

## DATASHEET

# **OX Protect** – Network-based security for consumers

### **Secure internet access for users**

OX Protect provides a secure internet experience for families and SOHO (Small Office Home Office) set ups and helps protect IoT devices. It delivers robust, easily configurable, network-level parental control and malware filtering. This includes clear notifications and user reports, easy-to-use reference apps and a well-documented API.

### **OX Protect for families**

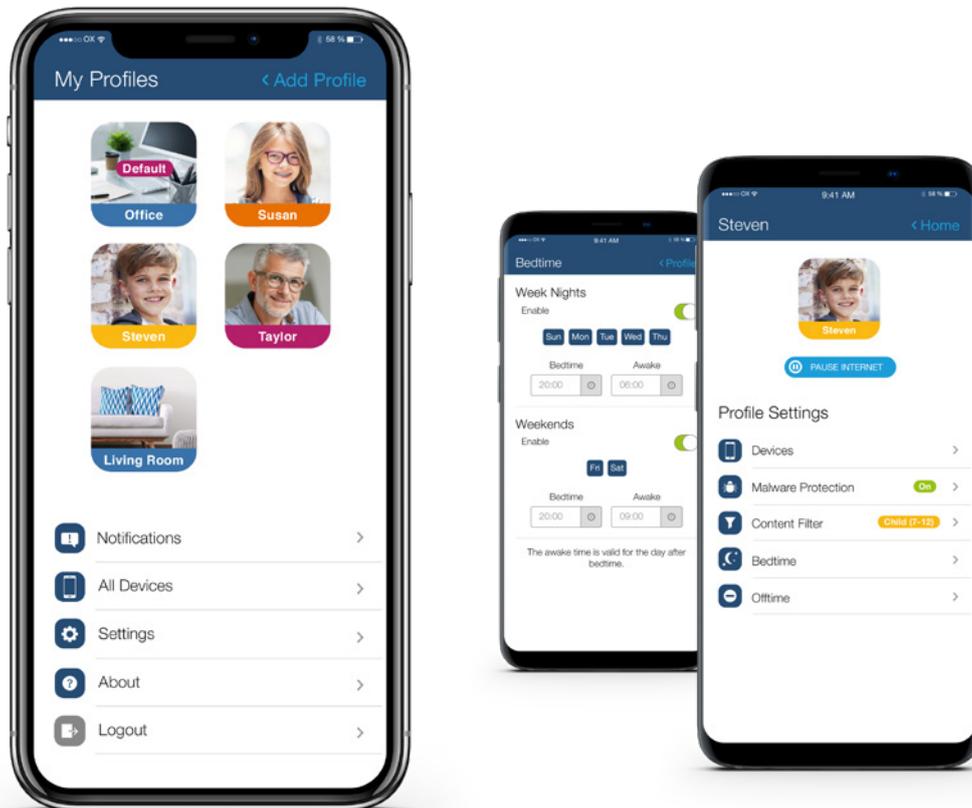
OX Protect helps keep families safe from dangerous and undesirable content with parental control features that allow parents to decide which content each family member is allowed to access and to keep an eye on online activities as well as schedule usage windows. It also prevents access to known malware, phishing and botnet command and control centers.

### **Connect with your users**

OX Protect allows you to keep users informed by sending reports and real-time notifications in case of imminent threats. The main contract holder is informed about possible infections on specific devices and can also receive warnings concerning IoT devices.

### **Network-based security for SOHO**

OX Protect also offers a secure environment for a small office/home office set-up. It allows easy management of user and department profiles, sensible access control, real-time alerts and reports on which devices are in use across the company network. Malware and phishing protection completes a solid solution for keeping SOHO networks running efficiently and securely.



# Parenting becomes smart

Parental control and malware protection in one

## OX Protect for families

OX Protect offers a secure and safe internet experience for families and adopts a comprehensive approach to user and device protection. Users can easily create a profile for each family member, any device or a combination of both (e.g. all the devices used by a particular household member). It allows parents to control access to categories of websites and apps by assigning safe browsing profiles for the devices used by children and by blocking domains that are considered unsuitable for a specific age category.

## Homework time is not Netflix time

At Open-Xchange we understand the struggle parents face every day. It is a challenge to keep an eye on the online activities of all the family members, especially in the fast-paced world of social media and smart devices. Thanks to OX Protect, you can help parents stay in charge. For example, with OX Protect parents can create time windows (such as 'homework time' or 'bedtime') with a customized set of rules that can be applied per profile or per device. This means parents can pause internet access when it is time to sleep or block access to video-on-demand when it is time to do homework.

## OX Protect against malware

OX Protect for Malware provides protection against malware, phishing and botnets, and sends real-time notifications if malware is detected. It also detects infected devices, including IoT devices such as smart TV, webcams etc. in real-time and provides notification of attacks in progress.

## Real-time notifications

OX Protect comes with a notification center for security status, alerts and other relevant information. The system notifies users of threats in the network or on each of the devices and warns the account holder if new devices are detected on the network. It is also possible to notify parents if an attempt to access a website from a blocked category has been made.

# Differentiate for business success

## The advantages of OX Protect

### Easily integrate

OX Protect is highly customizable and can be configured to meet different deployment requirements. You can choose between using the Open-Xchange white-label consumer reference apps or the REST API to provide straightforward integration with existing end-user portals and mobile apps. Integration with existing authentication systems is simplified thanks to support for OAUTH2 authorization. Moreover, no additional consumer hardware is required in the home to make OX Protect work, thus eliminating the complexity normally involved in hardware procurement and distribution.

### Optimize costs and generate additional revenue

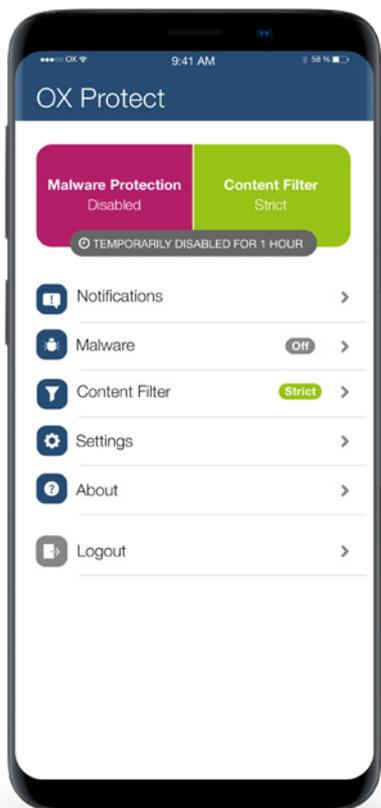
Compared with solutions based on DPI, OX Protect is based on DNS filtering and is therefore extremely efficient – requiring only a tiny percentage of network traffic to be controlled rather than every packet. The deployment options are extremely flexible, whether distributed or centralized, and the solution supports NFV-style functionality, such as cloud orchestration APIs. In the event of a major disruption, ISPs with a large user base can expect a spike in costs caused by additional customer service requirements, such as an emergency hotline for customer complaints and additional technical support. As an ISP, this risk can be minimized by offering an additional layer of security to your subscribers and notifying them of any event and ongoing resolution efforts with OX Protect. OX Protect is also a great way to generate additional revenue. It can be bundled as part of a premium package or offered as an upsell option.

### Drive brand visibility

As a white-label product, OX Protect is brandable, extending your visibility and simplifying integration into existing portals or apps. OX Protect also allows you to reinforce your position as a trusted provider and interact proactively with those users who may be facing security issues. This in turn helps underscore your brand reputation and encourages subscriber loyalty.

### Increase user activation and engagement

As a vendor of white-labeled communication and collaboration products, we understand service providers' needs. This is why our applications are attractively designed to help maximize user engagement and boost revenue growth. However, a well-designed product is only half the story: Open-Xchange also supports customers with onboarding, activation, acquisition and engagement planning and implementation activities, allowing you to benefit from our extensive expertise and years of experience.



## Benefits for providers

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- Provide safe internet for families and SOHOs
- Re-engage with subscribers
- Reduce costs caused by vulnerable IoT devices
- Increase brand reach
- Take advantage of a robust network-based solution
- An agile and trustworthy partner with transparent pricing
- Be in control of the content categories
- No new hardware for your customers is required

## Benefits for end users

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- Family friendly internet access
- Easy to set up and configure
- Control access to specific websites and apps
- Create and manage time windows ('bed time')
- Protection against malware and phishing attacks
- Protect all IoT devices in home network
- Customizable alerts and real-time notifications
- Easy to use apps
- No additional hardware required

# OX Protect: What's in the Box

## World class technology that works

### Basic set-up

The basic OX Protect set-up includes:

- The OX Protect Server
- The notification Server
- PowerDNS recursor platform
- Protect clients, for iOS and Android

### How does it work

The filtering engine uses threat intelligence to block access to known bad domain names, those that resolve to known bad IP addresses (i.e. IP blocking), those that depend on known bad name servers and domains that correspond to known botnet command and control (C2) servers. It allows the use of multiple threat categorization lists and supports major threat-intelligence providers.

### OX Protect Middleware server

The OX Protect middleware provides a REST API for customer applications and GUIs. This is end-user focused and includes support for end-user configuration, authentication/authorization, etc.

The APIs can be used to integrate with customer OSS/BSS systems, existing mobile apps, self-care portals, and customer care systems. The API supports OAuth2 for authorization, enabling easy embedding into existing apps or services. The middleware REST is also used by Open-Xchange's own mobile apps and web UI.

### Notification center

OX Protect includes support for alerts via its notification server. The main feature of this is its modular setup that is fully API-based, allowing deployment in combination with existing components. The notification center distributes end-user messages according to the triggers, instructions and parameters it receives from the event sources over a REST API. In addition, it supports push notifications to the OX Protect app, as well as email, SMS and other channels (for which custom integration may be required).

### OX Protect client apps

OX Protect comes with multiple solutions to enable easy app integration, including the choice between REST APIs to integrate your own mobile apps, or a control panel, or white-label Android and iOS apps. OX Protect Android and iOS apps offer user-friendly design, customizable notifications for important events, a control center, configuration management with filtering settings for household and individual devices as well as real-time permissions. The apps are designed to allow for a consistent brand and user experience across all platforms.

### OX is there for you 24/7

Open-Xchange provides you with 24/7 support with carrier grade SLAs. Professional services by Open-Xchange and PowerDNS specialists are available on-site or remotely.

## OX Protect

