NAC

J. Scheerder*  
jeroenscheerder@on2it.eu

L.J. Koning*  
lieuwejankoning@on2it.eu

October 25, 2007

1 Introduction

Network Access Control technology is increasingly deployed.

2 Product

ON2IT carries Mirage NAC technology. It offers permanent control over networks, based upon real-time monitoring and behavioral assessment of systems on the network. In addition 'pre-admission' control facilities are offered, that allow to enforce both user authorization as well as integrity checks on systems prior to granting network access. The Mirage NAC technology operates out of band, and operates entirely stand-alone, independent of the (brand and flavour of the) network components used.

3 Goal

Definition of a complete scenario for fully transparent NAC-deployment in an existing network, with permanent monitoring and protection, full authentication, and full compliance enforcement. Fine-grained and (semi-)automated mitigation in case a system is out of compliance or otherwise violates the network access policy is an integral part of this scenario, as is the operational practice of alerting and reporting.

Scalability and fault tolerance are of specific relevance in this scenario-to-be, as are near-future technological developments such as IPv6, pervasive computing (increased significance of mobile computing), and the consequential blurring of the network perimeter.

4 Task

Design, describe and create a proof-of-concept implementation of an entirely platform-agnostic addition of NAC, including pre-admission authentication and compliance enforcement, to an existing and unaltered network, without any change to the configuration and/or installed software of the systems on the network.

*ON2IT b.v., Waardenburg, The Netherlands.