

## **Solutions for Mobile and Internet Service Providers**

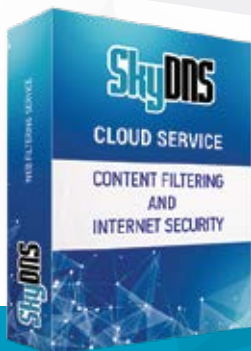


# SkyDNS for Mobile and Internet Service Providers

SkyDNS has for years been working in the telecoms market to provide its players solutions for web content filtering and web categorization, cyber security and threat intelligence. Our technology is based on resolving DNS queries and own database of over 90M categorized internet resources. These technological elements are the foundation of the SkyDNS efficient and reliable products and services with a large number of features network operators find useful.

To differentiate from competitors mobile and internet service providers use SkyDNS to protect their entire customer base against web-based threats and offer end users means to safeguard young internet surfers from harmful web content and online time wasters. With SkyDNS telecoms attract new subscribers, increase their loyalty and get insights on user behavior online. To achieve that telecom operators choose from our range of products and services the ones which better suit their goals.

## SkyDNS solutions for network operators



### ISP Cloud

Cloud-based Content Filtering Service



### ISP Go

Parental Control Platform



### ISP Filter

URL Filtering System

To better understand the difference between the SkyDNS content filtering and parental control solutions we have compiled this table.

	Cloud Filtring Service	Parental Control Platform	URL Filtering System
Protection against web threats	+	+	-
Internet content filtering	+	+	+
OSS/ BSS integration	Subscription API to integrate the service with ISP's billing	+	-
Protection of users behind NAT	+	+	-
The fastest to deploy	+	-	-
Multiple customization opportunities	+	+	-
White labeling	+	+	-
Detailed reports and stats	+	Minute-by-minute stats	-
Regulation compliance	+	+	+
Domain and URL filtering	Domain	Domain	URL and Domain
Scalability	+	+	+

# Content Filtering Solutions

Whatever SkyDNS solution a telecom chooses, our filtering technology requires no additional software on devices of end users to ensure they get access to the allowed websites only. To fine tune the filtering to individual needs SkyDNS customers choose what groups of internet resources to block or allow among the 57 categories containing the most popular resources and almost all of the most dangerous ones. That is how access to inappropriate and age-restricted content is blocked in web browsers and mobile apps.

To introduce an efficient parental control service network operators can filter out porn, social networks, drugs, alcohol, extremist, hate, racism, weapons-related and other unwanted websites. Specific sites are easily white- or blacklisted. The web can also be filtered in a whitelist-only mode. To prevent bypassing SkyDNS you can easily block proxies and anonymizers.

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Together with the customized filtering telecoms' users get such useful SkyDNS options as enabling YouTube Restricted Mode and SafeSearch for Google and Bing to filter out most explicit content in search results and on YouTube.

An ad blocking feature is especially popular with SkyDNS customers as it speeds up web pages loading due to the lack of annoying and distracting ads of any kind – video, audio, context, banner, and pop-up. The ad blocker also protects against malware disguised as innocuous advertising and ensures kids do not see inappropriate images often used in online ads.

Using SkyDNS internet and mobile service providers get detailed reports and stats as to the domains requested, either blocked or allowed, the most popular content categories and much more useful information. It comes in handy for network operators to create a more precise customer profile for better ad targeting.

SkyDNS supports HTTP and HTTPS filtering. The company's filtering technology supports any type of web connection – mobile (GSM/CDMA/LTE), wireless (Wi-Fi), broadband. Web traffic is filtered equally well, no matter what web-connected devices, new or old, are used for surfing (routers, desktop computers, laptops, tablets, smartphones etc.).

The SkyDNS filtering system supports the most popular OSes (Windows, Linux, Mac, iOS and Android). SkyDNS is suitable for protecting individual web-connected devices, entire networks of any size and public Wi-Fi hotspots. It can also be used as an option on special internet plans for children.

The SkyDNS filtering solutions are highly scalable and have a redundancy option.

## ISP Cloud

Need to improve network-wide protection against botnets, malicious and phishing resources in an hour? Deploy the SkyDNS cloud filtering service! You just redirect user DNS requests to our filtering servers and define which categories of resources should be available to your subscribers. With 100% up-time during the last 5 years our distributed network of servers located in Europe, New Zealand, North and Central America provides a fast response worldwide with no latency. Daily the servers process over 1B DNS queries blocking access to 9M queries to malware and botnets.

### **With the SkyDNS cloud service you can offer customers**

- **Parental control service allowing adults to protect children against harmful content and spending too much time online**
- **Content filter for educational institutions and libraries**
- **Wi-Fi protection necessary to prevent kids on public Wi-Fi networks from visiting inappropriate resources**
- **Corporate filter enabling employers to manage, monitor and control staff online activity**
- **Extra protection against phishing, malware and botnets**

## Benefits of the cloud service

- Easy to deploy and manage
- Fastest way to introduce network-wide protection against web threats
- Multiple opportunities to customize the service like SafeSearch for Google and Bing, YouTube Restricted Mode, etc.
- Opps to monetize web filtering products and services and to brand them
- No added latency due to the SkyDNS distributed network of filtering servers
- No hardware to buy, no software to maintain
- No CAPEX and little service overhead

## ISP Go

It is a software platform designed for ISPs to introduce a sophisticated content filtering and parental control service which can easily be monetized. ISP Go allows both, internet service providers and their end users to manage the filtering service. The SkyDNS platform is a standalone solution installed inside the operator's network on a dedicated physical or virtual server. ISP Go is a DNS-based platform with a dynamically updated categorization database and an open API for integration with operator's systems.

ISP Go is totally brand free. After integration via API with operators' systems like OSS/BSS and a selfcare portal the platform provides the parental control service under the operator's own brand. The software platform is intended to overcome the limits of NATed internet access because it is deployed inside operators' networks with access to internal IPs.

ISP Go uses the same technology and database as the SkyDNS cloud service. It guarantees customers high performance, stability and filtering quality.

The parental control platform can be deployed fast. Straightforward integration of ISP Go with systems and websites of network operators allows them in a short time period – from a couple of hours to 2 business days to introduce content filtering options and a parental control service. With API and a ready-to-use administrative frontend ISP Go is easily managed – network operators can create and delete user accounts, configure the filtering, etc.

With the SkyDNS platform network operators are free to decide for themselves whether to introduce fixed filtering rules for all end users and groups of them or allow end users to set individual filtering rules in a personal web-based dashboard.

**The SkyDNS content filtering technology is adapted to specific needs of internet and mobile service providers allowing them to:**

- Provide a safer web connection free from botnets, phishing and malicious resources including those outbound from infected end users' devices
- Provide a reliable and fast DNS resolving
- Find an easy-to-deploy and cost-effective solution to expand the range of packages, products, services and brand them
- Avoid CAPEX and high TCO
- Get new customers and additional revenue
- Comply with regulation concerning compelling ISPs to block resources deemed illegal, harmful and dangerous by the authorities

**Platform's benefits you get**

- High quality content filtering for your end users without downloading additional software on their devices
- New sources of revenue as network operators set their own price on services generated via Platform
- New users and increased customer loyalty. People would appreciate that their mobile and internet service providers care about online safety
- Simple implementation requiring no additional high-end equipment on operators' networks. No need for DPI systems to use SkyDNS
- Open API and a ready-to-use administrative frontend for managing the use of Platform
- Seamless integration with network operators' OSS/BSS and a self-care portal to provide customers with services under operator's own brand
- Multi-policy filtering for operators' individual users and groups of them
- Accommodation of any number of users due to Platform's scalability
- Opportunity to brand the filtering services
- Fully customizable block page to show end users only the necessary information and contact details
- Regulation compliance. It is important for network operators which in many countries are made responsible for blocking harmful online content



- No overblocking issues as there are zero false positives
- Tailoring the service to any individual needs by fine tuning the filter. Just choose which of the 57 content categories to block or allow
- Powerful reports and stats of the filtering service are available to operators and their customers. An opportunity for operators to use service statistics for creating a more precise customer profile and to always be in the know if there are any request to botnets and malicious resources from ISPs' networks
- Protection against botnets, phishing and malware for individual web-connected devices and entire networks of any size
- Enhanced filtering of adult and child sexual abuse images with Internet Watch Foundation (IWF), a leading organization for reporting and removing online child sexual abuse images and videos. SkyDNS includes in its web filter and blocks URLs of indecent images of children and abuse domains from Child Abuse Images and content list (CAIC) supporting IWF efforts to stop child abuse and exploitation online.

## ISP Filter

To help operators comply with regulation SkyDNS provides ISP Filter, a URL filtering system. It blocks access to domains and web pages prohibited by the authorities. In case telecoms are required by law to filter out pirate resources and entire lists of sites and web pages with illegal content (like child sexual abuse images, extremism-related content), ISP Filter is the solution to deploy. With automatic updates to the compulsory lists of sites subject to blocking the SkyDNS URL filtering system ensures operators are always on the right side of the law.

If operators need to create their own lists of domains and web pages to always block or allow they easily can add them to black or white lists.

## SkyDNS Licensing

Telecoms can choose whether to deliver web filtering services for free or for a fee, and how much to charge for it. There are two types of SkyDNS licensing to choose from. One is a pay-as-you grow model based on the number of active users of the filtering service. The other one is based on the overall amount of network operator's users – the more users it has, the less the operator pays for each one of them.

In case of ISP Cloud and ISP Go a revenue sharing model is also available. It allows any network operator to offer the filtering products and services at prices it finds appropriate, with revenues shared proportionately between SkyDNS and the network operator.

# Why SkyDNS



We provide cloud solutions for web content filtering and internet security focusing on the telecoms market and that of network equipment manufacturers. Our products and services are used by over 100 mobile and internet service providers to allow, block and monitor access to the internet and increase customers' safety online. The SkyDNS filtering solutions are integrated into network hardware of vendors selling it internationally.



The SkyDNS highly scalable distributed network is able to accommodate any number of users and provides fast response worldwide with no latency. SkyDNS processes over a billion requests daily blocking access to 9 million queries to malware and botnets. We have a global coverage with SkyDNS filtering servers located throughout data centers in Europe, New Zealand, North and Central America with 100% up-time during the last 5 years.



Our own farm of web crawlers gathers huge amount of data off the internet. That is why our internal database covers billions of URLs and over 180M websites.



By now the efficiency of the SkyDNS web filtering technology has been proved several times by AV-Comparatives, a world leading test lab. For 3 years straight our filter is named Approved Parental Control Product. In 2017 test the SkyDNS technology proved to block 99.8% of adult content and had zero false positives.



Our database of categorized internet resources, SkyDNS DB is included in Best Soft 2016 list compiled annually by PC Magazine Russian Edition, a respected and popular edition of a world known publication.



The SkyDNS technology is Editor's Choice for Content Management & Filtering Solutions in 2016 Cyber Defense Magazine Infosec Awards. We create a next-generation innovation and advanced technology for protection against web threats and making the internet cleaner and safer all our users. This fact is recognized and emphasized with this award by the industry's leading electronic information security magazine. The award further validates our company as an innovator in the sphere of online security and web content filtering.





Since 2010 SkyDNS develops web filtering and internet security solutions for end users and the telecom market. Now >100 network operators protect millions of subscribers with the SkyDNS solutions. In >40 countries SkyDNS provides products and services to educational institutions, home and corporate users like telecoms, MSPs and VARs. SkyDNS solutions are used by more than 4000 businesses and institutions and hundreds of thousands of home users.

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