

# Secure Authentication Key Metadata

## Version 1.0

**Title:** Secure Authentication Key

**Subject:** Provide a more secure authentication method for machine authentication.

**Abstract:** Secure Authentication keys are a more secure means of authenticating NAAS accounts tied to a specific machine. If widely used, the security of machine-to-machine transactions on the Exchange Network will be enhanced. This document outlines their use, how they should be requested, and explains how they are more secure than current Exchange Network authentication..

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**Version History:** N/A

**Revision Date:** April 6, 2006

**Commission Date:** January 2006

**Relationships to Other Products:**

“Environmental Information Exchange Network Node Administrators Guide to Network Security”, March 17, 2004 – Document could be upgraded to include information about SAKs

“Network Security Guidelines and Recommendations” April 16, 2003,  
[http://exchangenetwork.net/node/dev\\_toolbox/security\\_guidelines\\_041603.pdf](http://exchangenetwork.net/node/dev_toolbox/security_guidelines_041603.pdf) -  
Document could be upgraded to include information about SAKs

“Network Node Functional Specifications Document Version 1.1” September 17, 2003,

[http://www.exchangenetwork.net/node/dev\\_toolbox/network\\_exchange\\_protocol\\_v1.1.pdf](http://www.exchangenetwork.net/node/dev_toolbox/network_exchange_protocol_v1.1.pdf)

“Network Node Protocol Document Version 1.1” September 17, 2003,

[http://www.exchangenetwork.net/node/dev\\_toolbox/network\\_exchange\\_protocol\\_v1.1.pdf](http://www.exchangenetwork.net/node/dev_toolbox/network_exchange_protocol_v1.1.pdf)

A recommendation that SAKs be used for machine authentication by nodes and a reference to the Secure Authentication Key document could be added to the Node Protocol and Node Specification document at their next revision.

**Review Process:**

Final Draft Review March 27– April 6, 2006

**Reviewers:** Network Technology Group (NTG)

**Comments:** Major comments related to whether Secure Authentication Key should be strongly recommended for implementation at Nodes.

**Comments Resolution Process:** The NTG agreed that use of SAK should be strongly recommended.

**Pros and Cons:**

Pros: Nodes implementing SAKs will have more secure authentication.

Cons: Nodes will have to request SAK (and possibly new NAAS ID) and replace in code.

**Follow-up Activities:** The NTG has strongly recommended that Nodes with the ability to do so implement SAKs for machine authentication.

**Actions Required to Complete and Communicate Document:** Guidance encouraging nodes to implement SAK should accompany this document. An Exchange Network Alert should announce document release, suggesting that Node Operators implement SAKs and listing the Node Help Desk as a contact for questions.