

Internet Safety Technical Task Force Technology Submission Template

NetIDme Ltd

<http://www.netidme.net>

ABSTRACT

NetIDme produces a range of online age verification, identity and authentication products. A major focus of our work is online child safety. A key component within the product range is a NetID. Inter alia, this provides a mechanism for age verifying users. It provides dual factor authentication linked to one time passwords. Using the principle of federated data a NetID allows for a person's age to be vouched for by us, a trusted third-party without divulging the users' identifiable information. It negates the need to create an online database of children. NetID is compliant with Cardspace and Open ID standards.

Keywords

Verification; Parental Consent; Strong Authentication

Functional Goals

Functional goals of the submitted technology are indicated below:

- ✓ Limit harmful contact between adults and minors
- ✓ Limit harmful contact between minors
- ✓ Limit/prevent minors from accessing inappropriate content on the Internet
- ✓ Limit/prevent minors from creating inappropriate content on the Internet
- × Limit the availability of illegal content on the Internet
- ✓ Prevent minors from accessing particular sites without parental consent
- ✓ Prevent harassment, unwanted solicitation, and bullying of minors on the Internet
- ✓ Other – Prevent minors from purchasing age restricted goods online

PROBLEM INTRODUCTION

Anonymity on the internet presents a number of dangers to both adults and children alike. In recent years there has been a continued rise in both reported abuse cases and parental concern about minors being groomed through online services such as social networking sites and instant messaging. More recently problems have arisen with the sale of age restricted content and goods accessible over the internet. The NetIDme system has been developed over the last four years with input from charities and police authorities to specifically address these issues.

Proposed Solution.

Limiting harmful contact between adults and minors is achieved by providing a safe and secure token based mechanism for identifying parties communicating online.

The NetIDme system provides a patented method of exchanging digital identity cards to enable users to identify themselves to the other party. Importantly, only first name, age, gender and general location (state) are disclosed. This must be initiated by the user wishing to provide the information. The transfer of information is secure and because the system knows who the intended recipient is, the digital ID card cannot be viewed, reused or passed off to another user. The digital ID card system can be used with any instant message system or open chat forum. This system reduces the ability of groomers to impersonate a peer and is seen as one way to help protect children and reduce risks in this environment. The digital IDs can also act as a key to permit or deny entry into areas on a site based on the criteria set.

Limiting harmful contact between minors is addressed by providing a method of identifying a potential abuser and thereby providing a deterrent to harmful conduct. Many internet users believe that the anonymity on the internet provides them with the opportunity to behave in an abusive manner, such as bullying. While some on line service providers [1] make users aware that they leave a footprint that can eventually be traced a NetID acts as a regular reminder of that fact thus providing, provides a real and immediate deterrent to those who would otherwise seek to do harm. In the event that harmful conduct should occur, the NetIDme system can, with the appropriate legal authority, provide the required identity information quickly to enable the relevant agencies or service provider to take the necessary action.[2]

Limit/prevent minors from accessing inappropriate content on the internet is achieved using the NetIDme Gateway system to provide content and service providers the ability to age verify users of all ages, therefore restricting access to age sensitive or age restricted content. This may also be implemented as a gatekeeper solution where certain areas, such as an age restricted area, can remain inaccessible until either the age and/or identity of the user or verifiable parental consent has been provided.

Limit/prevent minors from creating inappropriate content on the internet is achieved by implementing NetIDme gateway to enable age and identity verification. This acts as a deterrent to users publishing inappropriate content and can also provide a secure method of banning users who breach the code of practice or terms and conditions of the service providers' site.

Prevent minors from accessing particular sites without parental consent is achieved by implementing NetIDme Gateway which gives service providers the ability to obtain verifiable parental consent (COPPA complaint) before providing access.

Prevent harassment, unwanted solicitation and bullying of minors on the internet is achieved by implementing another product in our range, ChatShield. Linked to a NetID ChatShield is a wrapper for instant messaging (currently supporting MSN®) that allows a parent or guardian to set rules to block communication from unknown users and/or restrict contact with other users by gender, age and general location. Contact with users can also be specifically permitted (friends and family) or specifically blocked. By implementing NetIDme, users are aware that they have identified themselves to the service providers' site and can be tasked or banned if they breach the terms and conditions.

Features and functionality

NetIDme system. For consumers, it is in essence a verified digital identity management system. The system provides users with the ability to:

1. Secure and keep safe their identity but using NetIDme as a trusted third party that will vouch for their age or identity without the need to disclose any personal identifiable information. This is analogous to, for example, what PayPal® provides to users in relation to financial information.
2. Swap digital identity cards with other internet users to prove that they are who they say they are.

NetIDme Gateway. For service providers, is an age and identity provider. The system enables service providers to;

1. Quickly and simply implement a hosted GUI driven service that enables a user to provide either personal identifiable information for verification or provide authentication of the users' identity without disclosing this information to the service provider.
2. Confirm that a user, with their permission, meets age or geographical restrictions without the need to obtain or keep personal identifiable information.

NetIDme Verify. For service providers, is an age and identity verification service. The system enables users to;

1. Implement a simple web service based technology that provides a confirmation of age and identity information provided by secure web service.

ChatShield. For consumers, an installable software application that enables users to;

1. Automatically block contact and communication with other instant messaging users according to a set of rules.
2. Identify that other instant messaging users are who they say they are.

Use Cases

The NetIDme age and identity verification systems are in use in a number of areas where the protection of children or identification of individuals is necessary including:

- Online retailers of age restricted goods
- Gaming Industry to verify the age of the customer
- Children's care homes
- Social networking (see below)

The NetIDme Gateway system is used by Yoursphere Media to obtain verifiable parental consent for users of their teen only social networking site www.yoursphere.com.

Technology Solves

The NetIDme system provides one component in an overall approach to reducing the risks faced by young people when they go online. By increasing the level of assurance that someone is who they claim to be, approaches by those disguising their true identities will be reduced. We never say that the risk of misrepresentation can be eliminated, only that it can be dramatically reduced. Web sites will also be better placed to target goods, services and content to the appropriate demographic.

It is not a substitute for site moderation, education or good parenting. In the same way that an intruder alarm is not a substitute for crime prevention but it does enhance security.

Using the NetIDme system it is possible to verify 100% of adults and children with a high degree of certainty. The level of surety resides with the web site owner who would be responsible for deciding how stringent to make the process e.g. by employing a parental consent model or to fully verify a child using an additional offline process.

Strength and Weaknesses

Strengths;

1. A secure and simple method of identifying and age verifying internet users of all ages.
2. Negates the need to develop or maintain an online database of minors' personal identifying information.

3. Cross platform solution including mobile.

Weaknesses.

1. In some countries access to information required to verify users is limited, and additional off line verification process is required.

Implementation Requirements

No specific hardware or software. Developer skills are the same as that used to develop service providers' web sites. Knowledge of secure web service implementation is useful. Example of implementation is provided.

Technical standards.

- WS-*/WCF/WC3
- .Net Framework 3.5
- Information Card Foundation
- Liberty Alliance
- OSIS (Open Source Identity Systems)

Reliance on law

The NetIDme system conforms to and complies with the requirements of:

- COPPA
- Data Protection Act
- PCI-DSS (Payment Card Industry Data Security Standard)
- British Board of Film Classification (BBFC) Online System
- UK Home Office Code of Practice for Social Networks,
- UK Trading Standards
- Byron Report

Viability in USA and international/

Proven in the USA and UK. Planned roll out internationally third quarter 2008

Effectiveness

No system is 100% effective, but coupled with other good practice by the social networking sites, the risk to young people can be significantly reduced.

The actual numbers of people who choose not to become members of sites where age and identity verification forms part of the joining criteria, cannot be quantified. Experts in this field have asserted that people who wish to maintain their anonymity would not join such a site.

[1] Bebo takes measures to reinforce the message to their users that regardless of their actions on the internet users will leave a footprint. The ability to analyze, act on and effectiveness of this information has not been to the writer's knowledge disclosed.

[2] NetIDme advised on problems encountered with a care site that aimed to provide online support to mothers who had recently lost a child. The site, which was an open forum, was receiving comments and postings from anonymous users which was causing sever distress to other users. Removing the offending users served no purpose as they would immediately register another anonymous account and continue the abuse.

EXPERTISE

The company has a wealth of experience in security technology, and child protection software. The company is a key contributor to open source projects and a .net contributor to the OpenID standard.

COMPANY OVERVIEW

NetIDme has been in existence since 2004, founded with the premise of protecting children on the internet.

Its people have a wealth of experience in the technology, security and child protection sectors.

Alex Hewitt (CEO): Alex Hewitt is the founder, and CEO of NetIDme. Alex founded NetIDme in 2004, following concerns for his own children's welfare online.

Alex started his first business, safety software company Lexware International Limited, in 1996 after a management buy-out from Motherwell Bridge. During his time with Lexware he grew the company from a start-up to an international business, with offices in East Kilbride, Hong Kong, and Phoenix.

John Carr: John is a world renowned expert in the issues surrounding children and the internet.

He is a member of the UK Government Home Secretary's Internet Task Force on Child Protection, acting as a key adviser to the Government. He was a Board Member of the Internet Watch Foundation, the UK Internet industry's self-regulatory body. He continues to advise corporate bodies, governments, inter-governmental agencies and NGOs in many different countries, as well as acting as Secretary of the UK's Children's Charities' Coalition on Internet Safety, which comprises all of the UK's largest professional child welfare organisations, including the NCH, NSPCC and Barnardo's.

Andrew Lloyd: With extensive experience in the security sector both in the UK and US, Andrew's role includes

advising on the company's sales & marketing strategy for both the UK corporate market, & the overseas market.

A frequent speaker at industry conferences, Andrew has presented on e-business and knowledge management topics at conferences in Indonesia, Holland, UK, Switzerland and the USA. Andrew was an active participant on the subject of industry standards and served on the Board of Directors of the non-profit Petrotechnical Open Software Corporation (POSC) & Biztech4Energy organizations.

BUSINESS MODEL OVERVIEW

A range of products and levels of verification are available to meet the requirements of all potential users. Verification may be prompted by triggers set by the site:

- Initial registration on the site
- Upgrade to a premium service
- Presence of age restricted goods in a shopping cart
- Access to an interactive or chat area within the site
- Uploading of user generated content

At the core of the system is ownership of a NetIDme account. These can be obtained by individuals in a variety of ways:

- Personal purchase through the NetIDme .com website
- Bundled with another product such as ChatShield
- Sponsored by another web site where the individual has previously been verified
- Sponsored via a trusted third party such as a school or bank.

Costs to implement the NetID Gateway service to check existing NetIDme accounts or to collect the required information and run checks on the data are dependant on the requirements of the site. As a guide, the client would be charged from \$4,600 - \$18,500, with the higher end for clients wishing to incorporate a billing engine.

Ongoing costs are for verification checks and are very much dependant on volumes and the extent of the checking required by the site. Costs per transaction are also country specific. Once an age and identity has been confirmed, the site can tag the individual's profile as verified for future visits.

Discounts are available to charities and schools and there are a range of payment options, and profit share schemes for start ups to help to spread the costs during the initial ramp-up phase.

MORE INFORMATION

Additional information, including:

- A demonstration of the solution
- Endorsements
- Product Literature
- Links to the NetIDme Websites

Can be found at:

<http://www.netidme.net/aboutus/tab-submission.html>

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CERTIFICATION

"I certify that I have read and agree to the terms of the Internet Safety Technical Task Force Intellectual Property Policy."

Alison McCoy, Sales Director