Security for the Pervasive Computing World

Objective

"Organisation Independent and user-centric security"

SEINIT aims to develop a trusted and dependable security framework that works across multiple devices and heterogeneous networks.

SEINIT abstracts away from low-level technology-specific security configuration, focusing instead around users in a usercomprehendible manner while transparently maintaining the appropriate level of security needed by the user.

The main challenges are to provide an environment within which a user may communicate securely while moving through multiple different security domains, without having to worry about continually keeping track of their changing environmental context.

SEINIT defines innovative security models and policies to address the new challenges of security within the pervasive computing world.

Architecture

Developing a trusted and dependable security framework across heterogeneous networks

The security requirements are formalised into Policies within each Security Domain. SEINIT supports policy negotiation and, by considering the current ambience, sensitivity of data, and threat level, launches the appropriate security technology.

For example, a corporate audio conference may be left unencrypted within a trusted office environment, but must be strongly encrypted when extended to an untrusted Internet café.



THALES

Infospheres

SEINIT maps all information concerning an entity to an Infosphere.

The information can reside in a *Security Domain* controlled by the Infosphere or in another domain. In either case, the Infosphere Supervisor has influence over the information.

Priority among security requirements varies:

- A Personal Infosphere prioritises **Privacy**
- An Open Community Infosphere prioritises Confidentiality
- An Undefined Infosphere prioritises Survivability













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