



Internet Business Systems

Safe Worlds Data Security

Alan Metcalfe, January 2009

Baseline Magazine's David Strom said in June 24, 2008 that "there are still no magic, one-size-fits-all solutions for managing endpoint security." Safe Worlds, I suggest, comes as close to providing such a solution as is possible. This paper explains the privacy and security issue and the solution that Safe Worlds delivers.

Data security is the way that data is kept safe from corruption and that access to it is controlled. Data security is the first step in ensuring user privacy; data security is essential to protect your personal data.

Safe Worlds delivers various levels of privacy and security for your business and your data, starting at the data object level. (In Safe Worlds, all things are represented by their digital description in the form of a database "object"):

1. **Data object security** – This allows you to control who can see different data in your database. This is the deepest level security possible. The big benefit is:
 - Individual item control over your data assets.
2. **Role Based Security** – This allows you to control groups of users who can perform specific tasks within the application and who can see different data in your database.
 - Reduced time spent managing the data and task permissions by managing the users in groups, and the actions as feature sets;
 - Sets of Feature and the data related to the feature may be are managed as a set.
3. **Single Sign-on (SSO)**. This is how we/you control access to your Safe Worlds application. It means that Users need only login once to gain access to the resources of their application. Benefits of single sign-on include:

- Reduced password fatigue from having to remember different user name and password combinations;
 - Reduced time spent re-entering passwords for the same identity;
 - Reduced IT costs due to lower number of IT help desk calls about lost or forgotten passwords;
 - Delivers security throughout Safe Worlds without the inconvenience of re-prompting users to enter passwords;
 - Centralizes reporting for compliance adherence; and
 - Provides a single identity that may be used for different purposes/situations. Your personal login is the same as the workplace login.
4. Three levels of Login information – To support the Safe Worlds SSO system, three levels of login information are required: (1) username; (2) password; and (3) security key. Every User is issued with a personal security key when you register to become a Safe Worlds User. This security key may be strengthened with biometrics. The main benefits of three levels of login information is:
- It overcomes the problem of someone accessing your data simply by having your username and password. The system is considerably strengthened when biometrics are added.
5. With SSO, no Domain Name is needed – SSO access where the system connects you to your application of Safe Worlds eliminates the need for a Domain Name or any other means of site identification that needs to be made public. This eliminates a major attraction for hackers whose job is made considerable easier when they know where you “live”.
6. Peer-to-Peer virtual private network (VPN) connectivity. Safe Worlds connects users on a one-to-one basis through “tunnels” created in the Internet.

Easy to Apply and Manage

The big advantage of the security within Safe Worlds is that it is either already built into the system, and so you need to do nothing; or it is very easy to apply. Priority has been given and continues to be given in the design of Safe Worlds to incorporate privacy and security into the basic fabric of the system. We understand the importance of privacy and security to business users. We also realize that this is one of our biggest advantages over the World Wide Web and other e-business systems.

The basic, object-oriented design of Safe Worlds is what makes privacy and security so easy to apply and manage within Safe Worlds. The “atomization” of information process that is central to how Safe Worlds works, reduces information to database objects that are actual atoms of information that can subsequently be fitted together and used like Lego blocks.

This “atomic” object structure is what we secure. The required security is applied at the time of creating the object (“atom”), at the same time that the object is monetized (valued); and uniquely identified for movement and tracking through the system. Like every other activity within Safe Worlds, this is handled by a simple Q&A wizard that takes the difficulty out of the task.

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