Supplie	rs Declarat	tion of Con	formity for USGv6	Products				USGv6-v1 SDOC-v1.10 Page 1				
1			ring Conformity:				USGv6 Profile Version 1.0, July 2008. (NIST SP500-2					
2	Product Id	entifier:			Cisco	Catalyst	Catalyst 4500E Supervisor Engine 9-E					
3	3 Supplier's Name, Address and SDOC Contact Details											
170 We	Cisco Systems, Inc. 70 West Tasman Dr. San Jose, CA 95134 USA											
4	Product as Tested/Declared: Product Identifier, version/revision information, details of configuration tested.											
IOS-XE 3.10.1E(ED)												
5	Product Fa	amily (othe	r products using sa	me IPv6 stack(s	•		d to apply). C	Check Product Family attestation below.				
	Supervisor Engine 9-E; Cisco Catalyst 4500 E-Series (4503-E, 4506-E, 4507R+E, 4510R+E)											
6		-	_ ,		ack in the product provide :: IPv6-Base+Addr-Arch+I			v6 capabilities below and include a detailed test result +Link=Ethemet.				
USGv6-v1-Router: IPv6-Base+Addr-Arch+EGW+SLAAC+SNMP+Mcast+DS+Link = Ethernet												
7	Self Contained or Composite SDOC? (Must indicate one).											
YES	addressed by orginal test results reported in this SDOC. USGv6 SDOCs. All of the relevan						lities of this product are provided by the use and/or integration of umodified components that have their own unique ant referenced SDOCs are identified in section 8 and attached. This product's page 2 will indicate which capabilities ed components (product-id/stack-id).					
8	Additional	Declaratio	ons / Attachments:	(List supplier &	product-id/stack-id for refe	erenced an	d attached i	test results in the case of composite products).				
	Componen	nt Supplier		Product II	D:	Stack ID:		Notes:				
[1]		<u> </u>										
[2]												
[3]												
[4]												
9	Suppleme	ntary Attes	stations (Answer all).									
	Yes	This product is fully functional in dual stack environments. That is, no claimed capabilities are invalidated ifthis product is operated in a dual stack (6 and 4) network environment.					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.					
	This SDOC contains a capabilities test report for each unique IPv6 stack in the product. If not, the stacks/ports not covered are documented, and how their Ipv6 capabilities differ from those reported are explained.					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 that these tested USGv6 capabilities are identical and unmodified for all the products cited above.					
10	, and the second		Darryll Gadson	no Cyatama Ir s	Date	2018-Oct-	12					
Can inatrus	Print Name		Darryll Gadson, Le	au USGV6 CISC	o Systems Inc.							

11 roduct Id		ers Declaration of Conformity for USGv6 Pro		Capab				I		SGv6-v1 SDOC-v1.10 Pag			
Product Id:		Cisco Catalyst 4500E Supervisor Engine 9-E Stack Id: Context / Supported Capabilities					IOS-XE 3.10.1E(ED)						
			Context /	Suppo	rted Capa	bilities	T O . "	USGv6 Testing F	Program Results	I = / D			
Spec / eference	Section	USGv6-v1 Profile Requirements	Configuration Option	Host	Router	NPD	Test Suite Conformance/NPD	Test Lab / Result ID, Note #, or Component Ref	Test Suite Interoperability	Test Lab / Result ID, Note #, Component Ref			
2500-267		IPv6 Basic Requirements	Орион	11051	Router	INFD	Comomance/Ni B	Component itel	rest Suite Interoperability	Component Net			
000 201	0.1	support of IPv6 base (IPv6;ICMPv6;PMTU;ND)	IPv6-Base		Р		Basic_v1.*_C	UNH-IOL/28949	Basic V1.* I	UNH-IOL/28951			
		support of PMTU Discovery Protocol requirements	PMTU		P		Basic v1.* C	UNH-IOL/28949	Basic V1.* I	UNH-IOL/28951			
		support of stateless address auto-configuration	SLAAC		P		SLAAC-V1.*_C	UNH-IOL/28949	SLAAC-V1.* I	UNH-IOL/28951			
		support of Creation of Global Addresses	SLAAC - c(M)		P		SLAAC-V1.*_C	UNH-IOL/28949	SLAAC-V1.* I	UNH-IOL/28951			
		support of SLAAC privacy extensions.	PrivAddr				Self Test		Self Test				
		support of stateful (DHCP) address auto-	DHCP-Client				DHCP Client v1.* C		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				
500-267	6.6	Addressing Requirements											
		support of addressing architecture regts	Addr-Arch		Р		Addr Arch v1.* C	UNH-IOL/28950	Addr Arch v1.* I	UNH-IOL/28952			
		support of cryptographically generated addresses	CGA				Self Test		Self Test				
500-267	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		IKEv2_v2.*_I				
		support for encapsulating security payloads in IP	ESP				ESPv3_v1.*_C		ESP_v1.*_I				
500-267	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				
500-267	6.2	Routing Protocol Requirements											
		support of the intra-domain (interior) routing protocols	IGW		N		Self Test		OSPFv3_v1.*_I	UNH-IOL28948, Note 1			
		support for inter-domain (exterior) routing protocols	EGW		Р		Self Test		BGP_v1.*_I	UNH-IOL/28947			
500-267	6.4	Transition Mechanism Requirements											
		support of interoperation with IPv4-only systems	IPv4				Self Test		Self Test				
		support of tunneling IPv6 over IPv4 MPLS services	6PE				Self Test		Self Test				
500-267	6.8	Network Management Requirements							Self Test				
		support of network management services	SNMP		Р		Self Test	Self Declaration	Self Test	Self Declaration			
500-267	6.9	Multicast Requirements											
		support of basic multicast	Mcast		Р		Self Test	Self Declaration		Self Declaration			
		full support of multicast communications	SSM				Self Test		Self Test				
2500-267	6.10	Mobility Requirements					- 4						
		support of mobile IP capability.	MIP				Self Test		Self Test				
		support of mobile network capabilities	NEMO				Self Test		Self Test				
2500-267	6.3	Quality of Service Requirements			D		0 " - 1	0 11 0 1 11	0 " = 1	0 15 0 1 11			
		support of Differentiated Services capabilities	DS		Р		Self Test	Self Declaration	Self Test	Self Declaration			
500-267	6.12	Network Protection Device Requirements											
		support of common NPD reqts	NPD				N1 N2 N3 N4_v1.3						
		support of basic firewall capabilities	FW				N1_FW_v1.3						
	1	support of application firewall capabilities	APFW				Self Test						
	1	support of intrusion detection capabilities	IDS				N3_IDS_v1.3						
		support of intrusion protection capabilities	IPS				N4_IPS_v1.3						
500-267	6.5	Link Specific Technologies	D0:::				0 1/ =		0.15=				
		support of robust packet compression services	ROHC				Self Test	Colf Declaration	Self Test	Calf Daglasstia			
		support of link technology [O:1]	Link=Ethernet		Р		Self Test	Self Declaration	Self Test	Self Declaration			
	1	(manage as manadad)	l !=!			-			 	 			
	1	(repeat as needed) support of link technology		<u> </u>			<u> </u>		<u> </u>	<u> </u>			
12	Х	< Check HERE if this stack's DOC includes a	idditional inforr	mation a	bout tes	ted cap	pabilities and options or	n an attached page 3 of notes.					
_evel	Level o	evel of support for USGv6-v1 Requirements for capability.					Indication of USGv6-v1 Recommended Level of Support for device type / stack role.						
	Blank - S	SDOC makes no declaration for this capability.			Indicates capability that is	recommendend as mandatory (uncon	ditional MUST) in the USG	/6-v1 Profile.					
Р	Passed required tests of USGv6-V1 requirements for these capabilities.						Indicates cabability that is unusal 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 requirements for this capability.						Indicates capability that is left optional / ocnditional by the recommedations of the USGv6-v1 Profile.						
X		capability not supported in product.	.ooquiiomonto loi	тпо оара	~ mry .			est optional / ostialional by the lecon					
t Suite -	Specific l	JSGv6 Test suite used for test. See: http://www.antd.n	st.gov/usgv6/test-	specificati	ons.html			Note # - reference to a	a detailed note about this c	apability or result on attached p			
		Abbreviation of accredited laboratory and its local iden					Component Ret	f - Supplier / Product / Stack ID of dist					

Suppliers Declaration of Conformity for USGv6 Products: Notes Page and Detailed Test Results Summary USGv6-v1 SDOC-v1.10 Page 3											
Field	Field Product Id:		Cisco Catalyst 4500E Superviso	Stack lo	l:	IOS-XE 3.10.1E(ED)					
13	0/			Context /	Supported Capabilities			= .0.	Notes about USG	v6-v1 Capabilities.	
Note #	Spec / Reference	Section	USGv6-v1 Profile Requirements	Configuration Option	Host	Router	NPD	Test Suite Conformance/NPD	Test Lab / Result ID, Note	Test Suite Interoperability	Test Lab / Result ID, Note
1	<u>RFC4552</u>		Authentication/Confidentiality for OSPFv3	IGW		c(M)				OSPFv3_v1.*_I	UNH-IOL28948, Note 1
Discussio	n:	The device	does fails to establish adjacency with OSPFv6 Encryp	tion. We're address	ing the is	sue with b	ug CSCvn	n81157 (Secure Socket I	Hangs at GOING UP with OSPFv	3 Encryption)	
2											
Discussio	n:										
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Vendor's	General Notes /	Discussion	n 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	Field	Description and Instructions
1	The Document Requiring Conformity : Identifies the profile version implemented. Not a user completable field.	11	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.
2	Product Identifier: Supplier's concise name for the product declared.		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.
3	Suppliers Name, Address and Contact Details : Company name and point of contact for SDOC questions, street address, phone and email.		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.
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).		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.
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.		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.
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).		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.
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.	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.
8	Additional Declarations / Attachements: List the supplier / product ID / Stack ID of any test results of composite components referenced by this SDOC.		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.
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.	13	Stack-1 Notes Instructions: The supplier may choose to use the Notes (page 3) in order to clarify unsupported features or non passing results. Each Note # must reference the same Note # from Page 2.
10	Signature Block : Wet ink signature of the responsible product manager, dated. Printed name and position title on the line below.		Complete the Note by including the Spec/Reference and Section (i.e. RFC or USGv6 Profile version), USGv6-v1 Profile Requirements, Config Option (i.e. IPv6-Base), choosing Host/Router/NPD, and Test Selection table version along with Test Lab Result ID. The Discussion includes details about the test result that will be disclosed to the buyer.