

Integrity Brick Retirement V1.0

Status of this Memo

This document proposes the retirement of a standard for the National Institutes of Health (NIH) and requests discussion and suggestions for improvements. Distribution of this memo is unlimited.

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1 Introduction

This document initiates the retirement of the NIH Technical Architecture Standards Brick for Integrity for the NIH community.

2 Description

Integrity is one of the three elements of modern information assurance. Integrity relates to the IT design principal that data only changes as intended. Integrity ensures data is consistent, certified, and reconciled (if required). This supports the integrity principle that when performing functions on the data, the functions ensure integrity by default.

Many infrastructure elements ensure integrity. Access controls limit who or what can change data with permissions. Database management systems control two phase commits to ensure data integrity. Telecom systems manage data as transmitted using checksums built into protocols, and encryption algorithms ensure integrity. Antivirus systems ensure files are not changed by malware. Firewalls ensure networks are not compromised by distant hackers and botnets.

Many bricks, principles, and patterns make up the tools to ensure and maintain integrity.

Other architecture standards that support data integrity are Active Directory, NIH Login, single sign-on, PIV cards, VPN access, firewalls, database management systems, and multifactor authentication. Other best practices such as disk encryption, NIH antivirus protections, file and directory permissions, Telecom data transmission encryption, and other principles to support effective assurance of integrity at NIH.

As such, we feel we can archive this standard without any impact to the NIH infrastructure while continuing to maintain the other listed standards and best practices.

Current technical standard text:

Table 1 - Integrity Brick

Tactical Deployment (0-2 years)	Strategic Deployment (2-5 years)
<ul style="list-style-type: none"> ■ Baseline ■ BlueSocket Secure Gateway ■ Tripwire 	<ul style="list-style-type: none"> ■ None
Retirement (Technology to eliminate)	Containment (No new deployments)
<ul style="list-style-type: none"> ■ None 	<ul style="list-style-type: none"> ■ Peregrine IND
Baseline Environment (As of last review)	Emerging (Technology to track)
<ul style="list-style-type: none"> ■ Anti-spoofing filters ■ Antivirus <ul style="list-style-type: none"> ■ McAfee Antivirus ■ McAfee Orchestrator ■ Norton Antivirus ■ Norton Command Center ■ Sybari Antigen for Exchange ■ Symantec Virus Scan File Integrity Checking Samhain ■ Configuration Management <ul style="list-style-type: none"> ■ Bindview ■ Ecora ■ Peregrine IND ■ HFNetChkPro ■ Update Expert Alteris ■ Digital Signature ■ File Integrity <ul style="list-style-type: none"> ■ Tripwire ■ Network Integrity 	<ul style="list-style-type: none"> ■ None
Comments	
<ul style="list-style-type: none"> ■ Tactical and strategic products were selected to leverage NIH's investment in products that are a proven fit for NIH's known future needs. Leveraging baseline products in the future will minimize the operations, maintenance, support and training costs of new products. ■ Some baseline products have been designated retirement and containment. These products are either not as widely or successfully deployed at NIH, or they do not provide as much functionality, value, or Total Cost of Ownership as the selected tactical and strategic products. 	

3 Contact

To contact the NIHRFC Editor, send an email message to EnterpriseArchitecture@mail.nih.gov

4 Changes

Version	Date	Change	Authority	Author of Change
0.1	12/6/2009	Initiation		Joe Klosky
0.2	1/13/20010	Minor formatting changes	NIHRFC0001	Kiley Ohlson
0.3	2/17/2010	Updated the structure of the brick to match the website		Anja Holovac
1.0	4/27/2010	ARB approved NIHRFC	ARB	Kiley Ohlson

5 Author's Address

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