



Compliance Component

DEFINITION

<i>Name</i>	Hashing
<i>Description</i>	<p>Hashing is the process of using an algorithm to encode information to ensure message integrity. Hashing makes it computationally infeasible to:</p> <ol style="list-style-type: none"> 1. find a message that corresponds to a given hash output, or 2. find two different messages that produce the same output. <p>Secure hashing is typically used in conjunction with other cryptographic algorithms.</p>
<i>Rationale</i>	Hashing provides an additional layer of security to complement encryption.
<i>Benefits</i>	<ul style="list-style-type: none"> • Indicates to the recipient whether electronic information has or has not been modified during transmission. • Provides varying levels of confidentiality depending on the hash used.

ASSOCIATED ARCHITECTURE LEVELS

<i>List the Domain Name</i>	Security
<i>List the Discipline Name</i>	Technical Controls
<i>List the Technology Area Name</i>	Cryptography
<i>List Product Component Name</i>	

COMPLIANCE COMPONENT TYPE

<i>Document the Compliance Component Type</i>	Guideline
<i>Component Sub-type</i>	

COMPLIANCE DETAIL

<i>State the Guideline, Standard or Legislation</i>	<ul style="list-style-type: none"> • The four approved algorithms for hashing are: <ul style="list-style-type: none"> ○ SHA-1 ○ SHA-256 ○ SHA-384 ○ SHA-512 • Hashing can be used for, but not limited to, protecting attachments in email, files being transferred and files in storage on various media.
<i>Document Source Reference #</i>	

Standard Organization

<i>Name</i>	Federal Information Processing Standards Publication 180-2	<i>Website</i>	http://csrc.nist.gov/publications/fips/fips180-2/fips180-2.pdf
<i>Contact Information</i>			

Government Body			
<i>Name</i>	National Institute of Standards and Technology (NIST), Computer Security Resource Center (CSRC)	<i>Website</i>	http://csrc.nist.gov/
<i>Contact Information</i>	inquiries@nist.gov		
KEYWORDS			
<i>List all Keywords</i>			
COMPONENT CLASSIFICATION			
<i>Provide the Classification</i>	<input type="checkbox"/> <i>Emerging</i>	<input checked="" type="checkbox"/> <i>Current</i>	<input type="checkbox"/> <i>Twilight</i> <input type="checkbox"/> <i>Sunset</i>
Rationale for Component Classification			
<i>Document the Rationale for Component Classification</i>			
Conditional Use Restrictions			
<i>Document the Conditional Use Restrictions</i>			
Migration Strategy			
<i>Document the Migration Strategy</i>			
Impact Position Statement			
<i>Document the Position Statement on Impact</i>			
CURRENT STATUS			
<i>Provide the Current Status</i>	<input type="checkbox"/> <i>In Development</i>	<input type="checkbox"/> <i>Under Review</i>	<input checked="" type="checkbox"/> <i>Approved</i> <input type="checkbox"/> <i>Rejected</i>
AUDIT TRAIL			
<i>Creation Date</i>	04/13/2004	<i>Date Accepted / Rejected</i>	4/13/04
<i>Reason for Rejection</i>			
<i>Last Date Reviewed</i>		<i>Last Date Updated</i>	
<i>Reason for Update</i>			