	rs Declaration of Con			ucts			USGv6-v1 SDOC-v1.1 Page 1						
1	The Document Requi	iring Conforr	nity:				USGv6 Profile Version 1.0, July 2008. (NIST SP500-267)						
2	Product Identifier:						Cisco 2821						
3	Supplier's Name, Address and SDOC Contact Details												
	isco Systems, Inc. 70 West Tasman Dr.												
	an Jose, CA 95134												
USA	A												
4	Product as Tested/Declared: Product Identifier, version/revision information, details of configuration tested.												
IOS 15.0(1)M1													
5	Product Family (other products using same IPv6 stack(s) to which these results are declared to apply). Check Product Family attestation below.												
	The trade of the products using same if to stackly to which these results are decided to apply). Check Froduct Failing attestation below.												
	Cisco 1800 Series, Cisco 2800 Series, Cisco 3800 Series												
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). e.g. example-prod-id/stack-1: USGv6-v1-Host: IPv6-Base+Addr-Arch+IPsec-v3+IKEv2+SLAC+Link=Ethernet.												
USGv6-v1-Router:IPv6-Base+Addr-Arch+IGW+EGW+SLAAC+Link=Ethernet													
7	Self Contained or Composite SDOC? (Must indicate one).												
YES		dressed by orginal test results reported in this SDOC. unique USGv6 SDOCs. All o					abilities of this product are provided by the use and/or integration of umodified components that have their own the relevant referenced SDOCs are identified in section 8 and attached. This product's page 2 will indicate which ecific referenced components (product-id/stack-id).						
8	Additional Declaratio	ns / Attachm	nents: (List	supplier & pro	oduct-id/stack-id for refer	enced and a	d 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	environments. That is, no claimed capabilities are invalidated if this product is deployed in a network environment that does			for each unique not, please docu not covered, and	tains a capabilities test report IPv6 stack in the product. If ument which stacks/ports are d how their IPv6 capabilities a reported in this SDOC.	YES	capabilities are conformance a of this product	ucts listed in the product family in section 5 are implemented such that their USGv6 identical in form and function across the entire product family. The specific and interoperability test results for the USGv6 capabilities of an identified member family are provided in this SDOC. The SDOC attests to the fact that these tested illities are identical and unmodified for all the products cited above.					
10	Signature	Darryll Gads	son	D									
	Print Name / Title	Print Name / Title Darryll Gadson, Lead USGv6 Cisco Systems											
		<u>'</u>											

11	Suppli	ers Declaration of Conformity for USGv6 Pro	ducts: Declare	d Capab	ilities an	d Test	Results Summary		U	SGv6-v1 SDOC-v1.1 Pag		
roduct ld	:	Cisco 2821			Stack Id	l:			IOS 15.0(1)M1			
			Context /	Suppo	orted Capabilities				Program Results			
Spec /			Configuration				Test Suite	Test Lab / Result ID, Note #, or	Test Suite	Test Lab / Result ID, Note #, o		
Reference	Section	USGv6-v1 Profile Requirements	Option	Host	Router	NPD	Conformance/NPD	Component Ref	Interopoperability	Component Ref		
SP500-267	6.1	IPv6 Basic Requirements	ID: O D		D		Desir set a 0	110111101 5007	Davis Mak I	LINULIAN FOOD		
		support of IPv6 base (IPv6;ICMPv6;PMTU;ND)	IPv6-Base		P		Basic_v1.*_C	UNH/IOL-5237	Basic_V1.*_I	UNH/IOL-5238		
		support of stateless address auto-configuration	SLAAC		Р		SLAAC-V1.*_C	UNH/IOL-5239	SLAAC-V1.0_I	UNH/IOL-5240		
		support of SLAAC privacy extensions.	PrivAddr				Self Test		Self Test			
		support of stateful (DHCP) address auto-configuration	DHCP-Client				Self Test		DHCP_Client_v1.*_I			
		support of automated router prefix delegation	DHCP-Prefix				Self Test		Self Test			
		support of neighbor discovery security extensions	SEND				Self Test		Self Test			
P500-267	6.6	Addressing Requirements										
		support of addressing architecture reqts	Addr-Arch		Р		Addr_Arch_v1.*_C	UNH/IOL-5458	Addr_Arch_v1.*_I	UNH/IOL-5459		
		support of cryptographically generated addresses	CGA				Self Test		Self Test			
P500-267	6.7	IP Security Requirements										
		support of the IP security architecture	IPsecv3				IPsecv3_v1.*_C		IPsecv3_v1.*_I			
		support for automated key management	IKEv2				IKEv2_v1.*_C		IKEv2v1.0_I			
		support for encapsulating security payloads in IP	ESP				ESPv3_v1.*_C		ESP_v1.*_I			
P500-267	6.11	Application Requirements										
		support of DNS client/resolver functions	DNS-Client				Self Test		Self Test			
		support of Socket application program interfaces	SOCK				Self Test		Self Test			
		support of IPv6 uniform resource identifiers	URI				Self Test		Self Test			
		support of a DNS server application	DNS-Server				Self Test		Self Test			
		support of a DHCP server application	DHCP-Server				Self Test		DHCP Serv v1.* I			
P500-267	6.2	Routing Protocol Requirements										
		support of the intra-domain (interior) routing protocols	IGW		N		Self Test		OSPFv3 v1.* I	UNH/IOL-5460, Notes 1, 2, and		
		support for inter-domain (exterior) routing protocols	EGW		P		Self Test		BGP v1.* I	UNH/IOL-5461		
P500-267	6.4	Transition Mechanism Requirements	2011				300 7001		20	01111102 0 101		
1 000 207	0.4	support of interoperation with IPv4-only systems	IPv4				Self Test		Self Test			
		support of functional IPv6 over IPv4 MPLS services	6PE				Self Test		Self Test			
P500-267	6.8	Network Management Requirements	OI L				Sell Test		Self Test			
1 000 201	0.0	support of network management services	SNMP				Self Test		Self Test			
P500-267	6.9	Multicast Requirements	SINIVIE				Sell Test		Sell Test			
F300-207	0.9	support of basic multicast	Mcast				Self Test					
		full support of multicast communications	SSM				Self Test		Self Test			
P500-267	6.10	Mobility Requirements	JOIN				Sell Test		Sell Test			
P500-267	6.10	support of mobile IP capability.	MIP				Self Test		Self Test			
			NEMO									
P500-267		support of mobile network capabilities Quality of Service Requirements	NEIVIO				Self Test		Self Test			
P500-267	6.3		DO.				0 - 15 T 1		0.16 To 14			
		support of Differentiated Services capabilities	DS				Self Test		Self Test			
		PHB Id					Self Test					
P500-267	6.12	Network Protection Device Requirements										
		support of common NPD regts	NPD				N1 N2 N3 N4					
		support of basic firewall capabilities	FW				N1_FW					
		support of application firewall capabilities	APFW				N2_App_FW					
		support of intrusion detection capabilities	IDS				N3_IDS					
		support of intrusion protection capabilities	IPS				N4_IPS					
P500-267	6.5	Link Specific Technologies										
		support of robust packet compression services	ROHC				Self Test		Self Test			
		support of link technology [O:1]	_ink=Ethernet		P		Self Test	Self Declaration	Self Test	Self Declaration		
		(repeat as needed) support of link technology	_ink=									
12	х	< Check HERE if this stack's DOC includes a		mation	about tes	ted car	nahilities and ontio	ns on an attached nage 3 of no	tes			
Level	Level of support for USGv6-v1 Requirements for capability. Blank - SDOC makes no declaration for this capability.						r Indication of USGv6-v1 Recommended Level of Support for device type / stack role.					
								is recommendend as mandatory (unco				
Р	Passed	required tests of USGv6-V1 requirements for these capab			Indicates cabability that is unusal for a given device type / stack role. Do not select without careful analysis.							
N							Indicates capability that is left optional / ocnditional by the recommedations of the USGv6-v1 Profile.					
X	USGv6 capability not supported in product.							optionar outditional by the fect	Jaaa.one or the oodere			
							·					
st Suite - S	Specific U	SGv6 Test suite used for test. See: http://www.antd.nist.g			.html		Note # - reference to a detailed note about this capability or result on attached pag Component Ref - Supplier / Product / Stack ID of distinctly tested component that provides this capability.					
		Abbreviation of accredited laboratory and its local identifie										

Suppliers	iers Declaration of Conformity for USGv6 Products: Notes Page and Detailed Test Results Summary										USGv6-v1 SDOC-v1.1 Page 3		
	Product Id:		Cisco 2821			Stack lo	d:	IOS 15.0(1)M1					
	0/			Context / Supported Capabilities			abilities		Notes about USG				
Note #	Spec / Reference	Section	USGv6-v1 Profile Requirements	Configuration Option	Host	Router	NPD	Test Suite Conformance/NPD	Test Lab / Result ID, Note	Test Suite Interopoperability	Test Lab / Result ID). Note	
			·						,				
1	RFC2740		OSPF for IPv6 pports an older implementation of this RFC and we belie	IGW	failure by	c(M)	s Our pro	ducts will function fine wh	en implemented according to our o	OSPFv3_v1.*_I	UNH/IOL-5460; Test (
Discussion			ntation to correct this behavior in a future release.			uny mou	p.o			,			
2	<u>RFC2740</u>		OSPF for IPv6	IGW		c(M)				OSPFv3_v1.*_I	UNH/IOL-5460; Test Ca 4.5		
Discussion:		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)					UNH/IOL-5460; Test Ca	se 5.1,	
		This protocol is supported on this specific device, however, some problems were uncovered during test. Cisco is working actively to address these issues and plans to retest the product once the issues have been resolved. Please										ase check	
Discussion	1:	back with Cisco about the progress on this issue.											
4													
Discussion	1:						ı						
5													
Discussion	1:												
6													
Discussion:						•							
7													
Discussion	1:												
8													
Discussion	ı:												
9													
Discussion	ı:												
10													
Discussion	ı:												
General Notes / Discussion about this Product / Stack's capabilities:													

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.

Field Description and Instructions 1 The Document Requiring Conformity: Identifies the profile version implemented. Not a user completeable field. 2 Product Identifier: Supplier's concise name for the product declared.

3 Suppliers Name, Address and Contact Details: Company name and point of

contact for SDOC questions, street address, phone and email.

- 4 Product as Tested/Declared: Product Identifier and detailed version information. If this SDOC reports oringal test results (page 2), include information about the specific product configuration(s) that was actually tested (e.g., hardware configuration, operating system, etc).
- 5 Product Family: 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.
- **6 USGv6 Capability Summary**: 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).
- 7 Self Contained or Composite SDOC: If this SDOC relies on the test results of other disinct products, list the Supplier & Product ID/Stack IDs referenced and attach those original SDOCs to this one.
- 8 Additional Declarations / Attachements: List the supplier / product ID / Stack ID of any test results of composite components referenced by this SDOC.
- 9 Supplementary Attestations: 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.
- Signature Block: Wet ink signature of the responsible product manager, dated. Printed name and position title on the line below.

Field Description and Instructions

Summary of Results: 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.

Product Id/Stack Id: 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.

Host, Router and Network Protection (NPD) 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.

Test Suite Conformance and Interoperability 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.

The supplier completes the adjacent **Test Lab and Result Id** 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.

Cells marked **Self Test** have no associated public test suite. If implemented by the supplier, the required adjacent annotation is "Self Declaration". Note that vendors declaring support for such a capability are declaring support for the associated specific requirements in the USGv6 Profile.

12 Additional Options Tested: 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.

Headings and Special Notations: as described.

Options for Test Lab and Result Id: 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.