E²BN Protex

Web Filtering System – Freedom to Explore, Create, Share and Learn in a Safe and Secure Environment

ProtexLocal *for Virtual Appliances* – DATASHEET

http://protex.e2bn.org/protexlocalvm   Notes: This datasheet describes Protex version 3.

Description	
E2BN **ProtexLocal VA** is a subscription service that runs on a virtualised Protex filtering server. The **ProtexLocal** Virtual Appliance is hosted on a school server to provide a fully featured web filtering solution using the school's existing cache server. While the filtering performance of **ProtexLocal VA** is dependent upon the host server the VM can very easily be moved to a greater capacity server as demands require.	

System	
Host server requirements	The host server must be running a 64-bit operating systems (Windows, Linux, or Mac) with the appropriate VM(Virtual Machine) software installed. We recommend that you do not use a heavily loaded server as filtering is a CPU intensive process and the performance of both the VM and host will degrade. Much of the filter processing takes place is memory so we recommend that the server has at least 2Gb RAM and that at least 1Gb is dedicated to the ProtexLocal VM. Our technical consultants can advise on the best settings to use.
Cache requirement	**ProtexLocal VA** uses an existing cache to fetch pages from the Internet. Poor cache response times will adversely affect the performance so it is important that the cache is correctly sized and configured.
Central filtering systems	**ProtexLocal VA** can optionally be used in conjunction with your Local Authority or other third party filtering provision to allow much more fine-grained local control than that typically provided by these centralised systems.
Installation	A console GUI is provided on the Virtual Machine for initial server setup and Protex installation.
Software	All the required **Protex** web filtering software is downloaded from our management servers at installation.
System management	System and list management is done via an easy to use web interface. No direct access to, or knowledge of, the virtual server's operating system is required. The systems management interface requires a browser which supports xhtml and javascript.
System updates	**Protex** software updates and list changes are automatically applied throughout the subscription period.
Transparent filtering	Can be used to provide transparent filtering, with age appropriate filtering when used with User Authentication.

Flexible Filtering Policies	
Age appropriate profiles	There are currently 15 filter profiles provided which are suitable for a range of age groups from Primary to Sixth form level and staff. All the profiles have been developed in partnership with schools or libraries to be appropriate for the user group in question. There is more detail about the filter profiles in the E2BN filtering policy at http://protex.e2bn.org/policy
Local profiles	You can generate your own bespoke local profiles to meet your school's specific requirements

Advanced User Authentication Module	
The Protex Advanced User Authentication Module (AUAM) has been specifically developed to provide a standard method for implementing individual user logging and filter profile mapping for multiple authentication mechanisms.	
Status box	An important feature of the AUAM is the colour coded Status Box. This window provides users and staff with valuable information about the filter profile in use and indicates which major categories of web sites are available or blocked to the user.
Active Directory	With Protex's AUAM filter profiles can be assigned to an Active Directory group. This will add network user names to the Protex logs and allow filter profile changes to be made in real time by changing users AD group membership (for example banning a user by putting them in a '**sin-bin**' group).
Teacher switch option	Teachers can switch filtering level, so that they can check the filtering experience of their students
AD Group prioritisation	The filter profile a user is assigned will depend upon the order of the groups as specified within the Protex web interface. If, for example, the '**sixthform**' group is assigned a higher priority than the '**all-students**' group then Sixth form pupils will have the correct profile by virtue of being in this higher priority group.
Time-based policies	AUAM also allows filter profiles to be varied on a time basis allowing, for example, student access to games sites during break times.
Port based	Filter profiles can optionally be assigned to a particular port. In a Windows environment, for example, a Group Policy or other mechanism can then be used to direct users' browsers to the appropriate port.
Location based	Filter profiles can be applied to a range of IP addresses to allow, for example, a less restrictive profile for computers in the school Library.
Log in on demand	This option allows all users including "guests" to browse at a default level without authentication. Access at a higher level is granted via a login.

Filter Management

Local list updates	Changes to the lists can be made locally through the web interface and can be applied instantly.
Central lists	The central lists are updated and are distributed overnight to all Protex filtering systems.
Central list changes	Changes to the central lists made during the day are distributed every 15 minutes during the day. So, if an inappropriate site is discovered and the central lists modified all **Protex** systems will be blocking the site within 30 minutes. The same will also apply to sites which are **unblocked** centrally.
Automatic distribution of extreme sites	URLs added locally to some special categories (porn for example) are automatically distributed to all **Protex** systems within 30 minutes to provide near realtime blocking of such sites found by local **Protex** administrators.
URL filtering	Extensive lists of URLs are used to allow or block sites. The central lists are distributed to all **Protex** servers while local lists allow schools to modify the lists to tailor the filtering to their needs. Any local URLs override the central ones.
'Trusted' URLs	Allow sites to be completely unfiltered so that no further actions take place and all files types can be downloaded. By default all **.sch.uk** and **.gov** sites are trusted.
Content filtering	If a page is not blocked by URL and is also not explicitly trusted then the content of the page is scanned and either blocked or sent to the user based on the result. The content is compared to a large set of word and phrase combinations extensively and continuously tuned by E2BN to provide a robust mechanism for categorising and blocking inappropriate pages and sites not in the URL lists.
IWF	Internet Watch Foundation block lists are applied and cannot be overridden.
Search Words filtering	Individual or combinations of search words can be blocked for all major search engines.
URL pattern matching	In addition to standard URL blocking **Protex** also applies pattern matching rules to URLs.
Safe search	'Safe search' rules on various search engines can be enforced.
Image safe search	Enforces 'safe search' rules on various image search engines and also blocks the thumbnails of images from sites which are in the block lists.
Referrer allow	Allow pages to be displayed from sites which are normally blocked depending upon the 'Referrer' header.
File type blocking	Depending upon the profile in use certain file types can be prevented from being downloaded from sites which are not explicitly trusted.
Proxy bypass filtering	Extensive lists of proxy URLs and various other methods are employed by **Protex** to prevent access to proxy bypass sites.
IP block	Access to sites by using their IP address can be blocked
IP allow	Specific IP addresses can be added to the lists as required to override a general IP block.
HTTPS block	Access to non-trusted sites by https can be blocked
YouTube for Schools	The E2BNProtex YouTube for Schools service is activated by default on student profiles. If you wish to control your own YouTube playlists you can register with YouTube and activate it by filling in a simple form and Protex will do all the complex rule changes for you.

Web Interface

Editable AUP	Protex provides a sample Acceptable Use Policy which can be edited via the web interface for displaying to all users when they start a session.
AUP display option	Whether the AUP is displayed to users is optional.

Monitoring & Logging

List change logging	All changes to the URL lists, both centrally and locally, are logged. This offers an off-site and independent audit trail for schools in case of problems as well as providing E2BN with the option of applying centrally changes which schools have made locally.
Offsite backup	Protex system configuration and local lists are backed up centrally every night. If reinstallation is required, in case of hardware failure for example, then this backup will be used to restore the configuration and local lists automatically.
Access reporting	Flexible analysis of all user web access including daily/weekly summary and ad hoc reports.

Support

Documentation	Here: http://protex.e2bn.org/protexdoc/
Email support	Provided via filtering@e2bn.org
Installation support	Email support with telephone call-back is provided for the initial installation as part of the first year's subscription.