



Newsletter

www.opendium.com

Christmas 2015

2015 has been an exciting year for us and we're producing this newsletter to keep all of our customers abreast of developments and our roadmap for the year ahead.

Please note that some of the new features described in this newsletter are only available in the very latest version of our Icen online safety system. We have been slowly rolling out this version to all of our customers and expect to complete the upgrades early in the new year.

Happy birthday

This year we celebrated our tenth anniversary. In 2005, Harry Mills (Managing Director) and Steve Hill (Technical Director) left their jobs at an internet filtering vendor in order to set up Opendium. We recognised that schools needed access to experienced engineers who could support them whilst willing to be flexible to accommodate their individual needs. Starting with nothing but our expertise, a handful of loyal customers and a commitment to hard work, we've spent the last decade developing our Icen online safety systems. Along the way we've gained a lot of experience, worked closely with many schools and

contractors, and made new friends.

Whilst we believe we're ahead of the curve when it comes to our systems' technical capabilities and our support expertise, we will not be resting on our laurels. We have a lot to be thankful for and we're in a great position to continue expanding the business. Our roadmap for 2016 is as exciting for us as this last year has been, with more improvements to the Icen online safety systems, ongoing work to maintain and improve our quality of customer support and we'll be continuing to further raise the profile of the company.

Online Resources and Community Participation

Over the last year, we have been improving the online resources that are available. In February we launched our new website at opendium.com, featuring product manuals, a knowledgebase and a blog. The blog is a great resource, with information ranging from "how to" articles and videos to news about Opendium and the wider industry.

We've also made a big effort to engage with the whole education community, not just our customers. Our Twitter feed is featured on your Icen dashboard, and also at twitter.com/opendium. We aim to tweet both urgent notifications,

but also general information of interest to school system administrators. We encourage schools to follow and engage with us through Twitter, whether or not they are our customers and we regularly participate in a number of popular online forums such as EduGeek

Following our sponsorship of the Welsh Independent Schools Council's annual conference a year ago, we started 2015 off by exhibiting at the Girls' Schools Association's Deputy Heads' & Senior Leaders' Conference in Oxford. Not only have these events helped us to promote and raise our profile, but the conversations we have with

Training

We have always provided basic training when we install an Icen system. However, the basic training can only scratch the surface of Icen's extensive capabilities. If you are interested in further training to help you make better use of your Icen system or would like more detailed training in any specific area, you can enrol on one of our training courses. Please contact us for more information.

Advanced Support

We recognise that there is a huge variation in the level of support that our customers require, and to this end we offer an Advanced Support package. Whilst we always try to provide the best technical support that we can, the Advanced Support package aims to help those with more complex requirements. For more information, please see our Service Level Agreement, or contact us for a quote.

www.opendium.com/support/sla

Per-User/Network Controls

Icen has an extremely powerful hierarchical grouping system which allows top level settings to be applied to your whole school, and then tuned for specific groups of users and networks. However, every so often it's necessary to adjust the settings for just a single user or single network. Ordinarily you would need to create a new group containing just the user whose settings need to be adjusted. This year we have extended this

system so that settings can be applied to individual users or networks, just as they could be applied to groups.

You can do this anywhere you would usually be changing settings on a group. Right click the user's group in the group tree and click "Show users / networks" in the pop-up menu and the group tree will expand to show all of the users and networks in that group. You can now click an individual user or

network and apply settings to them just as you would to a normal group.

You can also review which groups, users or networks are using each type of configuration item without needing to manually search through the groups. For example, to find out where a specific filtering category is being used, go to the Filtering Categories page, click the category and a summary of how it is being used will be displayed.

Opendium

Reporting

Iceni collects a vast amount of information, and the ability to analyse and report on this data is extremely important. Over the past year we have continued to work closely with our customers to understand their requirements. As a result, we have put into place a number of improvements.

Sessions Report

Given the myriad of web requests originating from an active network, it can be challenging to understand a user's online activities. The new Sessions report, which can be accessed through *Reports -> Web Proxy -> Sessions*, aims to distil this vast amount of data into a more easily understood form.

Through a heuristic approach, the Sessions report aggregates web requests into a simplified list of web sites that a

user has been using, together with when they were using them and for how long.

Disabled User Report

Have you ever had a user's web access automatically disabled by the filter, but you don't understand why? This year we introduced the disabled user report to answer this question. This is a composite report which shows pertinent information about what the user was doing in the time leading up to them being disabled. This includes the web requests that the user made, the search terms they entered into websites such as Google, YouTube, Wikipedia, etc. and thumbnails showing what images they were looking at prior to being blocked.

Not only is the disabled user report extremely useful for the system administrator, who can very quickly see

whether the user was legitimately disabled and re-enable them if not, but it can be exported to a PDF for a boarding master, for example, to present as evidence when confronting a student about their behaviour.

You can find the disabled user report under *Reports-> Web Proxy -> Disabled User*. Just enter the user name and a rough time period during which they were disabled.

Exportable Reports

Whilst there has always been an option to send copies of some of the reports by email, this capability has been extended to more of the reports. Many reports can be emailed in either PDF format suitable for printing or archiving, or as a CSV file which can be loaded and analysed by third party software such as Microsoft Excel.

Prevent Duty

From the start of July, schools have been expected to perform certain counter terrorism functions. This is known as the Prevent duty and requires schools to take steps to protect children from radicalisation. The Prevent duty's scope is relatively wide, but it cannot be denied that providing protection at the internet gateway is an important part of it. To support schools in their obligations, we created a Radicalisation filtering category. This can be used together with the Web Searches report (*Reports -> Web Proxy -> Web Searches*) to alert you to any users who may be at risk of radicalisation. As with all reports, the *Automate This Report* button can be used to schedule the report to be automatically emailed to appropriate staff on a regular basis.

Filtering Criteria Update Frequency

Our Iceni online safety systems use a variety of built in criteria to categorise and filter web sites. These criteria are regularly updated automatically, and historically this has usually been done overnight. Recent improvements in the way this data is handled by Iceni has allowed us to increase the frequency of updates. Iceni systems now update every hour, offering more protection from newly identified threats.

Third Party Virus Scanners

The Iceni mail server employs a number of different technologies to catch emails which contain viruses, and on the whole these work very well. However, some customers feel that they would benefit from a third party virus scanner. We are pleased to announce that we have partnered with ESET anti-virus and can now offer the additional protection of ESET as an option. Please contact us for a quote if you are interested in this extra protection.

Enhanced HTTPS Inspection and Transparent Proxy

The ability to inspect, audit and filter encrypted HTTPS traffic is now more important than ever. Over the past decade, there has been a gradual movement towards the use of encryption by a great many online services. The revelations of the mass surveillance being performed by the intelligence services which was revealed by Edward Snowden in 2013 have only served to increase the pace of this change.

Early on, we recognised the need to develop HTTPS interception technologies to protect students and have been at the leading edge in their development. This put us in prime position to support Google's move to make encryption a mandatory part of their services in June this year whilst many other filtering providers found themselves floundering.

But HTTPS interception has not been without its drawbacks: A certificate has to be installed on each machine, which is impractical for "guest" devices; Some applications are not compatible with interception and require it to be disabled

for specific web sites; Disabling interception would prevent filtering and meaningful auditing and selectively disabling interception simply was not possible when using the transparent proxy.

Recognising these limitations, we have put a lot of effort into further improvements and our new passive inspection technology eliminates many of these problems.

For guest devices, filtering and auditing is often desirable, but installing certificates and setting them up to use a proxy is impractical. You can now choose to use passive inspection, rather than the traditional active interception for these devices. In this mode the Iceni can still offer meaningful filtering and auditing of the traffic, although in a reduced capacity, but there is no longer any need to install a certificate on the user's device. This even works with the transparent proxy, meaning there is no need to perform any configuration on the user's device at all.

Whilst we cannot eliminate the

compatibility problems caused by design flaws in some third party applications, the new passive inspection technology is put to use to allow the Iceni to make better decisions as to when to disable active interception so as not to interfere with these applications. A number of previously unsupported applications now either work out of the box, or can be easily made to work through minor configuration work.

Finally, whilst active HTTPS still provides the best levels of filtering and auditing, it is now practical to selectively disable it for certain websites, irrespective of whether the client is using the transparent or non-transparent proxy.

The HTTPS interception/inspection mode can be set on a per-group basis in the *Web Proxy -> Permissions & Limits* page, or can be selectively disabled for specific websites through the usual overrides system. To protect the privacy of your users, active HTTPS interception is disabled on financial websites by default.

Authentication

Identifying which user is responsible for which web traffic is a bit of a black art. There are numerous standard mechanisms for doing this, but unfortunately the quality of client software is extremely variable when it comes to supporting these standards. This can result in inappropriate authentication pop-up boxes or applications simply not working.

Iceni now includes several user identification profiles which control how it does this job, and these can be set on a per-group basis in the *Web Proxy -> Permissions and Limits* page. If your network is split into VLANs and you group each type of device to their own VLAN then these profiles can be used to improve

the user experience. For example, a wireless network full of smart phones and tablets can be set to the Single user devices profile.

We have also just introduced support for RADIUS accounting. This allows your wireless controller to help Iceni to identify the users, completely eliminating the need for further authentication in many cases. For this to work, the Iceni and your wireless controller need to be configured to talk to each other. This can be set up in *Users and Groups -> RADIUS Configuration*.

Additionally, the new *Users and Groups -> RADIUS Sessions* page allows you to see which users are currently active, and a historical log can be seen through *Reports -> RADIUS -> Logs*.

Virtual Groups

There are times when you want to tweak the normal settings for specific situations. For example, you may want to relax the filtering when students are using workstations in rooms that will have staff present to keep an eye on them. The new Virtual Groups system allows you to do this and more.

In the Users and Groups -> Virtual Groups page, you can create new virtual groups and select criteria to trigger their use. In the above example, the trigger could be when a member of the Students group is using a workstation in a specific network. Configuration can be attached to virtual groups in exactly the same way as normal groups, and will be used instead of the normal settings.

Partnering with BT

Over the past few years we have helped a number of schools improve their online access by installing higher speed internet connections. This year we partnered with BT Local Business to improve our ability to help schools to provision new or replacement connections. This has proven to be an extremely beneficial partnership for our customers, allowing us to provide a technical liaison between our customers and BT. This has helped to ensure that all parties have fully understood the technical requirements, and to iron out problems as and when they have occurred. Going forward, we expect our partnership to continue to be mutually beneficial to everyone.

Christmas Opening Hours

	Sales / Enquiries	Support
Thursday 24th Dec	Closed	Emergencies only
Friday 25th Dec	Closed	Closed
Saturday 26th Dec	Closed	Closed
Sunday 27th Dec	Closed	Closed
Monday 28th Dec	Closed	Closed
Tuesday 29th Dec	Closed	Emergencies only
Wednesday 30th Dec	Closed	Emergencies only
Thursday 31st Dec	Closed	Emergencies only
Friday 1st Jan	Closed	Closed
Saturday 2nd Jan	Closed	Emergencies only
Sunday 3rd Jan	Closed	Emergencies only

Looking Forward

2016 promises to be another exciting year, and we've got a few key projects on our roadmap. Earlier this year we wrote detailed specifications for a complete overhaul of the Iceni firewall and laid much of the technical ground work. In 2016 work on the new firewalling system will begin in earnest. The intention is to provide functionality that is fully integrated with the heritable group structure, allowing firewall rules to be applied to individual

users, groups and networks. We have also carefully designed the new system to take away much of the laborious repetition that can be required to enable some applications. We will also be providing and automatically updating common "rule bundles" so that you can easily enable a variety of applications without needing to understand all of the complexities of the required rules.

Whilst Iceni's performance is pretty good,

we are always striving for perfection. We have identified a number of Iceni performance improvements which we will be making, and this is especially important as internet connections are becoming faster and web content more complex. We have also laid the foundations for running clusters of Iceni systems together to provide truly open-ended performance for any speed of network and will continue working towards this goal.

Thank You

Finally, we'd like to thank you for your business and support over the past year. We wish you a very happy Christmas, and a fantastic new year!



sales@opendium.com
www.opendium.com
(01792) 824568

Opendium Limited
Company No. 5465437

support@opendium.com
www.opendium.com
(01792) 825748