Integrated networking solutions

– **increasing of customers loyalty**
– **displaying device failures in real time as text and graphics**
– **grouping network terminals to control and update several devices simultaneously**
– **devices automatic registration**



Eltex.ACS

Automatic Configuration Server (ACS) is intended to simplify and automatise configuration of subscriber devices (CPE) by using the protocol described in TR-069 standard and allows operators to use global network for centralised control over customer equipment.
The standard defines a mechanism of safe CPE automatic configuration and combines CPE control functions in a single system.

Single Approach to Device Control

TR-069 protocol allows using a single approach to control all subscriber devices installed in the operator's network.
The Eltex.ACS server supports connection of various Eltex subscriber devices.
It also allows connection of third-party devices, which fully support TR-069 specification and have been tested for compatibility.

Configuration Models

The Eltex.ACS system supports 2 configuration models for subscriber devices:
- ACS is used only to configure public parameters of subscriber devices, while subscriber's private data, such as phone numbers, PPP and SIP passwords, etc. will be configured by users on their devices via WEB interface.
- ACS is used to configure all parameters of subscriber devices, including all service parameters.

OSS Integration

The ACS server can be controlled via NorthBound allowing complete OSS integration. This provides a capability to adjust all network nodes in order to connect a new subscriber as soon as possible and with minimum resources.

Supported devices Eltex

PON equipment

– **GPON**
  – Subscriber terminal ONT NTU
  – Subscriber terminal ONT NTP
– **EPON/TurboGEPON**
  – Subscriber terminal ONT NTE

VoIP equipment

– **Subscriber gateway IP-telephony**
  – TAU-1E.IP
  – TAU-1M.IP/2M.IP
  – TAU-8.IP
– **Subscriber gateway with VoIP support**
  – RG-14 series
  – RG-24 series
  – RG-44 series
  – RG-54 series

IPTV-mediacentres

– Linux-mediacentres NV-102, NV-300 series
– Android-mediacentres NV-310, NV-501 series

Thin clients

– TC-10
– TC-20

Wi-Fi access points

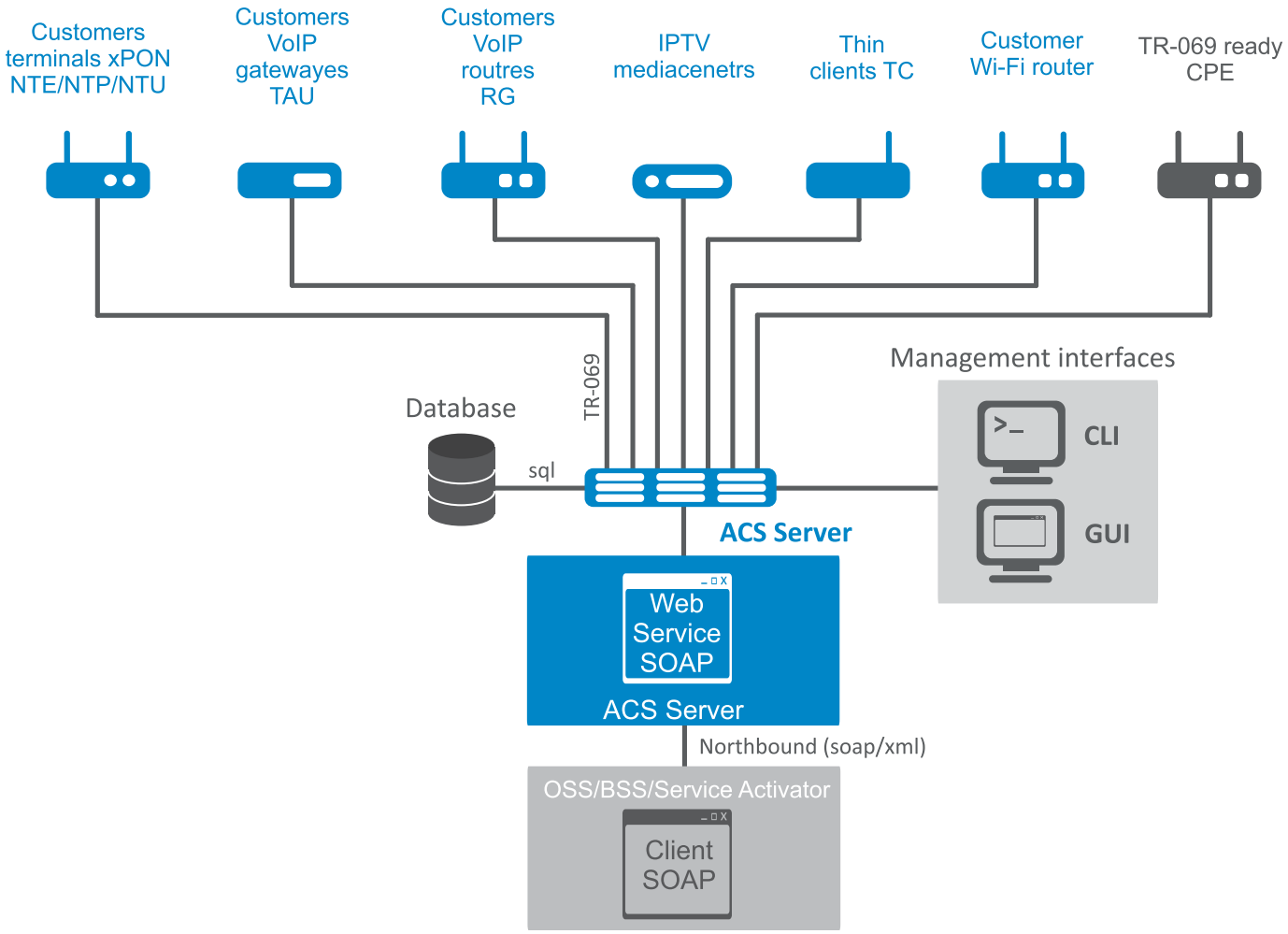
– WB-1P-LR

Subscriber Wi-Fi router

– WB-2
– RG-34-Wac

Name	Description
ACS	–Autoconfiguration and dynamic services preparing for work – Software versions management – Performance monitoring – Dyagnostics
Interfaces of GUI и CLI management	Graphic and console management interfaces
Interface of mid-program interaction Nortbound Interface (NBI)	Is designed for stack between different systems automatization. NBI realization allows to request CPE lists, to add and delete devices, to assign device parameters, to handle services. Also it allows to restart devices, to update Firmware and to execute reset devices to initial settings.
Database	Consists of: – CPE lists – CPE parameters – users and roles – passwords – profiles – CPE-firmware – processes journals – journals of exchange with devices
OSS/BSS	Running of customers devices and services

Scheme of using



Integrated networking solutions

Advantages of Eltex.ACS

– Failures diagnostics acceleration
– Quick messages precessing
– Decrease of clients application due to:
  - network monitoring automatization
  - statistic gathering
  - software updation
– Quality of service increasing
– Expenses decreasing when connecting new customers
– Automatic detection of new devices (zero-touch configuration)
– Decreasing of expenses for preparing employees
– Displaying of failures in text and graph form
– Flexible integration with any CPE that supports TR-069 protocol
– Efficiency increasing of call-center
– An additional logical level separates subscriber from his device to simplify configuration of individual parameters and allows changes in subscriber devices (replacement by similar devices) without services re-configuration– Using scheme with securing a device for customer, securing due to application
– Flexible hierarchy of profiles and services allows fully functioning configurations to be created for different criteria of CPE grouping
– Integration with the Eltex.EMS enterprise management system within a common graphical interface
– Support of software modules management

Easy-to-use

– Well-known interface
– More independence from “installators”, activation and reconfiguration services for any network devices which support TR-069 from unified ACS server - non-standard RPC support
– When devices are connected to network they automatically appear in server configuration
– Profiles of services and subscriber private parameters are configured on operator's PC either when they become available on server or beforehand, based on the device serial number
– The server can operate with any devices supporting TR-069. Different types of devices can be controlled and monitored by switching classes in a single GUI window
– VoIP-gateways management that are hidden behind router
– A possibility to connect more than 200,000 devices to one server.
– HTTPS protocol.
– Support of scripts (operator can create any script for ACS server operation with CPE).

The "leakage" Issue is Solved for SIP Passwords and Other Private Data

– All subscriber's private data is configured by the operator on the Eltex.ACS server and is not sent to the subscriber that eliminates the leakage issue.

Diagnostics of Failures

– A connection can be remotely checked by a ping command from a subscriber device to any specified WAN or LAN host.

Statistics Collection for Analysis

– Monitoring of current status of services, interfaces, port counters, etc.

Customer Configuration Backup

– Centralised backup of current settings of network devices on the ACS server (or any other server in the network). Recovery of the settings, for example after reset to factory settings

Centralised firmware update

– For groups and configured filters
– By schedule
– In the safe mode (at device startup only)

Integration of the system to the existing network infrastructure

- To make Eltex.ACS fully integrated to the existing network infrastructure, responses of the EMS DHCP-server should be supplemented with option 43 specifying the ACS address for device connection to the server.This has already been successfully configured in Novosibirsk branch of Rostelecom.

Easy-to-use and intuitive graphical interface

Ordering information

Name	Description
ACS-CPE-256	ACS-CPE-256 option of Eltex.ACS for Eltex CPE autoconfiguration: 256 CPE devices
ACS-CPE-512	ACS-CPE-512 option of Eltex.ACS for Eltex CPE autoconfiguration: 512 CPE devices
ACS-CPE-1024	ACS-CPE-1024 option of Eltex.ACS for Eltex CPE autoconfiguration: 1024 CPE devices

Contact Us

+7 (727) 220 76 10
post@eltexalatau.kz
www.eltexalatau.kz

About EltexAlatau

EltexAlatau company is one of the first communication equipment manufacturers in Kazakhstan established in 2012. The main focus of the enterprise is a set of solutions and the opportunity of their seamless connection to the customer's infrastructure.