

Gesture Based Authentication

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Abstract

Gesture based authentication is a new attempt to replace the traditional password based authentication. Using a Quick Reference (QR) reader, and handheld gestures with a mobile device; users will be allowed to access their machines. Gesture based authentication allows for advanced computer generated passwords to be applied to an entire computer network allowing for stronger general security.

The QR code allows for reference to a specific machine, and hand gestures reference a specific user allowed on a given machine. Implementing observation of the accelerometer data given by a mobile device, and reference to a database a centralized server will grant authentication. Given a full implementation of a gesture based authentication system over a password based authentication system will allow greater security by guaranteeing strong passwords for every user, and less administrative need for password reset, or the insecure process of physical logging.