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Licensing

- Stingray Service Gateway (SSG) licensing depends on the bandwidth and its features.
- The license is time-unlimited.
- [Technical support](#) is not included in the license and is paid separately.

SSG licensing

Bandwidth

Licenses grading of the bandwidth: **SSG-6/10/20/40/60/80/100/120/240**. [Pay attention to the hardware requirements!](#)

Depending on [the installation scheme](#), the following restrictions are assumed:

1. When installing "in line" scheme

- SSG-6 corresponds to 6Gbps total (upload+download) traffic
- SSG-10 corresponds to 10Gbps total (upload+download) traffic
- SSG-20 corresponds to 20Gbps total (upload+download) traffic
- SSG-40 corresponds to 40Gbps total (upload+download) traffic
- SSG-60 corresponds to 60Gbps total (upload+download) traffic
- SSG-80 corresponds to 80Gbps total (upload+download) traffic
- SSG-100 corresponds to 100Gbps total (upload+download) traffic
- SSG-120 corresponds to 120Gbps total (upload+download) traffic
- SSG-120 corresponds to 240Gbps total (upload+download) traffic



Licensing includes ISP traffic asymmetry. Usually, the incoming traffic is three times more than the outgoing one.

For example, Incoming - 6G, Outgoing - 2G. License - SSG-10.

2. When installing using the "mirror" scheme

- SSG-6 corresponds to 6Gbps of total mirror traffic
- SSG-10 corresponds to 10Gbps of total mirror traffic
- SSG-20 corresponds to 20Gbps of total mirror traffic
- SSG-40 corresponds to 40Gbps of total mirror traffic
- SSG-60 corresponds to 60Gbps of total mirror traffic
- SSG-80 corresponds to 80Gbps of total mirror traffic
- SSG-100 corresponds to 100Gbps of total mirror traffic
- SSG-120 corresponds to 120Gbps of total mirror traffic

Features

Licences grading of the features: **Base/BNG/Complete**

| Options | BASE | BNG | COMPLETE |
|---|-----------------------|-----|----------|
| Bypass | ✓ | ✓ | ✓ |
| Statistics gathering and analysis on protocols and directions | ✓ | ✓ | ✓ |
| Traffic prioritization depending on protocols and directions | ✓ | ⚪ | ✓ |
| Common and virtual channel policing | ✓ | ⚪ | ✓ |
| Subscriber notification and marketing campaigns | ✓ | ✓ | ✓ |
| Subscriber channel policing for IPv4 and IPv6 | ✗ | ✓ | ✓ |
| Allow Lists and Captive Portal | ✗ | ✓ | ✓ |
| BNG L3 (IPoE), Dual Stack IPv4/IPv6, Radius with CoA | ✗ | ✓ | ✓ |
| BNG L2 (PPPoE, DHCP), Dual Stack IPv4/IPv6 | ✗ | ✓ | ✓ |
| Router with BGP, OSPF, VRF support | ✗ | ✓ | ✓ |
| Carrier-Grade NAT | ✗ | ⚪ | ✓ |
| Ads blocking and replacing | ✗ | ⚪ | ✓ |
| Mini-Firewall for blocking on certain ports | ✗ | ⚪ | ✓ |
| Protection against DOS and DDOS attacks | ✗ | ⚪ | ✓ |
| Regulatory Compliance | BASE | BNG | COMPLETE |
| Filtering by the blocklisted Internet sites | ✓ | ✗ | ✓ |
| Lawful interception (LI) | ⚪ | ⚪ | ✓ |
| Additional modules and services | BASE | BNG | COMPLETE |
| URL Classifier Local version | ⚪ | ⚪ | ⚪ |
| URL Classifier Cloud version | ✓ | ✓ | ✓ |
| Graphical User Interface Base version | ✓ | ✓ | ✓ |
| Graphical User Interface Global version | ⚪ | ⚪ | ⚪ |
| Quality of Experience Module Base version | ✓ | ✓ | ✓ |
| Quality of Experience Module Standard version | ⚪ | ⚪ | ⚪ |
| Adding banners to HTTP resorses | Subscription | | |
| Signatures SDK | Subscription | | |
| Extended signatures packs | Subscription | | |
| Reserve License | BASE | BNG | COMPLETE |
| Stand by License | 25% from main License | | |

- ✓ Yes
- ⚪ Optional
- ✗ No

License Exceeding

If the bandwidth license parameters are exceeded, SSG will process traffic [until the platform reserves are exhausted](#). Once the platform capacity is exhausted, processing errors will occur and traffic degradation will occur. You can limit the bandwidth yourself by polysizing: [Common and Virtual Channels Policing](#), this is only relevant when the total port throughput exceeds the license bandwidth parameters.

VAS Experts reserves the right to refuse technical support or project maintenance to customers who do not comply with license terms, including those who exceed the allowed traffic (including according to the built-in error monitoring system).

Reserve SSG license

For the purpose of increasing the fault tolerance of the solution, we recommend backing up the main SSG server. Redundancy schemes and descriptions for [BRAS L3](#) and [BRAS L2](#).

Terms of use of the reserve license:

1. Use only for backup purposes of the main server
2. Constant traffic transmission no more than 5% of the license volume, in order to monitor the health of the backup server
3. Processing of all traffic of the main server only in case of an accident or maintenance of the main server

QoE licensing

| Options | BASE | STANDARD |
|---|------|----------|
| DPI's Full NetFlow and ClickStream statistics visualization | ✓ | ✓ |
| Built-in reports of Full NetFlow-based TOP: high RTT, by traffic volume, by number of re-requests, by application protocols, by AS, by subscribers AS, by access switches and aggregation | ✓ | ✓ |
| Built-in ClickStream-based TOP reports: URLs, hosts, subscribers, devices, IP resources | ✓ | ✓ |
| Custom filters for built-in reports, by web resource category, by protocol group, by subscriber | ✓ | ✓ |
| Download reports in .xlsx, .csv, .pdf, .png formats | ✓ | ✓ |
| API support for integration with external systems | ✓ | ✓ |
| Monitoring of apline quality and cyber threats | ✓ | ✓ |
| Online reports by specific IP, Login | ✓ | ✓ |
| NAT Flow statistics collection, compression, custom filters | ⚪ | ✓ |
| DNS Flow statistics collection, compression, custom filters | ⚪ | ✓ |
| GTP Flow statistics collection, compression, custom filters, map visualization | ⚪ | ✓ |
| Setting triggers and actions on events, DDoS and BotNet detection, notification by email and telegram with a specified periodicity | ⚪ | ✓ |
| Special reports | ⚪ | ✓ |

✓ Yes

⚪ Optional