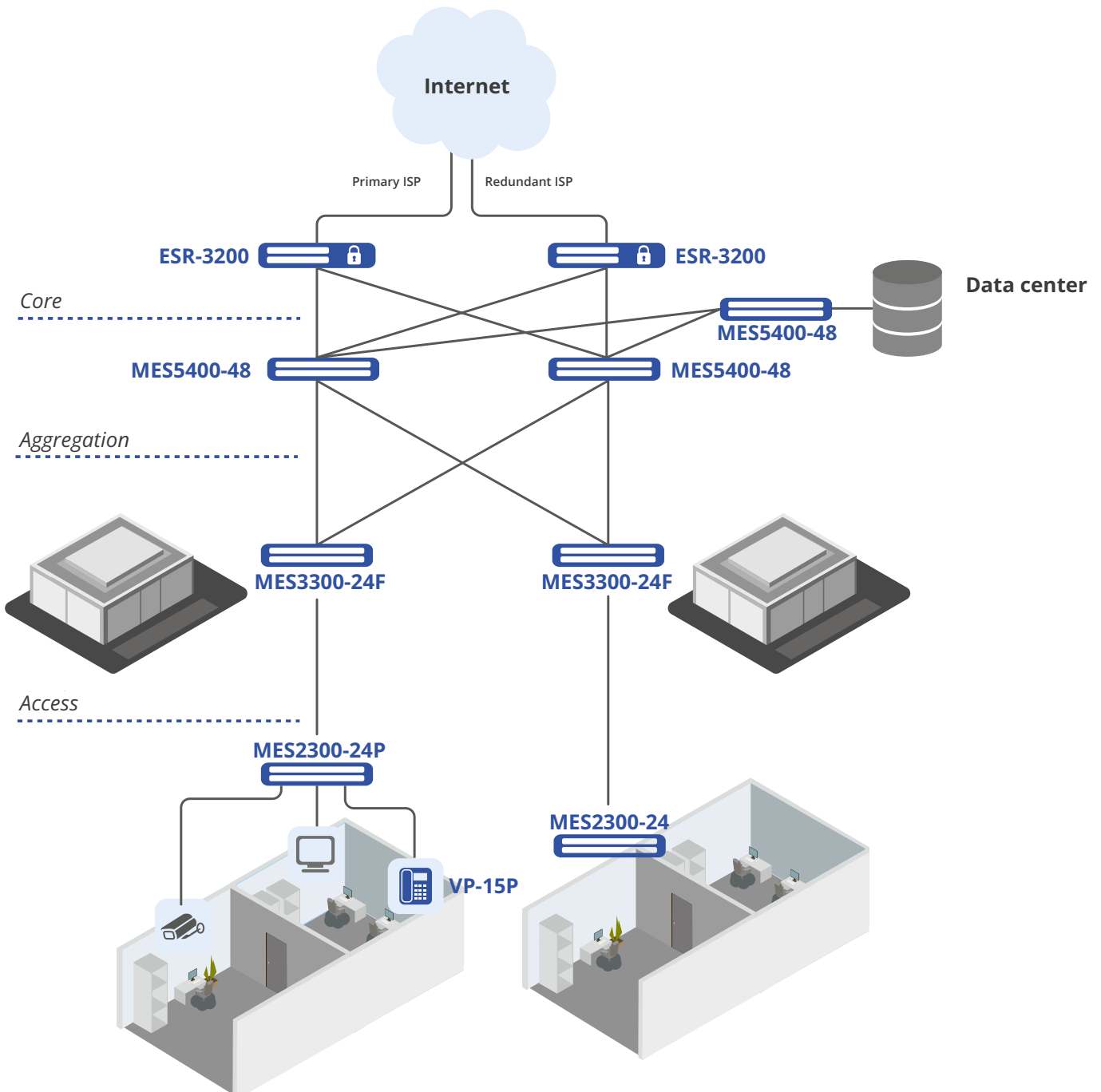
Equipment

- MES5400-48
- MES3300-24F
- MES2300-24P
- MES2300-24
- ESR-3200
- VP-15P



Benefits

- Redundancy of each distribution and aggregation node (MC-LAG, STP, ERPS)
- Redundancy of Internet channels





Construction of a high-speed network based on 10GPON technology (XGS-PON)



Objective

Creation of a modern passive optical network PON based on XGS-PON technology, providing data transfer up to 10 Gbps



Equipment

- NTX-RG-552x
- NTX-1
- NTX-1F



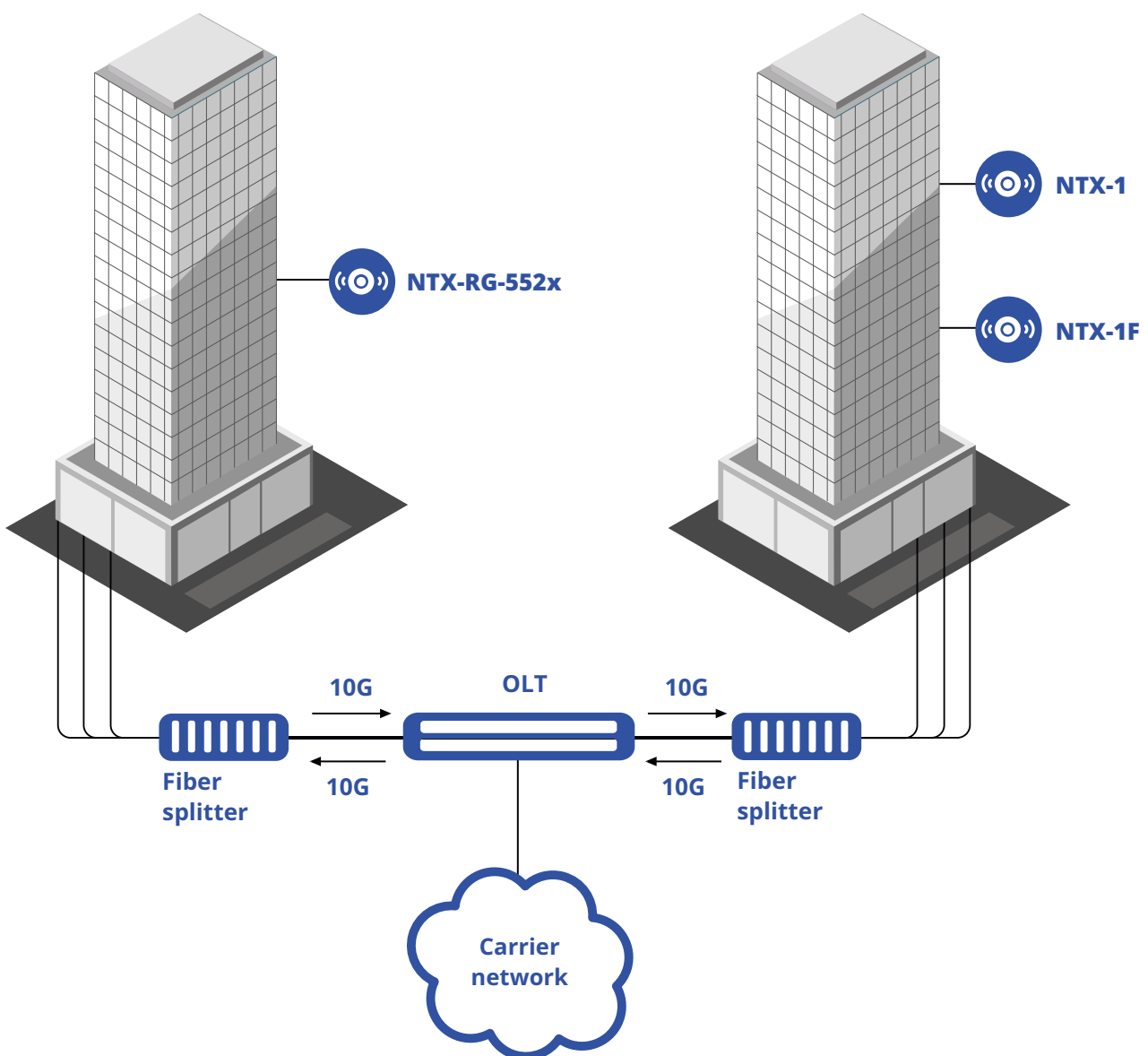
Benefits

High connection speed

The ability to connect through one terminal not only the Internet, but also digital television and telephone communication

High security and reliable data protection from interception

Reduced energy consumption of the used equipment





Construction of IP fabric using Spine-Leaf architecture



Objective

Creation of a high-performance fabric based on switches to increase fault tolerance in the data center segment



Equipment

- MES5400-24
- MES5400-48
- MES5500-32

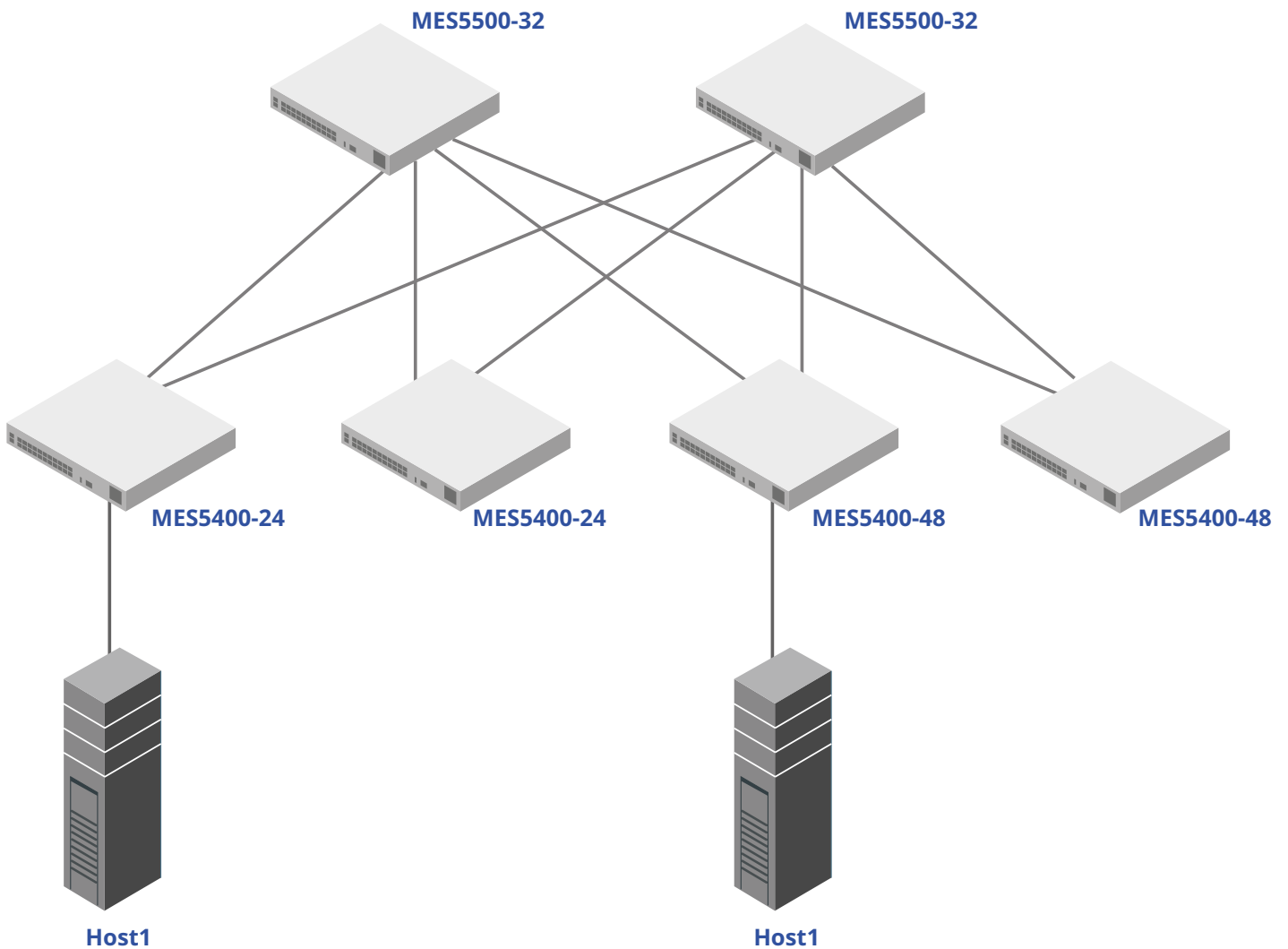


Benefits

High reliability

Excellent scalability of port capacity and performance

Load balancing between Leaf switches



Wi-Fi access points



Indoor



WEP-3L



**WEP-30L
WEP-30L-Z**



WEP-3ax



WEP-2L

Standard	802.11ax (Wi-Fi 6)	802.11ax (Wi-Fi 6)	802.11ax (Wi-Fi 6)	802.11ac (Wi-Fi 5)
Bandwidth	2.4/5 GHz	2.4/5 GHz	2.4/5 GHz	2.4/5 GHz
Radio interfaces number	2	2	2	2
Antennas type	Built-in	Built-in	Built-in	Built-in
Antennas configuration	MIMO 2×2 MU-MIMO 2×2	MU-MIMO 2×2	MU-MIMO 2×2	MIMO 2×2
Roaming	802.11r/k/v	802.11r/k/v	802.11r/k/v	802.11r/k/v
Operation mode	Managed by controller Standalone	Managed by controller Standalone	Managed by controller Standalone	Managed by controller Standalone
Interfaces	1×1G	1×2.5G	1×2.5G	1×1G
Power supply	PoE 48 V/56 V (IEEE 802.3af-2003)	PoE 48 V/56 V (IEEE 802.3af-2003)	PoE+ 48 V/56 V (IEEE 802.3at-2009)	PoE 48 V/56 V (IEEE 802.3af-2003)
Recommended users number	Up to 40	Up to 50	Up to 100	Up to 40
WIDS/WIPS support	Supported from firmware version 2.5.0	Supported from firmware version 2.5.0	•	Supported from firmware version 2.5.0
Airtune	•	•	•	•
IoT Hub support		WEP-30L-Z only		



WEP-1L



WEP-2ac



WEP-200L

Standard	802.11ac (Wi-Fi 5)	802.11ac (Wi-Fi 5)	802.11ac (Wi-Fi 5)
Bandwidth	2.4/5 GHz	2.4/5 GHz	2.4/5 GHz
Radio interfaces number	2	2	2
Antennas type	Built-in	Built-in	Built-in
Antennas configuration	MIMO 2×2	MIMO 2×2	MIMO 2×2 MU-MIMO 4×4
Roaming	802.11r/k/v	802.11r/k/v	802.11r/k/v
Operation mode	Managed by controller Standalone	Managed by controller Cluster Standalone	Managed by controller Standalone
Interfaces	1×1G	1×1G	1×1G
Power supply	DC 5V	PoE+ 48 V/56 V (IEEE 802.3at-2009)	PoE 48 V/56 V (IEEE 802.3af-2003)
Recommended users number	Up to 20	Up to 50	Up to 60
WIDS/WIPS support	Supported from firmware version 2.5.0	•	Supported from firmware version 2.5.0
Airtune	•	•	•
Mesh		•	
Hotspot 2.0 (Wi-Fi offload)		•	



Wi-Fi access points

Outdoor



WOP-30L



WOP-30LS



WOP-30LI
Industrial



WOP-2L



WOP-2ac



WOP-20L

	WOP-30L	WOP-30LS	WOP-30LI Industrial	WOP-2L	WOP-2ac	WOP-20L
Standard	802.11ax (Wi-Fi 6)	802.11ax (Wi-Fi 6)	802.11ax (Wi-Fi 6)	802.11ac (Wi-Fi 5)	802.11ac (Wi-Fi 5)	802.11ac (Wi-Fi 5)
Bandwidth	2.4/5 GHz	2.4/5 GHz	2.4/5 GHz	2.4/5 GHz	2.4/5 GHz	2.4/5 GHz
Antennas type	External	Built-in sector	External	External	External	External
Antennas configuration	MU-MIMO 2x2	MU-MIMO 2x2	MU-MIMO 2x2	MIMO 2x2	MIMO 2x2	MIMO 2x2
Roaming	802.11r/k/v	802.11r/k/v	802.11r/k/v	802.11r/k/v	802.11r/k/v	802.11r/k/v
Operation mode	Managed by controller Standalone	Managed by controller Standalone	Managed by controller Standalone	Managed by controller Standalone	Managed by controller Cluster Standalone	Managed by controller Standalone
Interfaces	1x2.5G	1x2.5G	2x1G 2x1G SFP	1x1G	1x1G	1x1G
Power supply	PoE+ 48 V/56 V (IEEE 802.at-2009)	PoE 48 V/56 V (IEEE 802.3af-2003)	PoE+ 48 V/56 V (IEEE 802.at-2009), DC 12-56V	PoE 48 V/56 V (IEEE 802.3af-2003)	PoE+ 48 V/54 V (IEEE 802.3at-2009)	PoE 48 V/56 V (IEEE 802.3af-2003)
Recommended users number	up to 50	up to 50	up to 50	up to 40	up to 50	up to 50
WIDS/WIPS support	Supported from firmware version 2.5.0	Supported from firmware version 2.5.0	Supported from firmware version 2.5.0	Supported from firmware version 2.5.0	•	Supported from firmware version 2.5.0
Airtune	•	•	•	•	•	•
Mesh			Under developmet		•	
Hotspot 2.0 (Wi-Fi offload)			Under developmet		•	

Wireless broadband access

	Base stations		User stations	
	WOP-2ac-LR2 SYNC	WOP-2ac-LR5 SYNC	WB-2P-LR2	WB-2P-LR5
Frequency range, GHz	2.4	5-6	2.4	5-6
Antennas configuration	2x2:2	2x2:2	2x2:2	2x2:2
Channel width, MHz	5, 10, 20, 40	5, 10, 20, 40, 80	5, 10, 20, 40	5, 10, 20, 40, 80
Management	EMS management system	EMS management system	TR-069	TR-069
Polling support	•	•	•	•
Transmitter power, dBm	26	28	26	28
Intersectoral synchronization	•	•		
Interfaces	1 Combo port 10/100/1000BASE-T (SFP)	1 Combo port 10/100/1000BASE-T (SFP)	1 Ethernet port 10/100/1000BASE-T	1 Ethernet port 10/100/1000BASE-T



WLC wireless LAN controller

Solution for corporate wireless networks management



WLC XX series controllers are designed to configure corporate wireless networks. The solution allows implementing different schemes for connecting access points over L2/L3.

Combined with routing and firewall functions, WLC XX series controllers are a universal solution for enterprise, office and other networks.

Key features:

- AP autoconfiguration according to preset templates
- AP monitoring and management
- AirTune. Radio Resource Management
- Connecting access points via L2/L3
- User authorization, network statistics
- WIDS. Detection of third-party access points, security monitoring

Interfaces



WLC-15



WLC-30



WLC-3200

	WLC-15	WLC-30	WLC-3200
1G RJ-45	4	4	
1G SFP	2		
10G SFP+		2	
25G SFP28			12
Console	1	1	1
OOB			1
USB 3.0		1	
USB 2.0	1	1	1
Slot for microSD card		1	1

Technical features

Number of access points	50 (extendable to 150)	150 (extendable to 500)	1000 (extendable to 1200)
VPN tunnels	10	250	500
Static routes	1K	11K	11K
Concurrent sessions	4K	256K	512K
BGP routes	1M	2.5M	5M
OSPF routes	30K	300K	500K
RIP routes	1K	10K	10K
FIB size	1M	1.4M	1.7M



Software controller for Wi-Fi networks

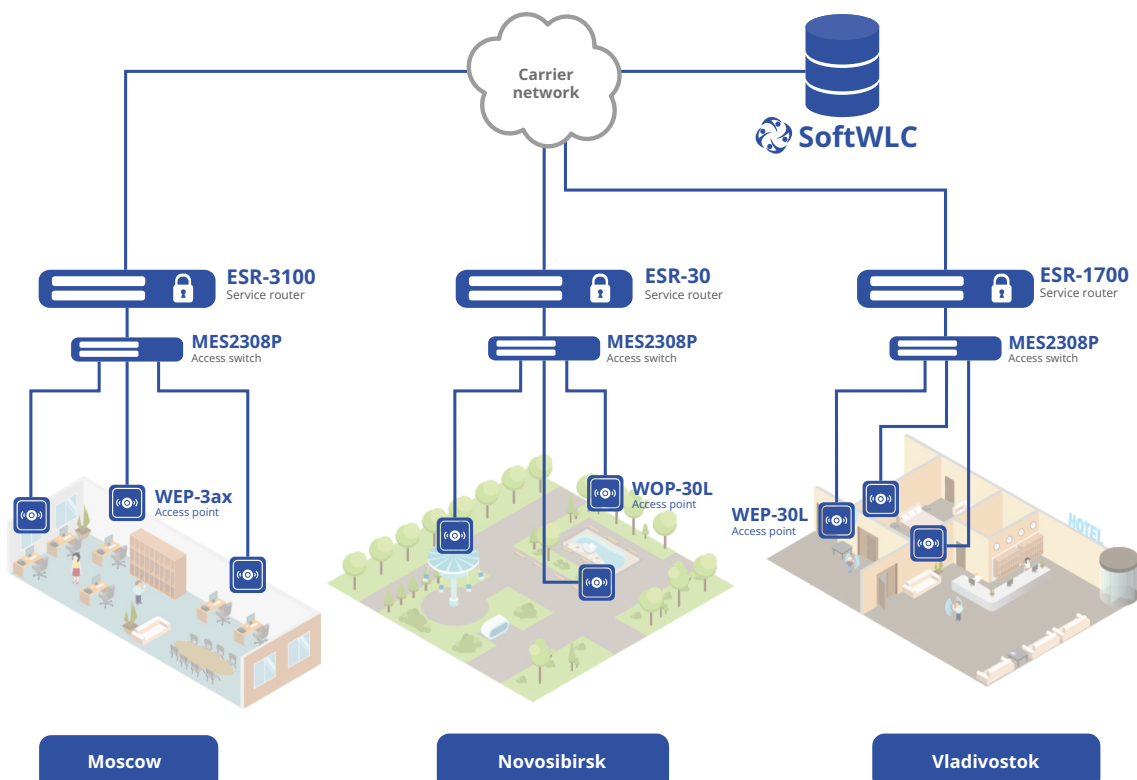


SoftWLC is a software package designed to manage wireless area networks via Wi-Fi technology.

The SoftWLC controller performs a variety of tasks for the organization of HotSpot zones and user authorization. SoftWLC is a flexible and convenient solution to monetize Wi-Fi devices and provide quality service under the operator's control.

SoftWLC provides an interface for all WiFi management operations. Flexibility of the solution allows building both enterprise peer-to-peer networks with a basic set of services, and complex solutions with hierarchical, carrier-grade management. Hybrid applications are possible.

- Up to 100 000 access points
- Centralized solution for carriers
- Wi-Fi networks management and monitoring (group operations, autoconfiguration, monitoring and notification of failures)
- Multidomain architecture (distributed system of access rights for different departments of a company)
- Management of Wi-Fi provision scenarios (portal authorization, paid access, WPA-Enterprise)
- Redundancy





Wireless broadband access via Wi-Fi technology



Objective

Construction of a wireless broadband access network



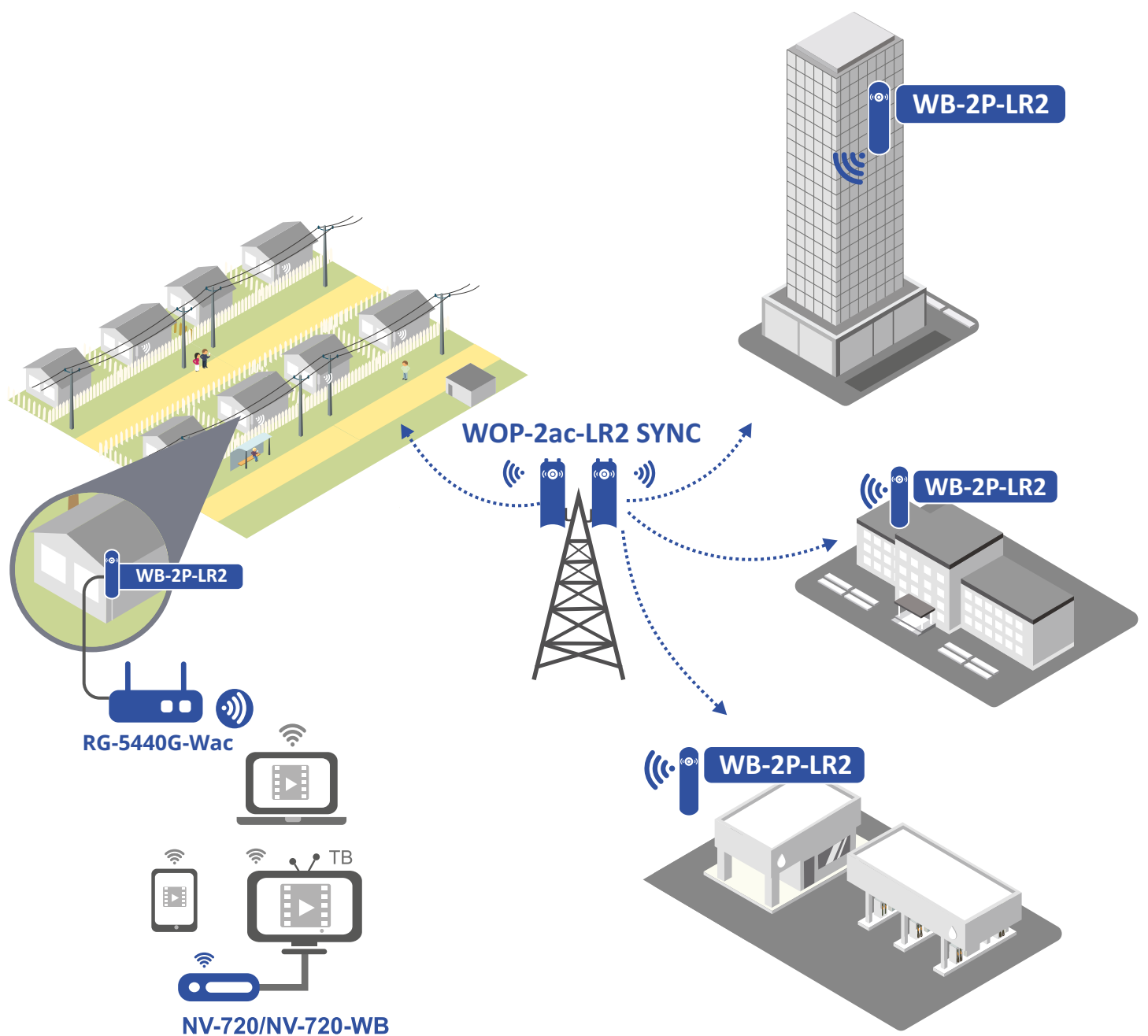
Equipment

- Subscriber station
WB-2P-LR2
- Base station
WOP-2ac-LR2 SYNC



Benefits

- Operating at 2.4 GHz
- Wide coverage area
- Intersectoral synchronization





IP phones



VP-12



VP-15P



VP-17P



VP-30P



VP-100P

OS	Linux	Linux	Linux	Linux	Android
SIP accounts	2	2	2	6	6
Interfaces	2×10/100 Mbps	2×10/100 Mbps	2×10/100/1000 Mbps	2×10/100/1000 Mbps	2×10/100/1000 Mbps
Display	Monochrome 128×64 px	Monochrome 128×64 px	Monochrome 128×64 px	Color 800×480 px	Touch-screen, color
Extension console				•	
HD VOICE				•	•

Low-density-port VoIP gateways



TAU-1M.IP



TAU-2M.IP



TAU-4M.IP



TAU-8N.IP

FXS	1	2	4	8
LAN	2	1	1	
WAN	1	1	1	1
MGMT				•
USB 2.0	•	•	•	•
3G/4G redundancy	•	•	•	•

Subscriber gateways



TAU-16.IP



TAU-24.IP



TAU-32M.IP



TAU-36.IP



TAU-72.IP

FXS/FXO/E1	16 FXS	24 FXS	Up to 32 FXO/FXS	36 FXS	72 FXS
VoIP	SIP, SIP-T, H.323	SIP, SIP-T, H.323	SIP, SIP-T, H.323	SIP, SIP-T, H.323	SIP, SIP-T, H.323

Features:

- Current and voltage protection of ports
- Ability to measure line parameters
- PBX functionality
- Redundant SIP proxy
- FXS port can be hard-relayed to FXO port in case of power outage*



Trunk gateways



SMG-2



SMG-4



SMG-1016M



SMG-3016

Interfaces	1 × 1GE (RJ-45) up to 2 × E1 (RJ-48) 1 × Console RS-232 port (RJ-45) 1 × USB 2.0	1 × 1GE (RJ-45) 4 × E1 (RJ-48) 1 × Console RS-232 port (RJ-45) 1 × USB 2.0	3 × 1GE (RJ-45) 2 × 1G (SFP) 16 × E1 (CENTRONICS-36) 2 × SATA for SSD 1 × Console RS-232 port (RJ-45) 1 × USB 2.0	2 × 1GE (RJ-45) 2 × Combo 1G (SFP, RJ-45) 1 × 1G (RJ-45) OOB 16 × E1 (RJ-48) 2 × SATA HDD 2.5 1 × Console RS-232 port (RJ-45) 2 × USB 2.0
SIGTRAN/MGCP/H.248			●	●
Synchronization	From E1 stream	From E1 stream	From E1 stream From analog source	From E1 stream From analog source, 2 sync inputs/sync outputs
Capacity	Up to 2 E1 streams Up to 64 VoIP channels	4 E1 streams Up to 128 VoIP channels	Up to 16 E1 streams Up to 768 VoIP channels	Up to 16 E1 streams Up to 768 VoIP channels
Redundancy			Power redundancy	Master-Slave: by IP by E1 by power

Features and capabilities:

- VoIP protocols: SIP, SIP-T/SIP-I, H.323 (H.323 is available only for SMG-1016M, SMG-3016)
- TDM protocols: SS7, DSS1 (Q.931)
- Media stream transcoding
- Semi-permanent connection mode for operation on satellite channels
- DTMF support
- QoS: IP DiffServ; 802.1p
- CDR files creation
- RADIUS authorization and accounting
- Support for STUN, public IP, NAT comedia (for SMG-1016M, SMG-3016)
- Management via WEB, CLI, SNMP
- Static and dynamic firewall
- Device access rights differentiation

Eltex IP PBX



SMG-200



SMG-500



SMG-1016M



SMG-3016



ECSS-10

Maximum number of subscribers	200	500	2000	3000	100000+
Scalability	100–200	250–500	500–2000	1000–3000	●
Redundancy	Battery connection	Battery connection	2 power supply units	Master-Slave: by IP by E1 2 power supply units	High-availability cluster, geographical redundancy, geographical cluster

Interfaces

E1		Up to 4	Up to 16	Up to 16	Via gateways
FXS/FXO	Up to 16	Via gateways	Via gateways	Via gateways	Via gateways



Services

	SMG-200	SMG-500	SMG-1016M	SMG-3016	ECSS-10
Virtual PBX					•
Call center with operator/supervisor workstation					•
Call queue	•	•	•	•	•
Subscriber personal account					•
Teleconference					•
Call recording	•	•	•	•	•
Voice mail	•	•	•	•	•

Session border controllers



SBC-1000



SBC-3000



E-SBC*

Load	Up to 500 connections	Up to 2000 connections	Up to 50000 calls
IP redundancy		Master-Slave	Local and geographical redundancy
DDoS attacks protection			•

Features and capabilities:

- Network topology hiding
- Port scanning protection
- Static and dynamic firewall
- SIP flood protection
- Client application filter
- RADIUS authorization



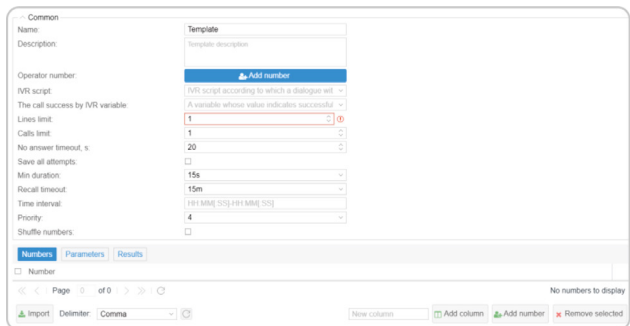
IP PBX ECSS-10



A modern software and hardware platform designed for building integrated infocommunication network connections. The complex is based on software and hardware components that provide a wide range of services and a high level of reliability.

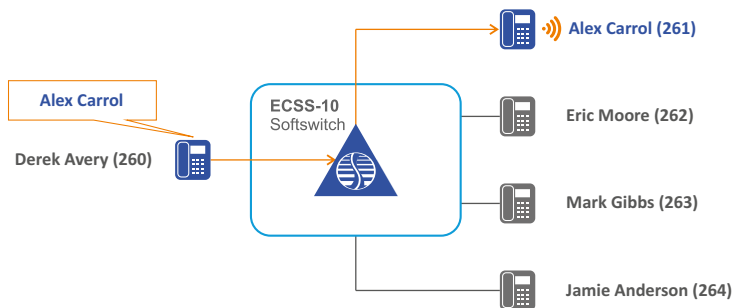
- 100000+ subscribers
- Functionality of private-branch, rural, city, trunk line, combined and international telephone exchanges
- Virtual PBX
- Virtualization capability
- Support for Astra Linux
- Active-active redundancy mode
- Location based media traffic routing
- Geographical redundancy
- Scalability
- Web, CLI
- Geoclustering

«Auto Redial» Service



- Automated notifications of subscribers about debts, new services, etc.
- Integration with Yandex Speech Kit
- Keyword recognition
- Virtualization capability
- Web interface
- Voting
- Call statistics

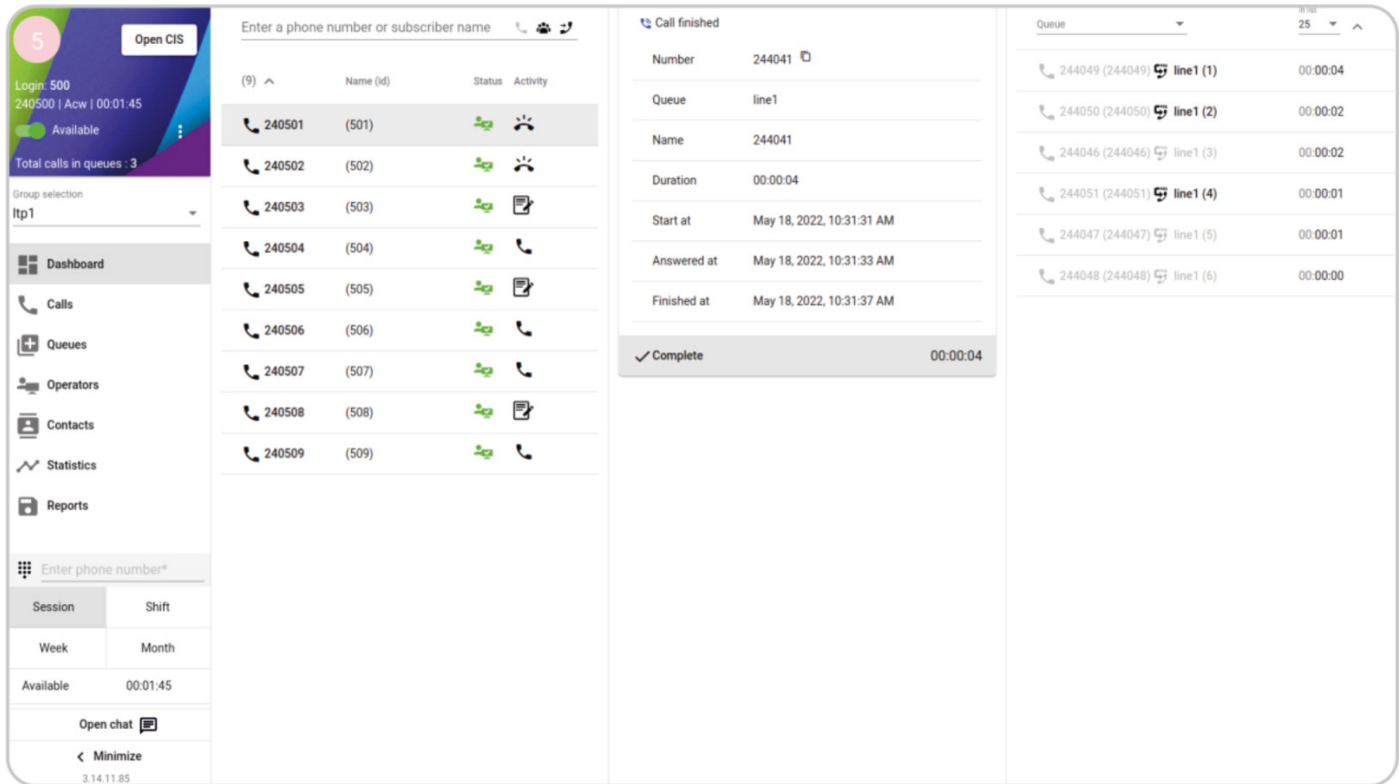
«Auto Attendant» Service



- Speed dialing any phone number from an address book after saying the subscriber's name



Call center



- Opportunity for an operator to work with a phone only
- Operator workstation with a wide function set for calls processing
- Supervisor workstation for call center monitoring
- Managing the call center settings via call center administrator application
- A wide range of call distribution algorithms
- Smart prediction of call waiting time in queue
- Selection and provision of a large amount of statistical information on call center performance
- Call prioritization when routing and queuing
- Call distribution according to operator's qualification
- Evaluating the performance of call center operators
- Queue hierarchy organizing
- Ability to pick up a call from a queue
- Manual mode for calls distribution in a queue
- Support for Callback feature in a queue



Geo cluster architecture



Objective

Organizing a distributed communication network in the regions with a full set of services



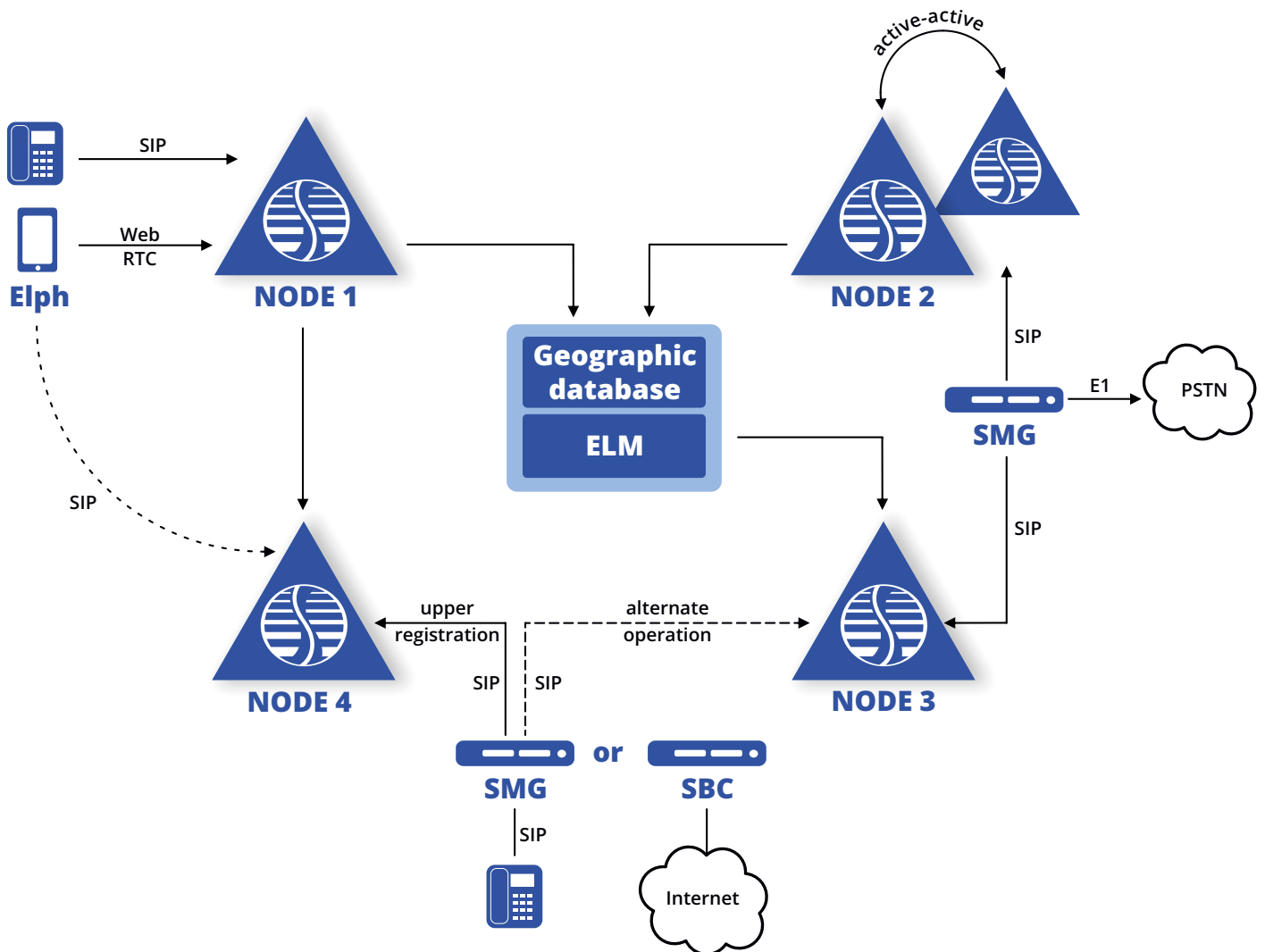
Services

- Call center
- Virtual PBX based on ECSS-10
- Auto redial
- IVR
- Total call recording
- Intergration with various CRM systems



Benefits

- User-friendly interface
- Unified monitoring and management system
- Automatic configuration of subscriber equipment





Organization of operator communication networks



Objective

Organization of a transparent transmission of SS7 signaling via IP network



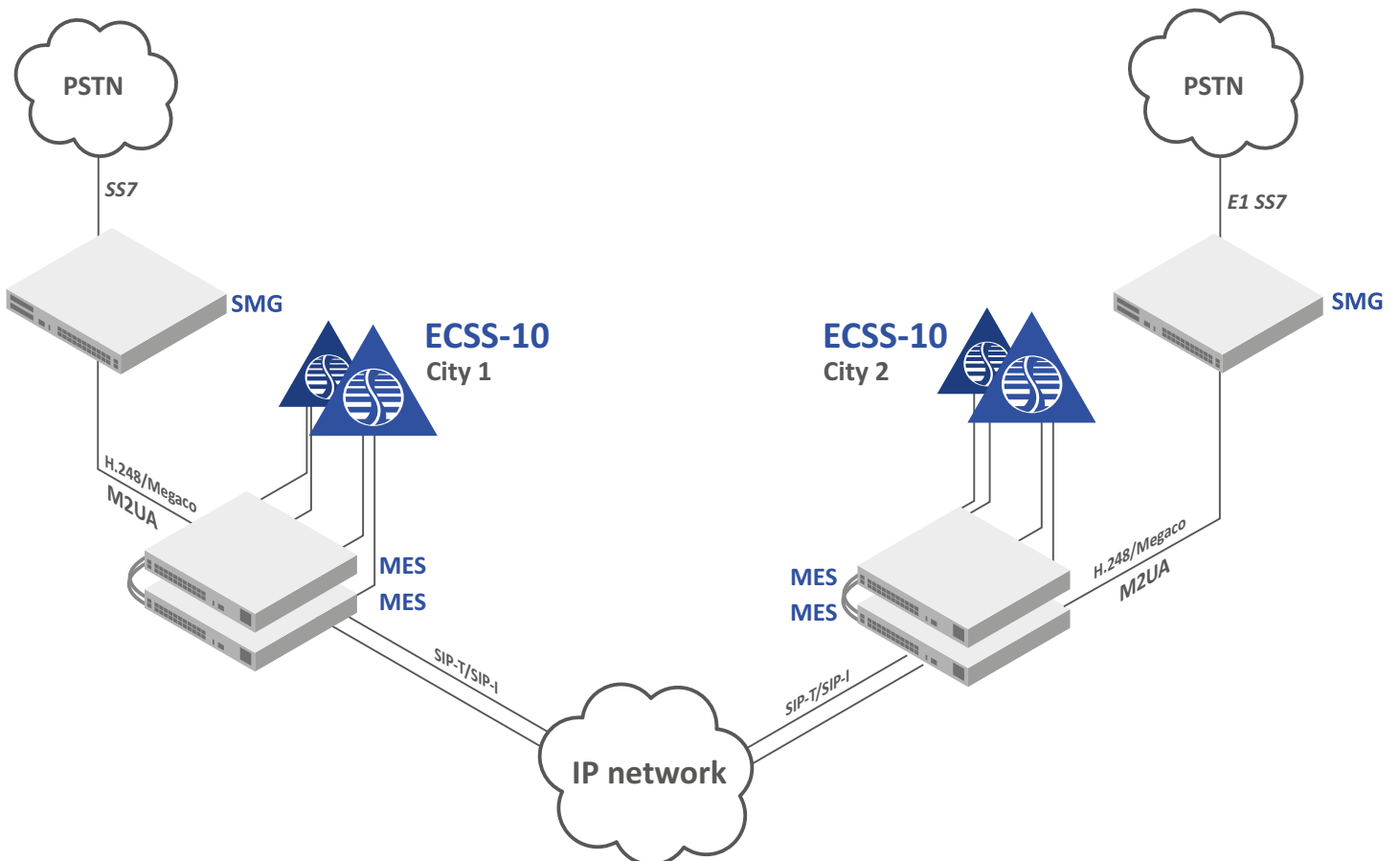
Services

- Virtual PBX
- Call center
- Auto notification
- IVR
- Call recoring



Benefits

- User-friendly interface
- Unified monitoring and management system
- Automatic configuration of subscriber equipment





Construction of fault-tolerant multiservice federal network



Objective

Construction of fault-tolerant multiservice corporate telecommunication networks



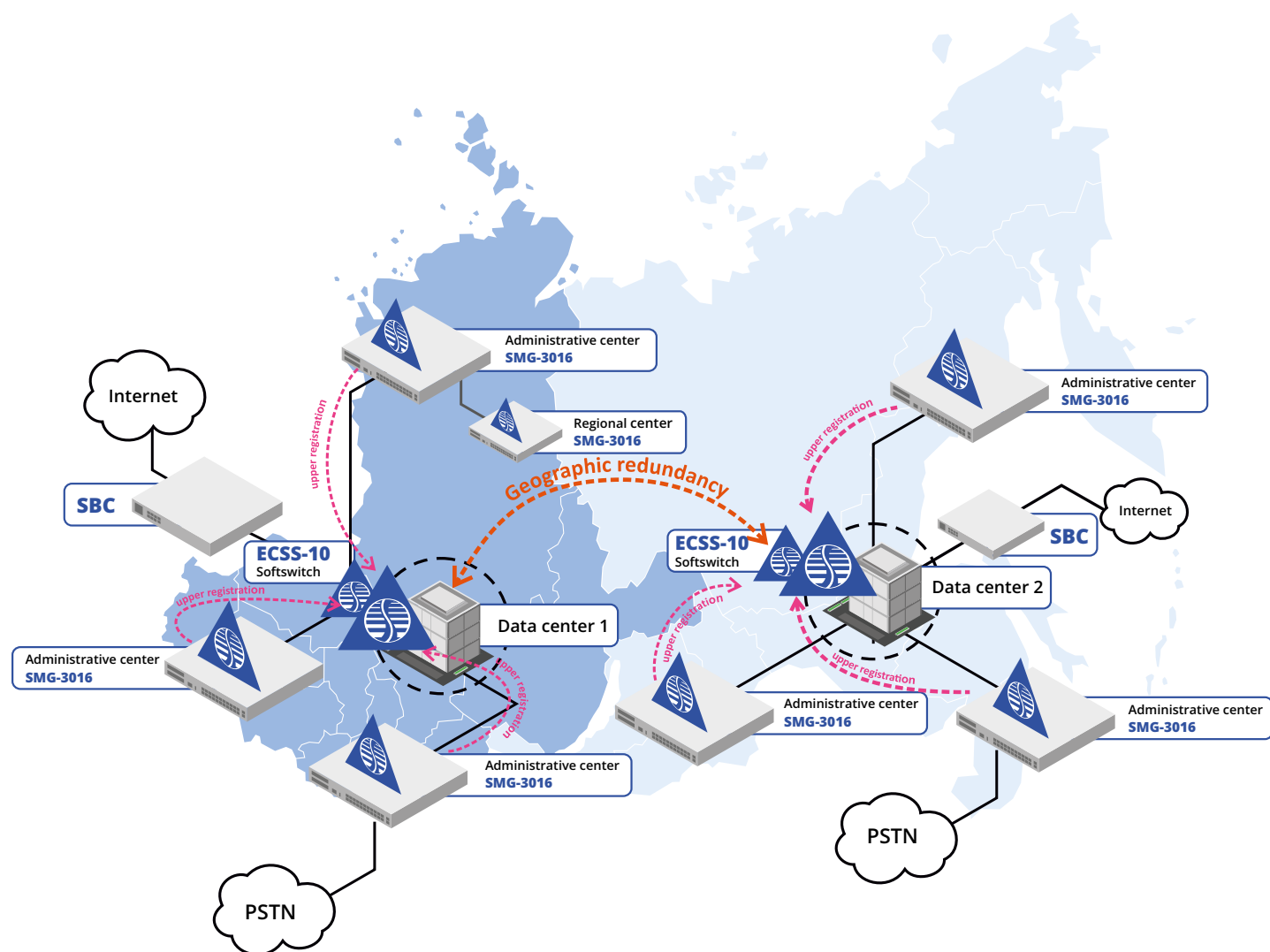
Equipment

- ECSS-10 Softswitch
- SMG
- SBC



Benefits

- Multi-level redundancy (central node, geographic redundancy, local PBX)
- Multi-domain architecture support
- Corporate network protection
- Cross-platform solution (servers, virtual machines)
- Unified monitoring and management system
- Autoconfiguration system for IP phones
- A wide range of services





Organization of teleconferences and call centers



Objective

Organization of teleconferences and call centers for large enterprises



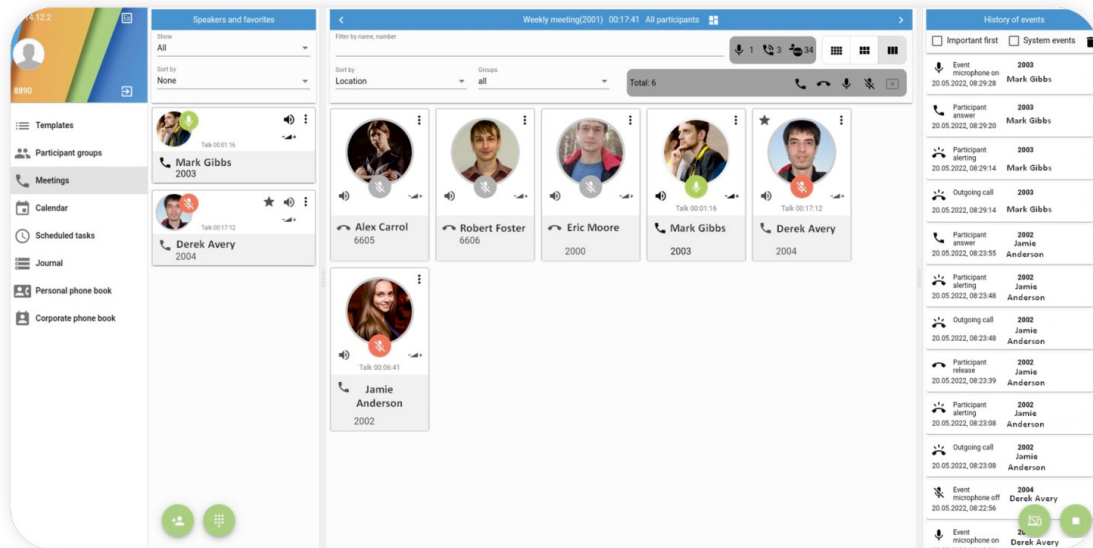
Equipment

- ECSS-10
- TAU-72.IP
- VP-17(P)
- VP-30(P)
- Elph



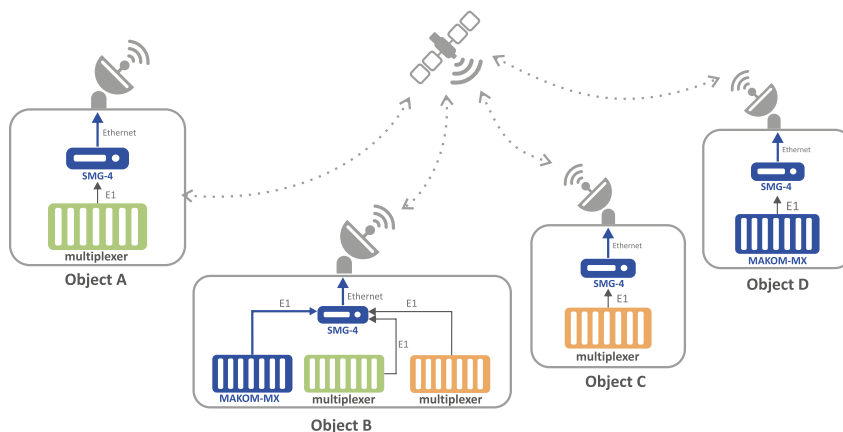
Benefits

- Unified platform for corporate communication and teleconferences
- Conference history and templates
- Different subscriber rights
- Russian-language web interface dispatcher
- Up to 200 participants in a conference
- Mute feature for all participants



Connection of remote objects via satellite communication channels

The special operation mode allows automatic maintaining a voice path between E1 streams of two devices (via channels with voice data packets switching) and providing effective echo cancellation on satellite communication channels.





Organization of networks for 100–3000 subscribers



Objective

Organization of network for 100–3000 subscribers



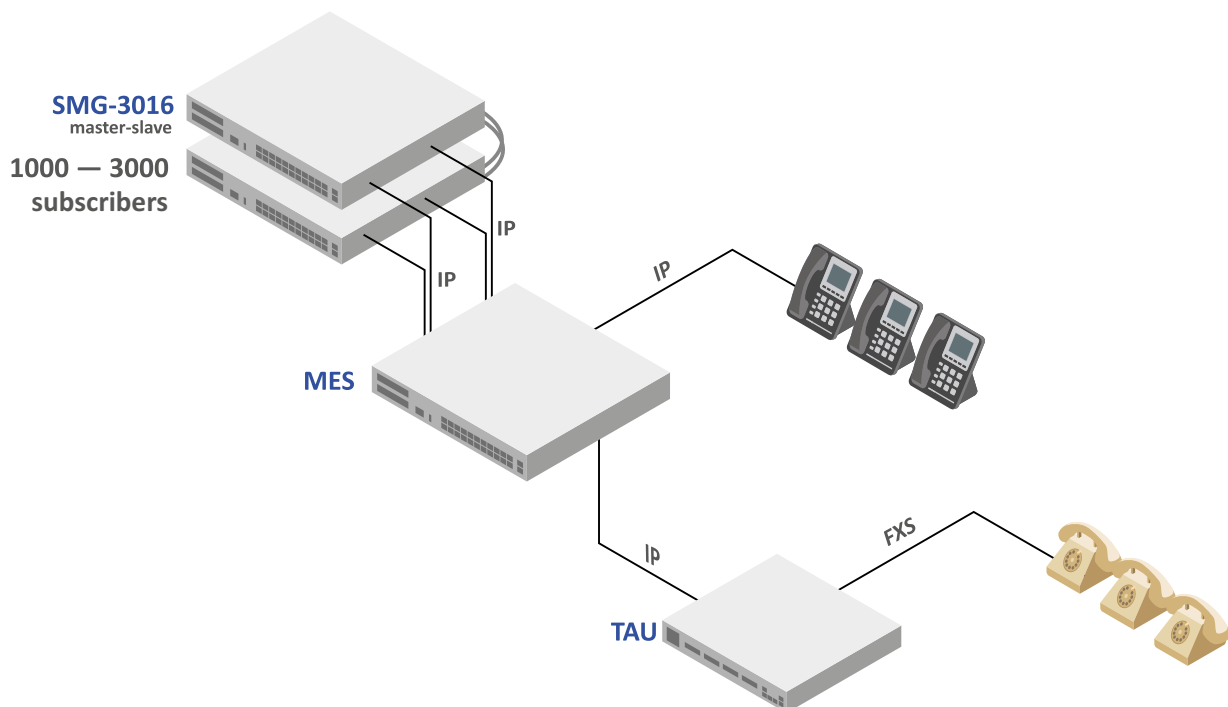
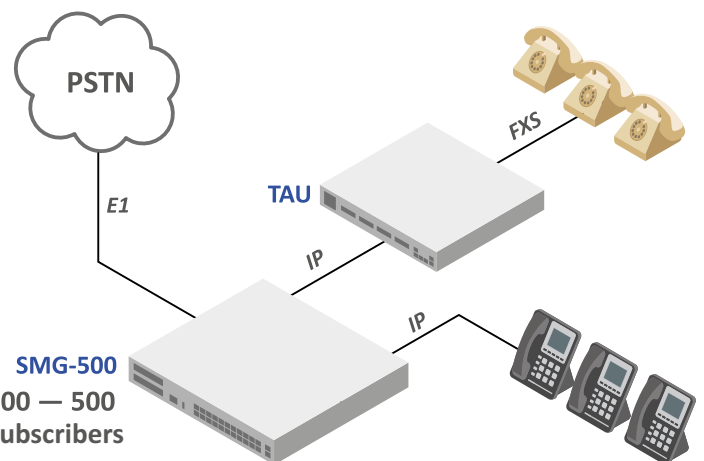
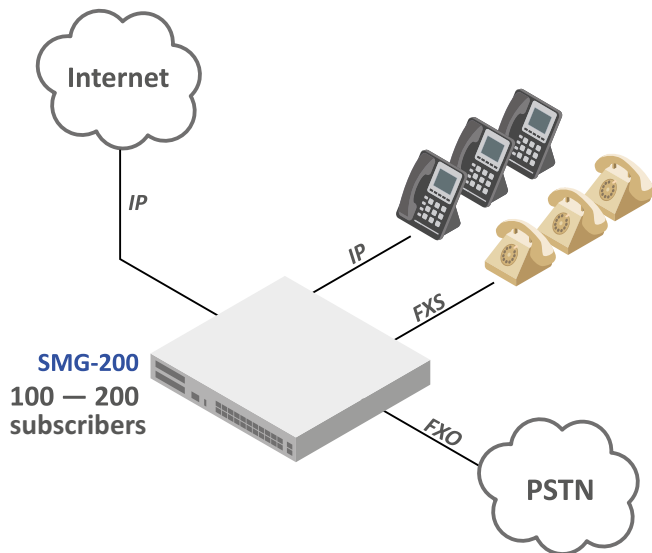
Equipment

- SMG-200
- SMG-500
- SMG-3016
- MES
- TAU
- VP



Benefits

- Easy management
- Unified monitoring and management system
- Automatic configuration of subscribers equipment





Organization of network for up to 100000 subscribers



Objective

Organization of fault-tolerant network for 1000-100000 subscribers



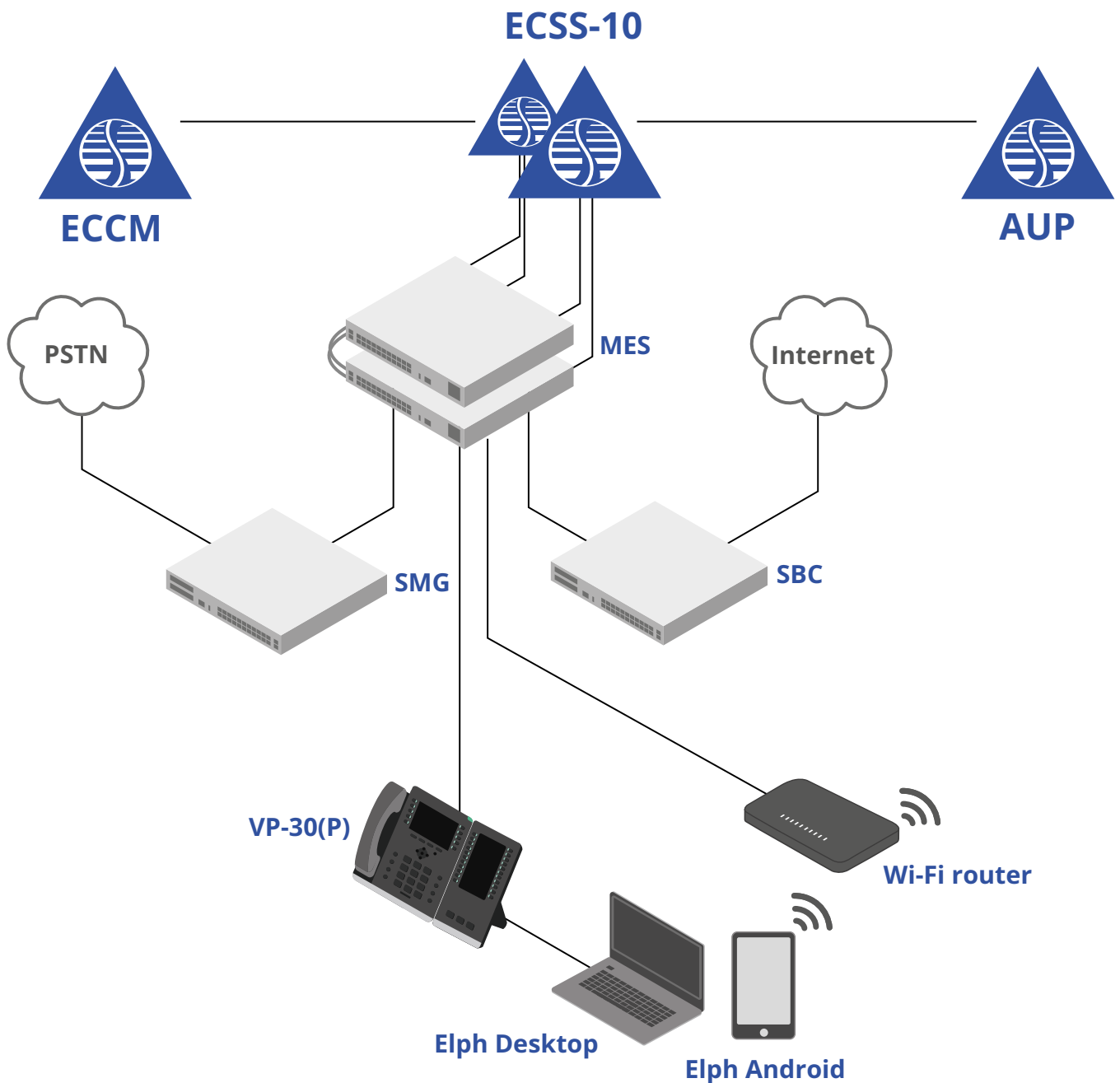
Equipment

- ECSS-10
- MES
- SMG-1016M
- SBC-3000
- VP-30(P)



Benefits

- Wide range of available services
- Automatic configuration of subscribers equipment
- High level of fault tolerance
- Unified monitoring and management system





Unified communications. Elph



Objective

Organization of a modern network with a full range of services



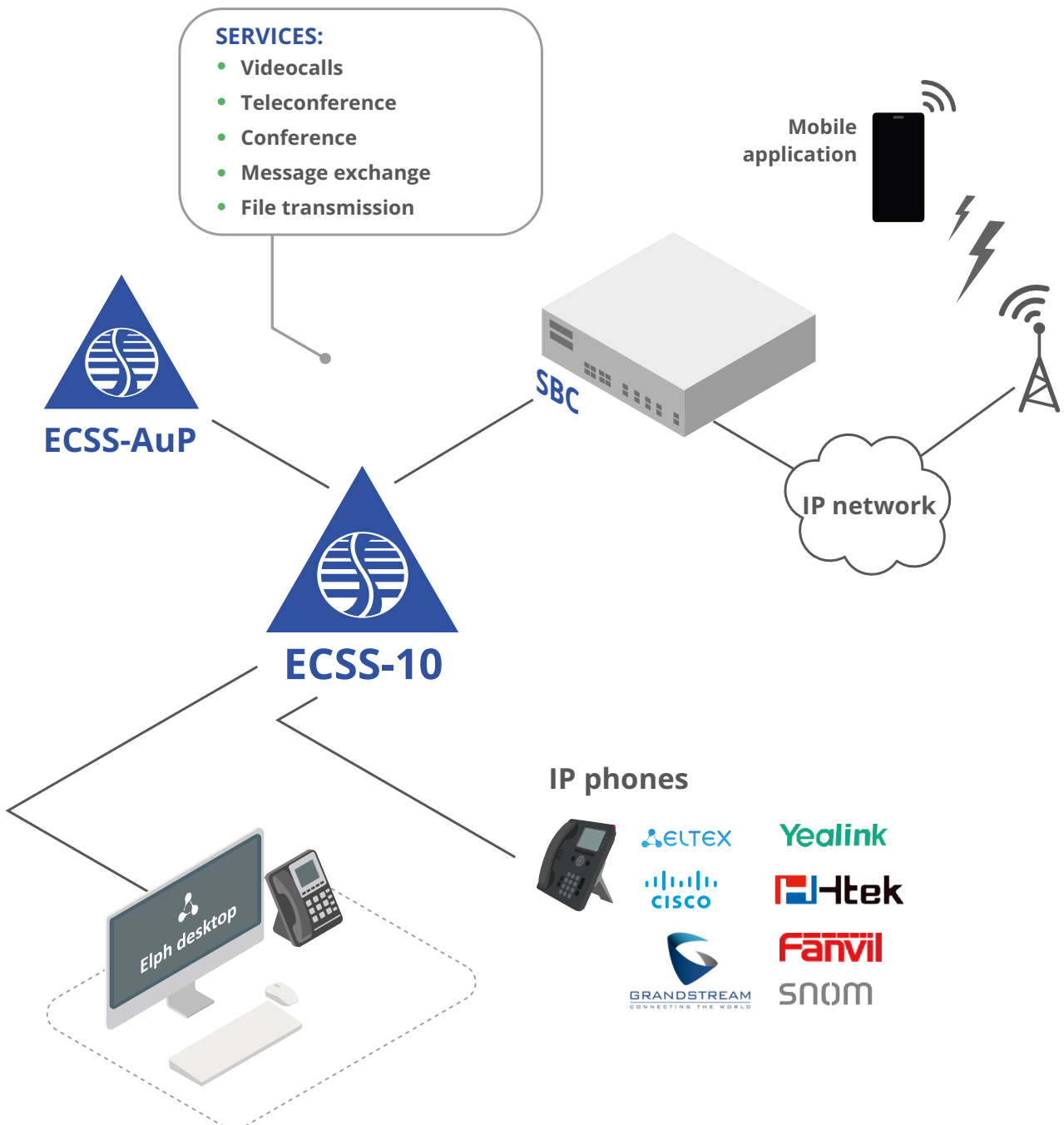
Equipment

- ECSS-10 Softswitch
- SBC session border controller



Benefits

- Support for «Auto Attendant» Service
- Desktop assistant
- Mobile application (iOS, Android)
- Autoconfiguration system for IP phones and mobile clients
- Corporate network security with SBC





IPTV Set-top boxes



About 2.5 million Eltex subscriber media centers have already been installed by IPTV operators.

Benefits:

- Remote configuration
- Customization
- AppStore server, ACS-Box
- Software and hardware locking upon customer’s requirements
- Voice control

NV-series Smart TV set-top boxes allow users to watch streaming multimedia and video content, as well as to install games and applications for Android.

Why do operators recommend buying a Smart TV set-top box?

- The high quality image transmitted by a Smart TV set-top box allows users to enjoy watching videos, clips, and movies.
- An easy-to-use, multifunctional and convenient media player with IPTV support will easily replace non-functional cable TV.
- Media center supports YouTube and other popular services. It can reproduce data over a local network or from USB sticks. The device easily functions even without access to the World Wide Web.

	Basic		Wi-Fi + BT	
	NV-731	NV-730	NV-731-WB	NV-730-WB
RAM	1 GB	2 GB	1 GB	2 GB
Flash	8 GB	8 GB	8 GB	8 GB
OS	Android 11	Android 11	Android 11	Android 11
4K	4Kp60	4Kp60	4Kp60	4Kp60
USB 2.0	2	2	2	2
HDMI	v2.1	v2.1	v2.1	v2.1
HEVC	H.265 L5.2	H.265 L5.2	H.265 L5.2	H.265 L5.2
Wi-Fi			802.11a/b/g/n/ac	802.11a/b/g/n/ac
Bluetooth			5.0 (BT)	5.0 (BT)
MicroSD	•	•	•	•
Additional equipment	IR remote control, RCA cable	IR remote control, RCA cable	IR remote control, RCA cable, Bluetooth voice remote control	IR remote control, RCA cable, Bluetooth voice remote control

Home devices



**Wi-Fi router
RG-5440G-Wac
RG-5440G-WZ**



**Wi-Fi router
RG-5520G-Wax
RG-5520G-Wax-Z**



**Wi-Fi router
NTU-RG-5420G-Wac
NTU-RG-5420G-WZ**



**Wi-Fi router
NTU-RG-5421G-Wac
NTU-RG-5421G-WZ**

RAM	256 MB	256 MB	256 MB	256 MB
Flash	128 MB	128 MB	128 MB	128 MB
OS	Linux	Linux	Linux	Linux
LAN	4×1GE	4×1GE	4×1GE	4×1GE
WAN	1×1GE	1×2.5GE	1×GPON	1×GPON
Wi-Fi	2.4 GHz 802.11b/g/n SU MIMO 2×2 5 GHz 802.11a/n/ac MU-MIMO 4×4	2.4 GHz 802.11b/g/n/ax MU-MIMO 2×2 5 GHz 802.11a/n/ac/ax MU-MIMO 2×2	2.4 GHz 802.11b/g/n MIMO 2×2 5 GHz 802.11a/n/ac MIMO 2×2	2.4 GHz 802.11b/g/n MIMO 2×2 5 GHz 802.11a/n/ac MIMO 2×2
USB 2.0	•	•	•	•
Z-Wave protocol support	Only for WZ	Only for Z	Only for WZ	Only for WZ
EasyMesh support	•	•	•	•



**Wi-Fi router
NTU-RG-5440G-Wac
NTU-RG-5440G-WZ**



**Repeater
RR-10**



**Repeater
RR-11**



**Smart Home hub
SH-10-WZ**



**Smart Home hub
SH-20-WBZ
under development**

RAM	256 MB	128 MB	128 MB	128 MB	128 MB
Flash	128 MB	16 MB	16 MB	32 MB	128 MB
OS	Linux	Linux	Linux	Linux	Linux
LAN	4×1GE	1×1GE	1×1GE		
WAN	1×GPON			1×FE or Wi-Fi	1×FE or Wi-Fi
Wi-Fi	2.4 GHz 802.11b/g/n MIMO 2×2 5 GHz 802.11a/n/ac MU MIMO 4×4	2.4 GHz 802.11b/g/n MIMO 2×2 5 GHz 802.11a/n/ac MIMO 2×2	2.4 GHz 802.11b/g/n MIMO 2×2 5 GHz 802.11a/n/ac MIMO 2×2	2.4 GHz 802.11b/g/n MIMO 2×2	2.4 GHz 802.11b/g/n MIMO 2×2
USB 2.0	•	•	•		
Z-Wave protocol support	Only for WZ			•	•
Zigbee protocol support					•
EasyMesh support	•	•	•		



Network controllers (PACS)



IPA-ER-010



IPA-ER-011

Executive device relay output (NO-COM-NC)	1	2
Management interface	Ethernet 10/100BASE-T (RJ-45)	Ethernet 10/100BASE-T (RJ-45)
Wiegand	1	2
Binary output for low loads	1	2
"Dry contact" binary input	2	4
Binary input for external opening sensor	1	1
1-Wire	1	2
Fire alarm input	1	1

Smart Home detectors and sensors



**Temperature and humidity sensor
SZ-AIR-HT01**



**Wireless water leak detector
SZ-WLK**



**Wireless small detector
SZ-SMK**



**IR remote control
SW-IRC01**

Protocol	Z-Wave	Z-Wave	Z-Wave	Wi-Fi
Signal frequency	869 MHz	869 MHz	869 MHz	2.4 GHz Wi-Fi IEEE 802.11b/g/n
Signal range	Up to 100 m (unobstructed)	Up to 100 m (unobstructed)	Up to 100 m (unobstructed)	Up to 20 m
Power supply	CR123A lithium battery, 3 V or 5 V DC from microUSB	CR123A lithium battery, 3 V	CR123A lithium battery, 3 V	USB-C, 5 V, 1 A
Protection class	IP20	IP65	IP20	
Dimensions	70×31 mm (dimensions × height)	74×25 mm	119×38 mm	60×20 mm
Operating temperature range	+5...+45 °C	+5... +45 °C	+5...+45 °C	+5...+45 °C
Operating humidity (at +40 °C)	No more than 93 %	No more than 93 %	No more than 93 %	
Maximum RF signal strength	+14 dBm	+14 dBm	+14 dBm	



**Wi-Fi lighting control relay
SW-RLY01**



**Wi-Fi lighting control relay
SW-RLY02**



**Inrush current limiting relay
RLY-BPS-HP**



**Wi-Fi socket
SW-PLG01**

WLAN	IEEE 802.11 b/g/n 2.4 GHz	IEEE 802.11 b/g/n 2.4 GHz		IEEE 802.11 b/g/n 2.4 GHz
Operating voltage	230 V	230 V	230 V	230 V
Connection type	Without neutral	With neutral	Together with SW-RLY0x	Plug type F
Number of channels	2	2	1	1
Maximum resistive load per channel	3.5 A	3.5 A	only LED load	3000 W
Dimensions	43.5×18×43.5 mm	43.5×18×43.5 mm	43.5×18×43.5 mm	51.5×80.5×38 (75) mm
Maximum LED load per channel	100 W	100 W	300 W	
Maximum current per channel	3.5 A (resistive load)	3.5 A (resistive load)		

Smart Home detectors and sensors



Devices under development



Temperature and humidity sensor SZ-AIR-HT02



Wi-Fi socket SW-PLG02



Wireless magnetic contact door/window sensor SZ-MCT



Wireless motion sensor SZ PIR

Signal frequency	869 MHz	869 MHz
Signal range	Up to 100 m (unobstructed)	Up to 100 m (unobstructed)
Power supply	CR123A lithium battery, 3 V	CR123A lithium battery, 3 V
Protection class	IP40	IP20
Dimensions	21×96×21 mm	68×97×77 mm
Weight with installed battery	No more than 30 g	126 g
Operating temperature range	+5...+45 °C	+5...+45 °C
Operating humidity (at +40 °C)	No more than 93 %	No more than 93 %



Wi-Fi home camera SV-C01



Wi-Fi home camera SV-C02 under development

Resolution	2560×1440	2560×1440
RAM	128 MB	128 MB
Flash	16 MB	16 MB
Frame rate	25 fps	25 fps
Wi-Fi	802.11 a/b/g/n 2.4 GHz	802.11 a/b/g/n 2.4 GHz
Lens	2.8 mm, F2.0	2.8 mm, F2.0
Sensor size	1/3"	1/3"
Support for microSD	●	●
Speaker	●	●
Microphone	●	●
IR light	Up to 5 m	Up to 5 m
Viewing angles	0° ~ 60°, 0° ~ 345°	0° ~ 90°, 0° ~ 350°
Operating temperature	From 0 to +45 °C	From 0 to +45 °C



Eltex Smart Cloud platform



Eltex Smart Cloud (SC) is a platform for deploying IoT system and providing this service to users. Using it over the cloud, the interaction of software and hardware components of the system is carried out:

- hub collects data from Z-Wave and Wi-Fi sensors and smart devices, as well as user commands via Eltex Home application;
- data is processed and stored on the Eltex Smart Cloud platform.

Eltex SC has a client-server architecture. Corporate clients can install Eltex Smart Cloud in data center and individually configure the smart home system and manage it.

- Interaction with smart home platforms such as Yandex, Sber and VK
- Open API
- Alarm monitoring
- Remote firmware update
- Analytics
- Ability to integrate with operator's billing system for automatic account creation
- Ability to integrate with devices from other vendors
- User account management
- Device management
- Smart Home devices monitoring
- Sending event notifications
- Creating collaboration scenarios of devices
- Interaction with video surveillance systems

Eltex Smart Home center SL-10-WBZ



SL-10-WBZ is a local platform designed to organize a unified system for management, configuration and monitoring of IoT devices (sensors, cameras, etc.).

The main advantage of the local platform is the ability to work without Internet access within one object (house).

Key features:

- Smart Home devices monitoring
- Device management
- Sending event notifications
- Creating working scenarios for devices
- Video surveillance
- Open API
- Remote firmware update

Technical features:

- 1×10/100BASE-T (RJ-45)
- 3×USB 2.0
- 1×MicroSD
- Wi-Fi IEEE 802.11b/g/n 2.4 GHz, IEEE 802.11a/n/ac 5 GHz
- Smart Home management interface
- 2 GB RAM
- 8 GB Flash



EVI Enterprise video surveillance



EVI is a professional software that provides a holistic solution for organizing video surveillance system at the enterprise with minimal delays and the most efficient use of workstation resources.

The software solution includes:

- EVI Videoserver is intended to receive streams from cameras and save them to the file archive.
Customers deploy a video surveillance system at their own facilities.
- EVI Client is a unified connection point for admin and users, a client program designed to view video streams from cameras and to get access to the archive of video recordings.
It is used by system administrator, security guards and personnel who need to control video streams from cameras (should monitor), work with archive and online broadcast.

Key features:

- Getting video stream from surveillance cameras
- Arrangement of streams from different cameras on one screen in various configurations (views)
- Forming and recording video stream data in the archive: motion, constant or scheduled recording + motion tags
- Generating screenshots from the archive and camera streams
- Downloading videos from the archive
- Access to video archive from a client interface
- Archive playback speed control
- Support for multiple video streams from a single camera
- Motion detection module
- Support for modern video codecs: H.264, H.265
- Support for standard protocols: RTP/RTSP
- Visual client on Linux and Windows 10
- User rights system, roles supporting
- Import and export of cameras in .csv
- Adding cameras using ONVIF
- Support for camera control via PTZ
- Support for WebSocket between client and server
- Full screen mode
- Support for 3 monitors for video wall display



Solutions for telecom operators



Objective

Providing users with IPTV service at a high level with available remote configuration, service quality assessment and operative bug fixes



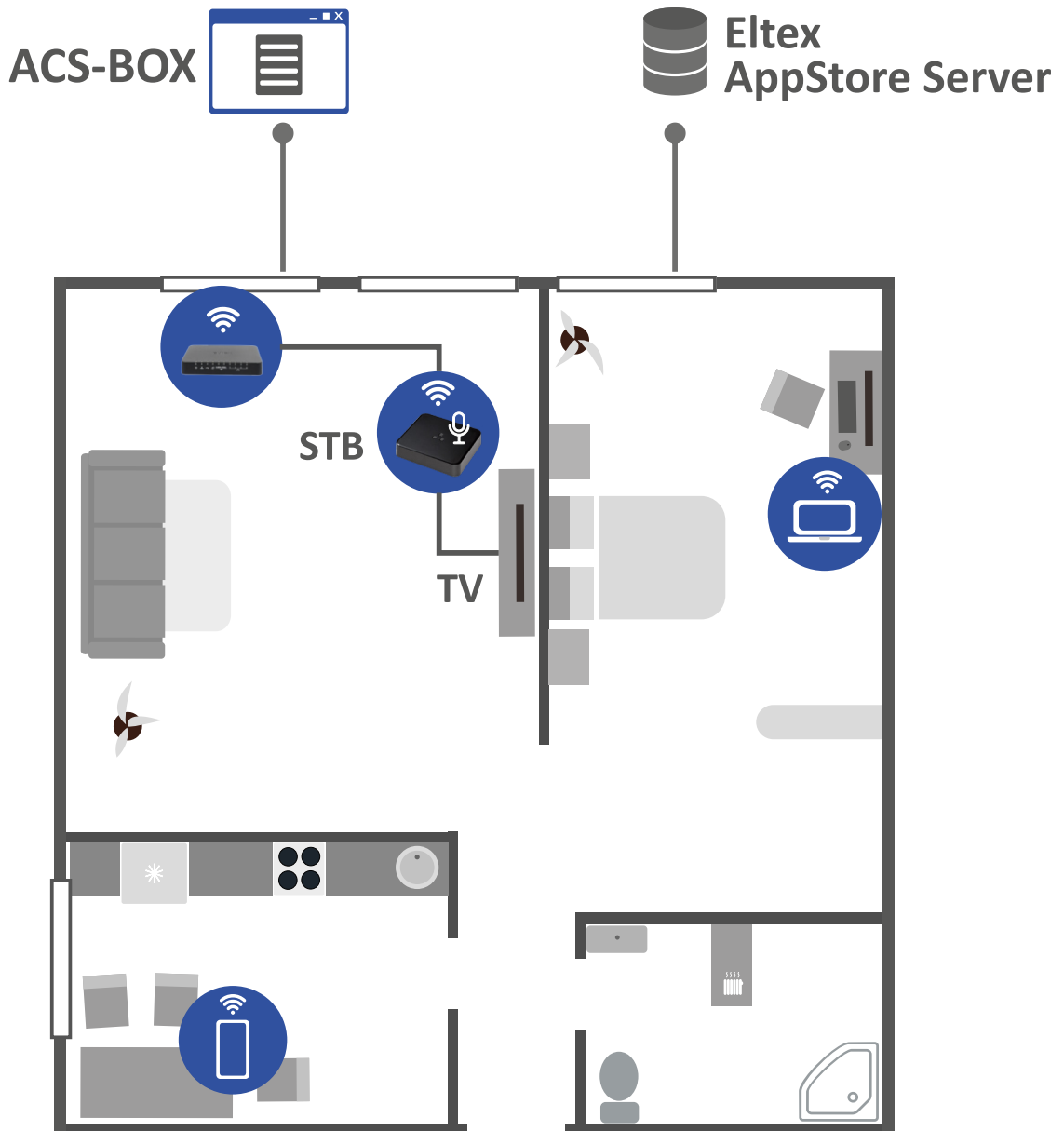
Equipment

- Smart TV set-top boxes NV-730 and NV-731
- AppStore server
- Eltex.ACS-BOX
- Subscriber routers
 - RG-5440G-Wac/WZ
 - NTU-RG-5420G-Wac/WZ
 - NTU-RG-5440G-Wac/WZ



Benefits

- Remote configuration
- Customization
- AppStore
- Software-hardware locking upon customer's requirements
- Voice control





Objective

Providing corporate customers with equipment and management systems for CorpTV service to solve internal and external tasks



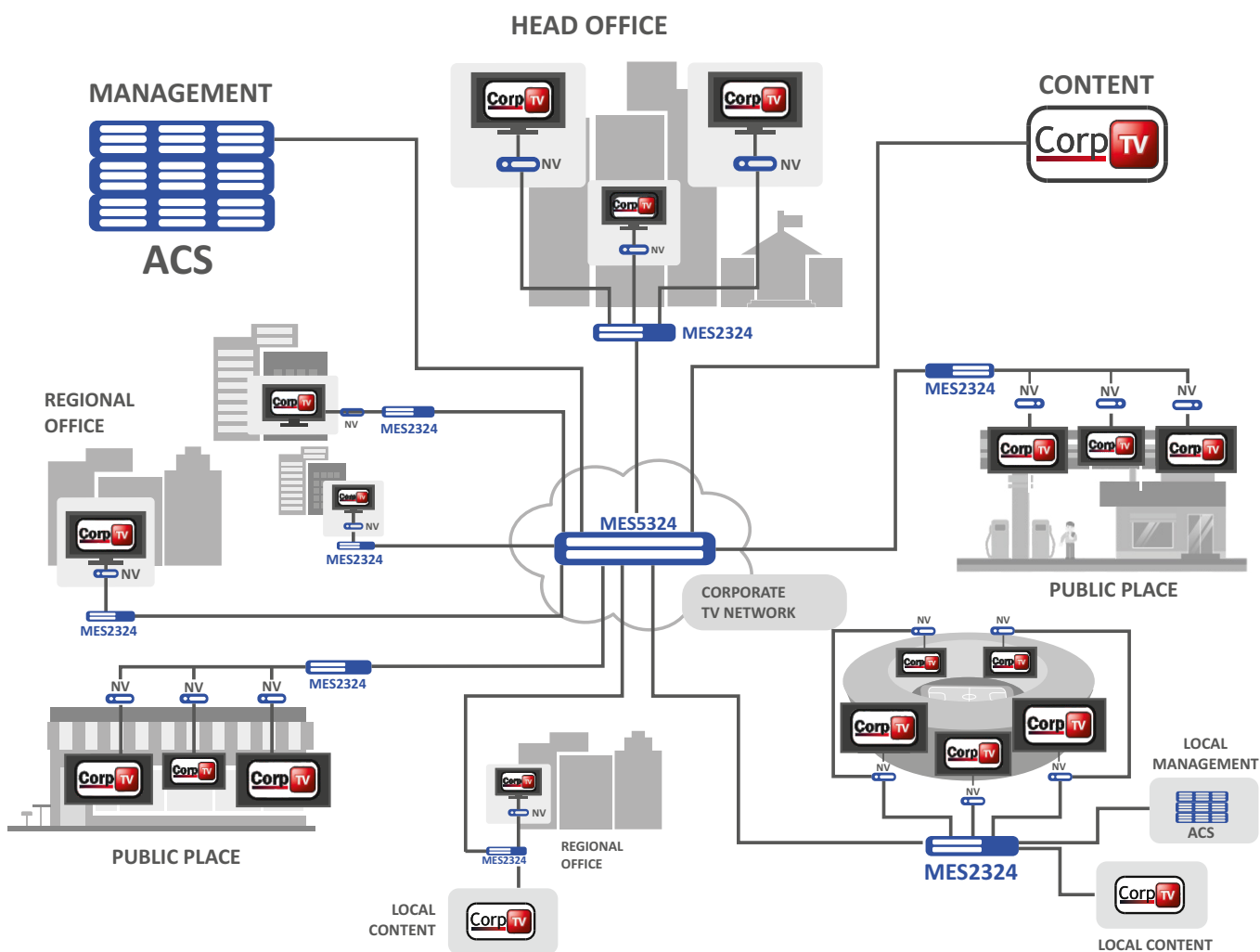
Equipment

- Smart TV set-top box NV-730
- Eltex.ACS management system
- Eltex.ACS-BOX



Benefits

- Ability to cooperate with CorpTV solutions, supplementing them with equipment and management software
- Formation of corporate culture
- Informing employees
- Training
- Promotional video broadcasting
- Informing clients
- Emergency notifications





Smart Home



Objective

Providing builders with Smart Home equipment



Equipment

- Eltex Smart Cloud/Box
- Hub systems with Wi-Fi/ Z-Wave protocol support
- Sensors
- Executive devices
- Eltex Home mobile application



Benefits

Service providing on the basis of telecom operator existing infrastructure

Potential subscriber binding

User-friendly application

Voice control
(only for SH-10-WBZ +
RG-5440G-Wac/WZ
NTU-RG-5420G-Wac/WZ
NTU-RG-5440G-Wac/WZ)

Integration with voice assistants: Alice,
Salute and Marusya
(only Eltex Smart Cloud)





Eliminating Wi-Fi zones with a weak signal



Objective

Coverage extension of home Wi-Fi network



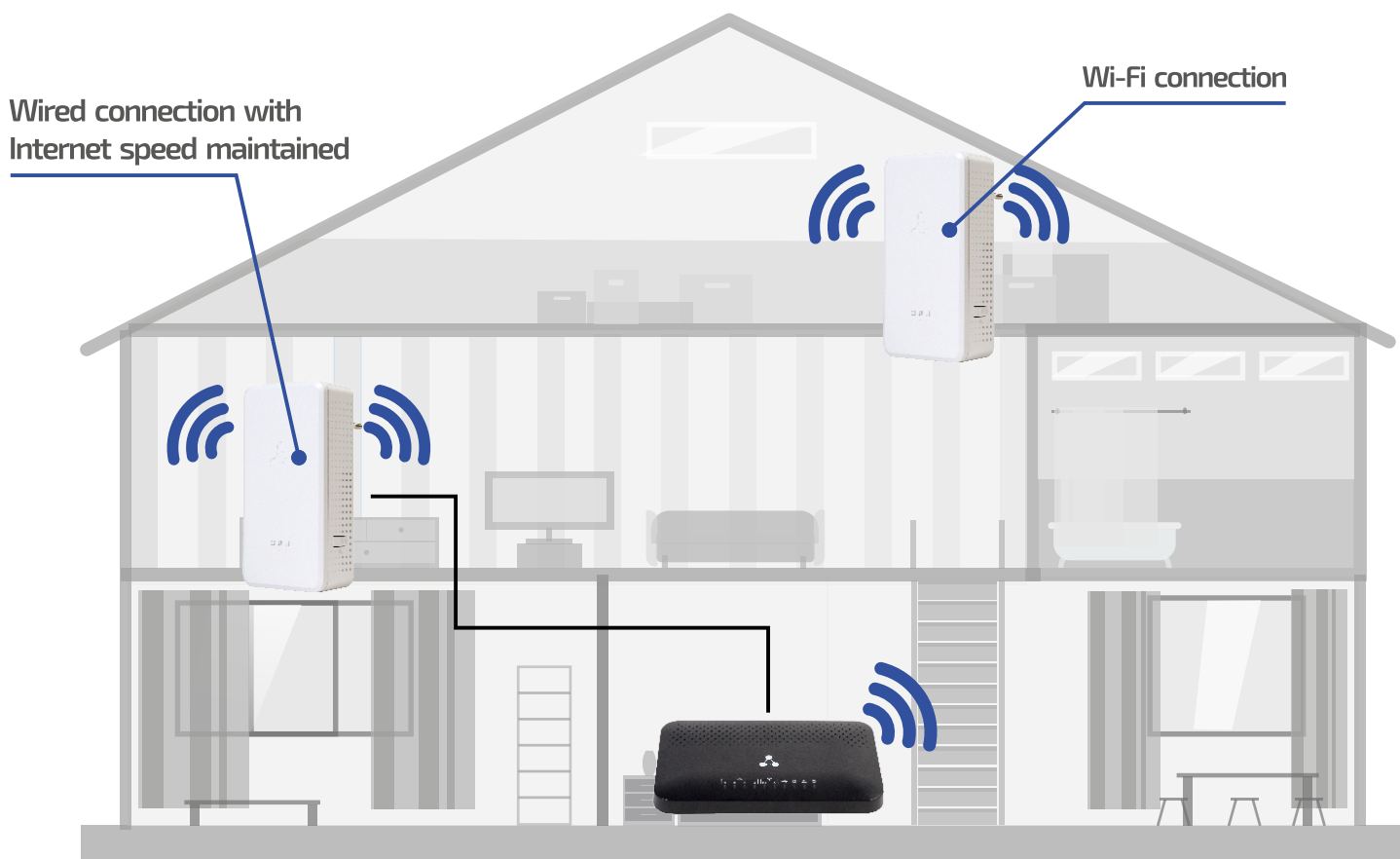
Equipment

- Routers with EasyMesh support (Ethernet, PON)
- Repeaters:
 - RR-10
 - RR-11



Benefits

- Guaranteed Wi-Fi coverage
- Decreasing subscriber calls to the telecom technical support related to Wi-Fi issues
- Self-optimizing wireless network
- Unified Wi-Fi network with a common name and password
- Moving between Wi-Fi zones without losing connection
- Unified intelligent network without «dead zones»





Software



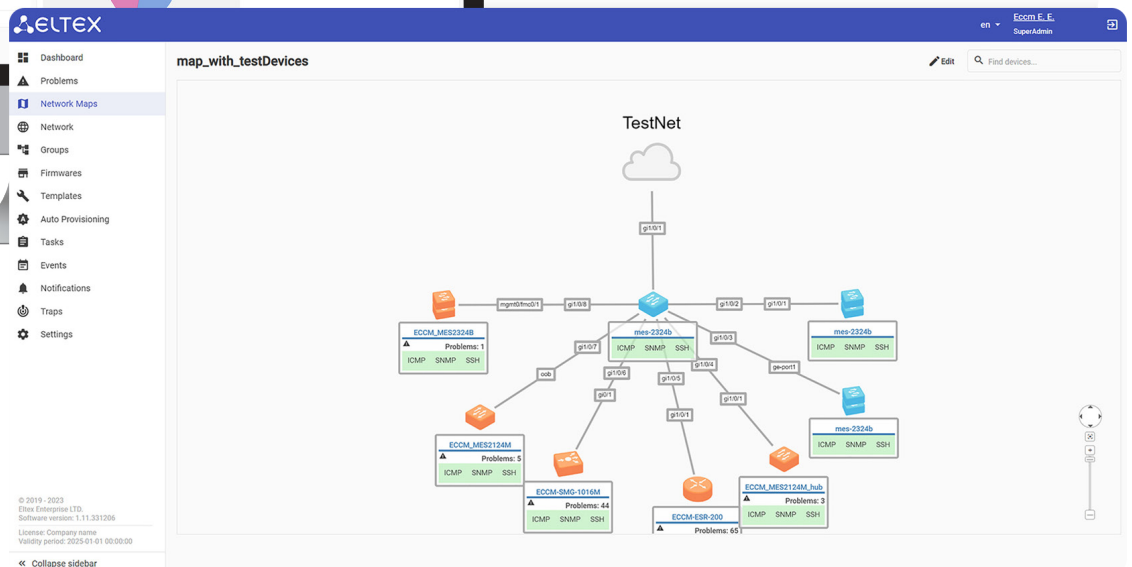
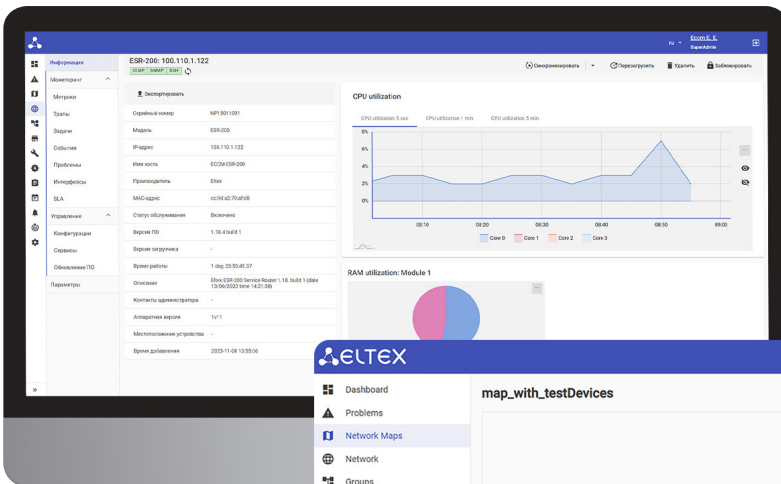
ECCM

ELTEX Cloud Configuration Manager is a centralized network equipment management system.

The system is managed via a modern user-friendly web interface that provides convenient tools for configuring system and network equipment to the user needs.

Key features

- Status and inventory data monitoring
- Registering and analysing equipment events, detecting network problems
- Device configuration management
- Centralized management of firmware updates
- Selecting device groups with differentiation of access rights
- Setting rights and roles of system users
- Network maps with automatic discovery of connectivities between devices via LLDP
- GUI for firewall configuration on ESR and WLC
- Group configuration steps with support for Jinja templates
- Basic implementation of Zero Touch Provisioning (ZTP)
- IP factory creation wizard





EVI Perimeter

EVI Perimeter is an intelligent video monitoring system from Eltex. It is a professional software that provides a complete solution for organising an enterprise video monitoring system with minimal latency and the most efficient use of workstation resources.

Key features

- Getting real-time video streams from cameras via RTP/RTSP
- Support for the H.264, H.265 codecs
- User rights system, roles supporting
- Open API for connecting to third-party systems
- Intelligent motion detection
- Scalability (the number of connected cameras is unlimited and depends on the server capacity)
- Schedule or event-based archiving (when motion detected)
- Quick access to the archive of specific cameras from the view workspace

IP cameras



IP camera SV-B01



IP camera SV-B02
under development



IP camera SV-B03
under development

	IP camera SV-B01	IP camera SV-B02 under development	IP camera SV-B03 under development
Resolution	4M (2560×1440)	4M (2560×1440)	4M (2560×1440)
RAM	128 MB	128 MB	128 MB
Flash	16 MB	16 MB	16 MB
Frame rate	25 fps	25 fps	25 fps
Power supply	DC 12 V/PoE 802.3af	DC 12 V/PoE 802.3af	DC 12 V/PoE 802.3af
Dynamic range	DWDR	DWDR	DWDR
IR light	Up to 25 m	Up to 25 m	Up to 25 m
Lens	Fixed, 2.8 mm	Fixed, 2.8 mm	Variofocal, 2.8 mm
Support for microSD	•		
Embedded speaker and microphone	•		



Software



Eltex.EMS

Centralized network equipment management system

- Monitoring of main device parameters
- Online display of device alarms in text and graphic forms
- Grouping line terminals into nodes with a capability to view all failures of a selected node
- Automatic search for ELTEX devices in network



Eltex.ACS

Subscriber devices management system

- Auto-configuration and dynamic provisioning
- Status and performance monitoring
- Firmware version management
- Centralized firmware updates
- Creating scheduled tasks



Eltex.ACS-box

Web application allows integrating and adapting ACS management system into an existing structure via NBI requests



AppStore server

Client-server solution that allows client devices to receive up-to-date versions of applications and firmware.

- Various Android applications based on MIPS/ARM architecture and current firmware versions for NV-series devices
- IPTV set-top box launcher customization
- Beta tester function for applications and firmware



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