

# Table of Contents

Version Information ..... 3



# Version Information

## Version v.2.35.1 (09/26/2024)

- Improvement: Possibility of SSH connection to equipment using keys
- New section: Administrator / SSH keys
- Redesigned DPI Control / HotSpot section
- HotSpot: Added the ability to authorize an outgoing call
- HotSpot: Added the ability to apply services/tariffs for a subscriber via a Web hook to a third-party service
- Bug fix

## Version v.2.34.5 (06/18/2024)

- Improvement: Subscriber synchronization indicator, list auto-update after synchronization
- Improvement: QoE reporting settings: visibility of columns/series, step in graphical reports, row limit. For PDF, the ability to set the Report Title, page orientation, display filters
- Improvement: Automatic deletion of data from the default QoE Stor disk. The setting is enabled by default unless otherwise configured.
- Improvement: Grouping Multi Subscribers in the DPI Management / Subscribers section
- Bug fix

## Version v.2.33.42 (04/25/2024)

- Improvement: Cluster editing section in the QoE Stor Configuration section
- New section: Sections for configuration and viewing IPFIX balancer logs
- Improvement: Display of compression logs
- Enhancement: Data formatting in QoE tabular reports
- Improvement: AS name in legends of graphical PDF reports
- Improvement: A number of improvements in PDF reports in the QoE Analytics sections
- Improvement: Ability to add ASN in custom protocols
- Improvement: AS name lookup in the Prioritization by ASN section
- Improvement: Date-time by browser in Notifications
- Improvement: License options
- Bug fix: Error when double clicking on notification
- Bug fix: Error when synchronizing the statuses of IPv6 addresses of subscribers

## Version v.2.33.5 (02/20/2024)

- New section: QoE Analytics / DNS Flow
- New Section: QoE Analytics / Raw DNS Flow

## Version v.2.32.70 (02/05/2024)

- Improvement: New filter for blocked/redirected HTTP,HTTPS requests in QoE

- Improvement: New filter for inbound/outbound traffic in QoE
- Improvement: Added MPLS tags to QoE reports
- New widget: Report for DSCP values(from 0 to 64) in QoE
- Improvement: Usability while working with QoE reports and filters
- Improvement: Localization in table reports in QoE triggers
- Improvement: Visual content of exported QoE PDF reports
- New feature: Sending reports as attached to mail files in QoE triggers
- Improvement: Ability to manage IPv6 based channels
- Improvement: Added the Traffic Redirection service (service code - 17)
- New section: Session Policing service (service code - 18)
- Improvement: Added ability to import LONG list to Custom protocols
- Improvement: Vascloud authorization by token
- Bug-fix

### **Version v.2.31.1 (08/21/2023)**

- New feature: Ability to change the aggregation step (aggregation period) fullflow when data becomes outdated
- Improvement: Replaced average RTT with median RTT in all QoE reports. Requires QoE Stor version 1.19.1 or higher
- Improved widgets: Monitoring of infected subscribers and Monitoring of uplinks
- Bug-fix

### **Version v.2.30.4 (06/28/2023)**

- New feature: [Raw fullflow compression](#)
- New widget: [Threats monitor](#)
- Widget enhancement: [Uplink monitor](#)
- Bug-fix

### **Version v.2.29.2 (05/15/2023)**

- Improvement: Protocols in Filter UI: ability to save a backup copy of current rules, ability to specify ISP for the rule
- New section: User actionslog
- Bug-fix

### **Version v.2.28.3 (03/21/2023)**

- New section: User action log
- Enhancement: Improved algorithm for processing Kaspersky feeds
- Enhancement: Added collection of dpiui2 usage statistics
- Bug-fix: Fixed subscriber synchronization algorithm

### **Version v.2.27.3 (01/25/2023)**

- New widget: Uplink monitoring
- Improvement: The algorithm for building subscriber routes on the map in the GTP flow section has been redesigned
- Improvement: Added the ability to configure vchannel by CIDR
- Bug-fix: Fixed work of the "Excel export" widget when working with regular tables

### **Version v.2.26.4 (12/15/2022)**

- New module: Captcha server for DDoS protection
- New section: Managing and configuring the Captcha server for DDoS protection
- Enhancement: Export QoE Reports from QoE Stor server
- Enhancement: Added the ability to send alerts from the "Triggers & Alerts" section to Telegram
- Enhancement: Nodejs migrated from 12.x version to 18.x for CentOS8+ and 14.x for CentOS7
- Enhancement: Added ability to send a test e-mail from the "GUI configuration" section
- Bug fix

### **Version v.2.25.20 (09/08/2022)**

- New feature: [VIP Subscriber Management \(Service 15\)](#)
- New section: Managing VIP subscribers in Filter UI
- New feature: File System and Database Backup Engine
- New feature: GUI Server Redundancy. File system and database replication
- New section: AS and DSCP - Autonomous Systems Management in Filter UI
- Enhancement: Ability to add an IPv6 address in the IP and AS Exclusions section of the Filter UI
- Bug fix
- New feature: Auto-recovery of file system and database from backups

### **Version v.2.24.2 (06/29/2022)**

- New feature: Ability to set filters in QoE dashboard
- New Feature: Ability to enter CIDR+PORT in User Protocols
- New feature: In the Performance/Statistics section, the display of dropped packets on the graphs for each class has been added
- Bug-fix: Fixed problem with displaying QoE Online reports if browser and server timezones do not match
- Bug-fix: Fixed problem with displaying aliases in the Performance/Online/Devices section

### **Version v.2.23.3 (04/20/2022)**

- New section: Online statistics
- New section: Protection against DOS and DDOS attacks
- New feature: Multiple input of resources in custom protocols
- New feature: Auto-updating QoE directories when updating User protocols
- New feature: Simplified setup for downloading User protocol directories in QoE
- New feature: Period Widget in Performance/Statistics section
- New feature: Manage video classification settings in Site Classifier
- Bug fix: Incorrect import of IP PORT records in the Black and White Lists section

### **Version v.2.22.4 (02/21/2022)**

- New feature: Social internet service
- New feature: Hardware diagnostic function
- New feature: Personalized dashboard in QoE
- New feature: Rechecking category and host in the Sites classifier
- New feature: Classified filter lists in Filter UI
- New feature: Forbidden to ping the subscriber in case of L3 authorization
- Support: New CGNAT statistics format supported in DPI 11.2 versions
- Bug-fix: Displaying the date in the Performance section
- Bug-fix: CGNAT profile synchronization in case when login=IP
- Bug-fix: Subscriber editing form

### **Version v.2.21.5 (11/15/2021)**

- Site classifier section: added the ability to recognize pornographic images and classify sites into porn / non-porn by the presence of such images
- Performance section: added the Devices tab, informing about the status of links
- Subscribers and Services section: synchronization refactoring
- Custom protocols section: added signature validation
- Configuration section: added Router parameters
- AS Prioritization section: added IPv6 support
- QoE analytics sections: added c% columns in protocol reports
- QoE analytics sections: Country code and Network code dictionaries for determining base stations in GTP traffic
- QoE analytics sections: bug fix
- Filter UI sections: bug fix
- Menu redesign

### **Version v.2.20.2 (08/23/2021)**

- New section Custom protocols - Create and manage custom FastDPI protocols (signatures)
- Management of cluster of QoE Stor
- Improvements in Filter UI (global interface)

### **Version v.2.19.3 (06/30/2021)**

- New LI section: Traffic analysis - decoding Web, Dns, Mail, Voip, Ftp from PCAP files
- New Vchannels section - service and policy management for virtual channels
- New Tariff Schedule function - schedule management for tariff plans
- New function BL and WL Schedule - control of automatic updating of lists
- New feature BL and WL Categories - inclusion of whole categories of sites in the lists
- Many internal improvements and bug fixes

### **Version v.2.18.2 (03/22/2021)**

- Improved section Prioritization by protocols: managing groups of protocols through a master

part

- Custom aggregated logs and reports
- License check in the absence of the Internet
- Ability to use the maps offline
- Added options in DPI Configuration section
- Improvements on the Classifier: the ability to assign a category to a folder, a bug fix
- Auto-tuning of the grid step in QoE graphs depending on the aggregation parameters

### **Version v.2.17.15 (12/28/2020)**

- Database of protocols in VAS Cloud, synchronization of protocols in dpiui2 and QoE Stor
- Management of the site Classifier model. Synchronizing models between VAS Cloud, dpiui2 and QoE Stor subsystems
- Synchronization of the directory of site categories in the subsystems VAS Cloud, dpiui2 and QoE Stor
- Sections Configuration and Logs of the site classifier
- Ability to set DSCP for a group of protocols in the main and ULR interface
- In the Subscribers and services section, the management of subscriber properties specific to BRAS has been added: L2-properties, Authorization, Ping
- Building QoE reports is accelerated more than 10 times
- Added the ability to build reports for more than 10 minutes
- Receive Netstream NAT from third-party systems in QoE Stor. Automatic IP-LOGIN binding in NAT logs
- Added reports to QoE
  - - RTT, Traffic, Retransmits by protocol groups
  - - RTT, Traffic, Retransmits on GTP base stations

### **Версия v.2.16.7 (12.12.2020)**

- Added a new section Terminal: the ability to execute CLI commands on equipment, command reference
- Added reports on traffic classes in QoE
- Added reports by traffic classes in the Performance section
- Added summary statistics on interfaces in the Performance section
- Updated parameter reference in the Configuration section
- Added SSO-like authorization, centralized login on multiple instances
- QoE sections in ULR
- Flexible configuration of fullflow and clickstream aggregation in QoE Stor

### **Version v.2.15.2 (10/15/2020)**

- Launch optimization
- NAT sections in QoE
- GTP sections in QoE. Geolocation and routes of mobile subscribers on the map
- Flexible management of data storage on HOT and COLD disks. Automatic data transfer
- Ability to configure the storage period for QoE logs separately
- Possibility of flexible configuration of aggregation of NAT logs in QoE
- Corrections in SORM sections

- Optimized loading of advertising JS scripts
- Section Site Classifier
- Fix bugs

#### **Version v.2.14.4 (10/02/2020)**

- Added the ability to clear the Wifi Hotspot configuration
- Bug fixes in the Wifi Hotspot section

#### **Version v.2.14.2 (09/14/2020)**

- Reworked DPI Configuration section. Works through a universal reference book. Added BRAS parameters. Flexible grouping. Scripts.
- Buttons Update hot parameters in the sections Prioritization by protocols and AS
- Bug fix

#### **Version v.2.13.1 (06/29/2020)**

- Fast PCRF configuration section
- New Fast PCRF log section
- Revised Fast DPI Logs section
- Bug fix

#### **Version v.2.11.6 (06/01/2020)**

- Bug fix
- Ability to install on CentOS 8

#### **Version v.2.10.14 (04/09/2020)**

- Updated protocol dictionaries
- Added push notifications:
  1. About connecting to a device
  2. Data synchronization and
  3. Notifications from the section "Triggers and Notifications"
- Added section for viewing and downloading DPIUI2 logs
- Added QoE Stor configuration section via DPIUI2
- Added section for viewing and downloading QoE Stor logs
- Fixed interface bugs in existing sections

#### **Version v.2.9.5 (12/25/2019)**

- Congratulations on NG 2020 and the opportunity to receive a gift!
- New section DPIUI2 server configuration



- New DPIUI2 update section: the ability to update and auto-update the dpiui2 version
- Tariffs refactoring
- Equipment section refactoring
- In the JSON API of the QoE section, the parameter for the maximum number of entries is made in the settings
- Minor bug fix

### **Version v.2.8.2 (06.11.2019)**

- SSH bruteforce report
- System trigger with bruteforce SSH report
- Filtering by CIDR has been fixed
- Personal account for operator's subscribers
- Fixes in the Hotspot section
- Usability fixes: text filter in tables, service profile selection in the subscriber's card, codes in services are replaced by names
- Bug concerning removal of Mini Firewall and CGNAT services from a subscriber has been fixed
- Check for class sum when using the static keyword

### **Version v.2.7.9 (25.10.2019)**

- VAS Cloud access using domain name
- Locked in the clickstream
- Critical bug in synchronization of subscribers service profiles has been fixed

### **Version v.2.7.7 (16.09.2019)**

- Added new Mini firewall section
- Raw log analytics: Protocol and subscriber report sets
- VAS Cloud personal account: new section Charges and payments, new section Statistics, a new feature to request withdrawal of funds by the operator
- Incorporation of logs Clickstream and Netflow (the both raw and aggregated). Analytical reports on such logs

### **Version v.2.6.6 (16.09.2019)**

- A new HotSpot management section is added
- Further improvements in the QoE/Logs section: speaker filters, column filters, Reset Filters button

### **Version v.2.5.7 (06.09.2019)**

- Adaptation to the new version of the QoE Stor (fastor-1.1.1)
- Optimization of jobs for cleaning outdated partitions in QoE Stor
- Added "Directory of excluded subnets" and "Directory of excluded AC numbers" dictionaries in QoE/Administrator

## **Version v.2.5.2 (16.08.2019)**

- Added a new section Triggers and notification
- Added licensing via VAS Cloud
- Bugfix in the QoE Analytics and CG-NAT sections

## **Version v.2.4.1 (11.07.2019)**

- Issue with the absence of subscribers list in the Block and Allow Lists section has been fixed
- Refactoring of dpiui2 and fastDPI update check functions
- Fixed an issue concerning occasionally hanging of ssh sessions

## **Version v.2.4.0 (08.07.2019)**

### A new CG-NAT section was added

- Added the feature to manage the CG NAT service (service 11)
- Added the feature to monitor the load level of CG NAT pools
- Support for all the innovations in the CG NAT service added in the Stingray Service Gateway 8.3.1

### Miscellaneous

- Added filter "Number of sessions" in the QoE section / Subscribers
- Added the feature to save the filter in all QoE sections
- Background check for a new version of fastDPI has been added

## **Version v.2.3.4 (27.05.2019)**

- Fixed a number of issues in the Block and Allow Lists section
- Added "Use federal" option
- Added the feature to see the name of the service profile installed on DPI in the Tariffs, Block and Allow Lists sections

## **Version v.2.3.1 (21.05.2019)**

### Added a new section Services / Advertising & Ad blocking

### Added the "Vas Cloud Services" new section / Personal account and Vas Cloud / Vas ADS

### In the Services / Subscribers and services

- Added the feature to apply a profile to the Block and Allow lists services
- Added the feature to apply a tariff plan

### In the Services / Block and Allow Lists section

- Redesigned the mechanism for binding subscribers to the service

- Improved sync
- Improved import of lists from QoE
- Fixed a number of bugs

#### In the Services / Tariffs

- Improved synchronization of individual tariffs

#### In the Performance section

- Added an option to clear data for charts - CHART\_DATA\_DELETE\_DAYS\_INTERVAL parameter in .env
- Fixed incorrect displaying of a large number of CPUs on the CPU usage diagram
- Fixed incorrect displaying of clusters on traffic graphs on DNA interfaces

#### In the QoE Analytics section

- Added the feature to filter by IP addresses based on the mask (CIDR)
- Fixed several bugs

#### Miscellaneous

- A warning is displayed if fastDPI is not running
- Added the feature to automatically check for a new version of DPIUI2
- Added the feature to view the license on the DPI device

### **Version v.2.2.0 (25.03.2019)**

#### A new Tariff plans section is added

- Tariff Management
- Enabling/disabling of tariff plan to Subscribers
- Tariff plan import option

#### In the Analytics section

- A bug concerning the incorrect counting the subscribers number in the QoE Dashboard section is fixed
- New feature to set conditions for filtering traffic
- Report on Clickhouse processes. The ability to stop the process
- Report with charts on AS traffic
- Legends in series charts are shown in the tabular form
- Traffic volumes reports
- New feature to see the active report status is added
- Ability to stop report building is added
- Retransmit Reports

#### In Configuration and Protocol prioritization (DSCP) sections

- Policing form is improved
- A bug with displaying protocol names containing spaces is fixed

#### In Subscribers and services section

- An issue regarding adding a subscriber without binding to the login is fixed
- New options are added to the filters: "No services", "No tariffs"

#### **Version v.2.1.14 (21.02.2019)**

##### Regarding "QOE ANALYTICS" section

- Query history widget (filters) is added
- Quick period of time selection widget is added
- Reports on Traffic are added
- "Mini" reports (with a minimum number of columns to speed up data processing) are added
- Feature to save the state of sections, jumping to desired tabs by link
- Columns sorting in reports ( by default descending order is used) is added
- Administrator section (the number of options will be expanded) is added
- Many bugs have been fixed

##### Regarding "DPI CONTROL/PERFORMANCE" section

- Charts of loading of cores of the processor (online and statistics) depending on time are added
- "Traffic on the interface" charts (Kbit/s) are added
- Some bugs have been fixed

##### Regarding "DPI CONTROL/CONFIGURATION" section

- A new feature to enable/disable displaying of comments to parameters is added
- Cosmetic tweaks

##### Regarding "SERVICES CONTROL" section

- New subsection "Block and Allow lists" under the "Services control/Services" is added

##### Regarding "SERVICE MANAGEMENT/ADVERTISING" section

- Import of categories for Block and Allow lists from QoE
- Synchronization issues are fixed
- Error message displaying is added in case the subscriber for any reason is not added to the advertising campaign

#### **Version v.2.1.11 (21.12.2018)**

- Bugs regarding filters in QoE sections are fixed
- Bugs in the Prioritization by protocols (dscp) section are fixed
- Bugs in the Prioritization section for autonomous systems (AS) are fixed
- Bugs in the Subscribers and Services section are fixed. FTTB logins and IPv6 support is added
- Bugs in ADVERTISING section are fixed
- New feature to force synchronization of subscribers and campaigns appeared. Update period setting is added

### **Version v.2.1.10 (03.12.2018)**

- A bug manifesting when user creates a cache, resulting in write operation interruption (under certain circumstances)
- Reports and filters by host categories are added

### **Version v.2.1.9 (22.11.2018)**

- Export to Excel and other formats
- Export to PNG for charts
- Feature to select the type of charts
- Reports on raw click stream and flow logs using filters and features to export
- Clearing aggregated logs

### **Version v.2.1.7 (13.11.2018)**

- A bug regarding filtering by time period is fixed. Now only the necessary partitions are queried, not the entire table
- Cache has been optimized. Now only the totals are stored in the cache, rather than intermediate data
- Bugs in "RTT distribution" and "Top subscribers with high RTT" reports are fixed

### **Version v.2.1.5 (07.11.2018)**

- Bug related to unresponsive hung SSH sessions is fixed in version 2.1.4
- Other hot-fixes

This version works with the QoE Stor 1.0.4+ module

### **Version v.2.1.4 (02.11.2018)**

The changes mainly concern the “QoE ANALYTICS” section and the [QoE Stor](#) module.

- Memory consumption optimization (QoE Stor module) when generating reports is implemented
- Background reports generating

This version works with the QoE Stor 1.0.4+ module

### **Version v.2.1.0 (20.09.2018)**

- New [QoE ANALYTICS](#) section is added
- New [ADV CONTROL](#) section is added

## **Versions v.2.0.0 - v.2.0.6**

- Further improvements
- Bug fixes

## **Version v.2.0.0 (28.12.2017)**

- Interface is significantly improved
- Usability is significantly improved