

Suppliers Declaration of Conformity for USGv6 Products		USGv6-v1 SDOC-v1.1 Page 1	
1	The Document Requiring Conformity:		USGv6 Profile Version 1.0, July 2008. (NIST SP500-267)
2	Product Identifier:	Cisco 4507R-E with SUP7LE	
3	Supplier's Name, Address and SDOC Contact Details		
Cisco Systems, Inc. 170 West Tasman Dr. San Jose, CA 95134 USA			
4	Product as Tested/Declared: <i>Product Identifier, version/revision information, details of configuration tested.</i>		
IOS-XE 3.2.0			
5	Product Family (other products using same IPv6 stack(s) to which these results are declared to apply). <b>Check Product Family attestation below.</b>		
Cisco 4503-E with SUP7LE, Cisco 4506-E with SUP7LE, Cisco 4507-E with SUP7LE, Cisco 4507R+E with SUP7LE, Cisco 4510R-Ewith SUP7LE, Cisco 4510R+E with SUP7LE			
6	USGv6 Capability summary. (For each distinct IPv6 stack in the product provide a summary of its USGv6 capabilities below and include a detailed test result summary). <i>e.g. example-prod-id/stack-1: USGv6-v1-Host: IPv6-Base+Addr-Arch+IPsec-v3+KEv2+SLAC+Link=Ethernet.</i>		
USGv6-v1-Router:IPv6-Base+Addr-Arch+SLAAC+IGW+EGW+Link=Ethernet			
7	Self Contained or Composite SDOC? (Must indicate one).		
YES	All of the declared USGv6 capabilities of this product are addressed by original test results reported in this SDOC.		Some or all of the USGv6 capabilities of this product are provided by the use and/or integration of unmodified components that have their own unique USGv6 SDOCs. All of the relevant referenced SDOCs are identified in section 8 and attached. This product's page 2 will indicate which capabilities are provided by specific referenced components (product-id/stack-id).
8	Additional Declarations / Attachments: (List supplier & product-id/stack-id for referenced and attached test results in the case of composite products).		
	Component Supplier	Product ID:	Stack ID: Notes:
[1]			
[2]			
[3]			
[4]			
9	Supplementary Attestations (Answer all).		
YES	This product is fully functional in IPv6 only environments. That is, no claimed capabilities are invalidated if this product is deployed in a network environment that does not support IPv4.	YES	This SDOC contains a capabilities test report for each unique IPv6 stack in the product. If not, please document which stacks/ports are not covered, and how their IPv6 capabilities differ from those reported in this SDOC.
YES		YES	All of the products listed in the product family in section 5 are implemented such that their USGv6 capabilities are identical in form and function across the entire product family. The specific conformance and interoperability test results for the USGv6 capabilities of an identified member of this product family are provided in this SDOC. The SDOC attests to the fact that these tested USGv6 capabilities are identical and unmodified for all the products cited above.
10	Signature	Date	
	Print Name / Title	Anil Bhatt, Lead USGv6 Cisco Systems	

Product Id:		Cisco 4507R-E with SUP7LE			Stack Id:		IOS-XE 3.2.0			
Spec / Reference	Section	USGv6-v1 Profile Requirements	Context / Configuration Option	Supported Capabilities			USGv6 Testing Program Results			
				Host	Router	NPD	Test Suite Conformance/NPD	Test Lab / Result ID, Note #, or Component Ref	Test Suite Interoperability	Test Lab / Result ID, Note #, or Component Ref
SP500-267	6.1	<b>IPv6 Basic Requirements</b> support of IPv6 base (IPv6:ICMPv6:PMTU:ND) support of stateless address auto-configuration support of SLAAC privacy extensions. support of stateful (DHCP) address auto-configuration support of automated router prefix delegation support of neighbor discovery security extensions	IPv6-Base	P		Basic v1.* C	UNH/IOL-10188	Basic V1.* I	UNH/IOL-10191	
			SLAAC	P		SLAAC v1.* C	UNH/IOL-10190	SLAAC v1.0 I	UNH/IOL-10195	
			PrivAddr			Self Test		Self Test		
			DHCP-Client			Self Test		DHCP Client v1.* I		
			DHCP-Prefix			Self Test		Self Test		
			SEND			Self Test		Self Test		
SP500-267	6.6	<b>Addressing Requirements</b> support of addressing architecture reqts support of cryptographically generated addresses	Addr-Arch	P		Addr Arch v1.* C	UNH/IOL-10189	Addr Arch v1.* I	UNH/IOL-10192	
			CGA			Self Test		Self Test		
SP500-267	6.7	<b>IP Security Requirements</b> support of the IP security architecture support for automated key management support for encapsulating security payloads in IP	IPsecv3			IPsecv3 v1.* C		IPsecv3 v1.* I		
			IKEV2			IKEv2 v1.* C		IKEv2v1.0 I		
			ESP			ESPv3 v1.* C		ESP v1.* I		
SP500-267	6.11	<b>Application Requirements</b> support of DNS client/resolver functions support of Socket application program interfaces support of IPv6 uniform resource identifiers support of a DNS server application support of a DHCP server application	DNS-Client			Self Test		Self Test		
			SOCK			Self Test		Self Test		
			URI			Self Test		Self Test		
			DNS-Server			Self Test		Self Test		
			DHCP-Server			Self Test		DHCP Serv v1.* I		
SP500-267	6.2	<b>Routing Protocol Requirements</b> support of the intra-domain (interior) routing protocols support for inter-domain (exterior) routing protocols	IGW		N	Self Test		OSPFv3 v1.* I	UNH/IOL-10194, See Note 1,2,3	
			EGW		P	Self Test		BGP v1.* I	UNH/IOL-10193	
SP500-267	6.4	<b>Transition Mechanism Requirements</b> support of interoperation with IPv4-only systems support of tunneling IPv6 over IPv4 MPLS services	IPv4			Self Test		Self Test		
			6PE			Self Test		Self Test		
SP500-267	6.8	<b>Network Management Requirements</b> support of network management services	SNMP			Self Test		Self Test		
SP500-267	6.9	<b>Multicast Requirements</b> support of basic multicast full support of multicast communications	Mcast			Self Test		Self Test		
			SSM			Self Test		Self Test		
SP500-267	6.10	<b>Mobility Requirements</b> support of mobile IP capability support of mobile network capabilities	MIP			Self Test		Self Test		
			NEMO			Self Test		Self Test		
SP500-267	6.3	<b>Quality of Service Requirements</b> support of Differentiated Services capabilities PHB Id	DS			Self Test		Self Test		
						Self Test		Self Test		
SP500-267	6.12	<b>Network Protection Device Requirements</b> support of common NPD reqts support of basic firewall capabilities support of application firewall capabilities support of intrusion detection capabilities support of intrusion protection capabilities	NPD			N1 N2 N3 N4				
			FW			N1_FW				
			APFW			N2_App_FW				
			IDS			N3_IDS				
			IPS			N4_IPS				
SP500-267	6.5	<b>Link Specific Technologies</b> support of robust packet compression services support of link technology [O:1]	ROHC			Self Test		Self Test		
			Link=Ethernet		P	Self Test	Self Declaration	Self Test	Self Declaration	
		(repeat as needed) support of link technology Link=								

12 X < Check HERE if this stack's DOC includes additional information about tested capabilities and options on an attached page 3 of notes.

Level	Level of support for USGv6-v1 Requirements for capability.	Color	Indication of USGv6-v1 Recommended Level of Support for device type / stack role.
	Blank - SDOC makes no declaration for this capability.		Indicates capability that is recommendend as mandatory (unconditional MUST) in the USGv6-v1 Profile.
P	Passed required tests of USGv6-v1 requirements for these capabilities.		Indicates cabability that is unusual for a given device type / stack role. Do not select without careful analysis.
N	See notes page for details on the level of support of USGv6-v1 reequirements for this capability.		Indicates capability that is left optional / ocnditional by the recommendations of the USGv6-v1 Profile.
X	USGv6 capability not supported in product.		

Test Suite - Specific USGv6 Test suite used for test. See: <http://www.nntd.nist.gov/usgv6/test-specifications.html>  
 Test Lab / Result ID - Abbreviation of accredited laboratory and its local identifier for this test result.  
 Component Ref - Supplier / Product / Stack ID of distinctly tested component that provides this capability.  
 Note # - reference to a detailed note about this capability or result on attached page.

Product Id:		Cisco 4507R-E with SUP7LE				Stack Id:			IOS-XE 3.2.0		
Note #	Spec / Reference	Section	USGv6-v1 Profile Requirements	Context / Configuration Option	Supported Capabilities			Notes about USGv6-v1 Capabilities.			
					Host	Router	NPD	Test Suite Conformance/NPD	Test Lab / Result ID, Note	Test Suite Interoperability	Test Lab / Result ID, Note
1	RFC2740		OSPF for IPv6	IGW		c(M)				OSPFv3_v1.*_I	UNH/IOL-8509; Test Case 4.3
<b>Discussion:</b> Cisco supports an older implementation of this RFC and we believe it is not a critical failure by any means. Our products will function fine when implemented according to our guidance. However, we will take steps to modify our implementation to correct this behavior in a future release.											
2	RFC2740		OSPF for IPv6	IGW		c(M)				OSPFv3_v1.*_I	UNH/IOL-8509 Test Case 3.2, 4.5
<b>Discussion:</b> Cisco's implementation is in accordance with the RFC's for these tests. The testcase needs to be written and executed differently to get the desired result. Please contact Cisco to see the test report provided by UNH-IOL for additional details											
3	RFC4552		Authentication/Confidentiality for OSPFv3	IGW		c(M)				OSPFv3_v1.*_I	UNH/IOL-8509; Test Case 5.1, 5.2
<b>Discussion:</b> This feature is currently not supported on this specific device. Please check back with Cisco about the progress on implementation of this feature.											
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<b>Discussion:</b>											
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<b>Discussion:</b>											
<b>General Notes / Discussion about this Product / Stack's capabilities:</b>											

**General:** This document describes network product from the identified supplier that claims support of USGv6 capabilities. General product and supplier identification is given on Page 1. Overall results of testing USGv6 capabilities for conformance, interoperability and network protection are given on Page 2. Detailed instructions for completing and interpreting each numbered field are given below. Note USGv6 Testing website at: <http://www.antd.nist.gov/usgv6/testing.html>. Contact: [usgv6-project@antd.nist.gov](mailto:usgv6-project@antd.nist.gov).

Field	Description and Instructions	Field	Description and Instructions
1	<b>The Document Requiring Conformity:</b> Identifies the profile version implemented. Not a user completeable field.		
2	<b>Product Identifier:</b> Supplier's concise name for the product declared.		
3	<b>Suppliers Name, Address and Contact Details:</b> Company name and point of contact for SDOC questions, street address, phone and email.		
4	<b>Product as Tested/Declared:</b> Product Identifier and detailed version information. If this SDOC reports original test results (page 2), include information about the specific product configuration(s) that was actually tested (e.g., hardware configuration, operating system, etc).	11	<b>Summary of Results:</b> The format of this table mirrors the USGv6-v1.0 capabilities checklist (USGv6 Profile, Appendix A). The 12 categories of USGv6 capabilities are listed as subheadings, with subsidiary functions as line items. Configuration options related to conditional implementation of selected capabilities.  <b>Product Id/Stack Id:</b> The identification line of this page includes space for Product Id and Stack Id labels. Product Id is the same as given on Page 1. As there may be more than one unique IPv6 stack implemented in the product, the Stack Id field identifies the particular stack described. One Results Summary page per stack is required.
5	<b>Product Family:</b> A list of other products that use the same, unmodified IPv6 stacks such that their USGv6 capabilities are identical in form and function to the specific product configuration above. Test labs are only required to affirm the results for specific products tested. Test labs optionally may affirm recognized product families.		<b>Host, Router and Network Protection (NPD)</b> columns identify 'preferred' options: cells in green represent the NIST recommendations. Cells in grey denote atypical options, very unlikely to be implemented. The procuring Agency may additionally tailor these fields to indicate requirements for this acquisition.
6	<b>USGv6 Capability Summary:</b> The USGv6 stack implementation summary as identified by the '+' notation described in the USGv6 profile, Appendix A. For each IPv6 stack implementation in the product, a distinct Stack Id and reference to the attached Results Summary page (Page 2).		<b>Test Suite Conformance and Interoperability</b> columns identify capability sets for which a public test suite exists, and the versions applicable to USGv6-v1.0 test results. Major version v1 and all its minor versions are deemed acceptable. Over time, new versions will be added and older ones retired. There may be periods when more than one major version is acceptable concurrently.
7	<b>Self Contained or Composite SDOC:</b> If this SDOC relies on the test results of other distinct products, list the Supplier & Product ID/Stack IDs referenced and attach those original SDOCs to this one.		The supplier completes the adjacent <b>Test Lab and Result Id</b> column with the test lab acronym and unique result identifier (See Test Lab and Accreditor page on the Website). The buyer may opt to query results with the test laboratory using the specified Result Id(s). The supplier may opt to provide particular explanation of some results (partial results, additional options) in which case reference to note on an attached page 3. (e.g. "See Note# N"). See the USGv6 testing website to identify the test lab, and find contact details.
8	<b>Additional Declarations / Attachments:</b> List the supplier / product ID / Stack ID of any test results of composite components referenced by this SDOC.		Cells marked <b>Self Test</b> have no associated public test suite. If implemented by the supplier, the required adjacent annotation is " <i>Self Declaration</i> ". Note that vendors declaring support for such a capability are declaring support for the associated specific requirements in the USGv6 Profile.
9	<b>Supplementary Attestations:</b> Suppliers disclosure of IPv6 only capabilities; multiple stacks present; product family applicabilities. These are not included to qualify or disqualify a product from purchase considerations, but to inform network administrators of potential configuration options relevant to USGv6 interoperability. Check all that apply.	12	<b>Additional Options Tested:</b> Vendor checks if it is desired to record tested options not part of the 'Musts' in the profile. Explanations on the page following the results summary.
10	<b>Signature Block:</b> Wet ink signature of the responsible product manager, dated. Printed name and position title on the line below.		<b>Headings and Special Notations:</b> as described.  <b>Options for Test Lab and Result Id:</b> Currently 3 cases: (1) the test lab acronym and alphanumeric Id of the result set as assigned by the test laboratory; (2) 'Self declaration' denoting the supplier attests to adequate QA testing of the capability; (3) See attachment or note 'N', where the supplier explains variations in greater detail.

Further Description: <http://www.antd.nist.gov/usgv6/testing.html>, and NIST SP 500-267 USGv6 Testing Program Users Guide available at the website.