Suppliers Declaration of Conformity for USGv6 Products

1	**The Document Requiring Conformity:**	**USGv6 Profile Version 1.0, July 2008. (NIST SP500-267)**
2	**Product Identifier:**	**SUSE Linux Enterprise Server**

3 Supplier's Name, Address and SDOC Contact Details

SUSE Software Solutions Germany GmbH
Maxfeldstrasse 5, 90409 Nürnberg, Germany
www.suse.com
Phone: +49-(0)911-740-53-0
Email: mark.darnell@suse.com

4 Product as Tested/Declared: *Product Identifier, version/revision information, details of configuration tested.*

12 Service Pack 4

5 Product Family (other products using same IPv6 stack(s) to which these results are declared to apply). ***Check Product Family attestation below.***

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-Host: IPv6-Base+Addr-Arch+SLAAC+ESP+Link = Ethernet

7 Self Contained or Composite SDOC? (Must indicate one).

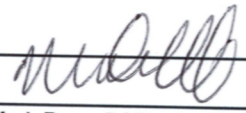
YES	*All of the declared USGv6 capabilities of this product are addressed by orginal test results reported in this SDOC.*	**NO**	*Some or all of the USGv6 capabilities of this product are provided by the use and/or integration of umodified components that have their own unique USGv6 SDOCs. All of the 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 dual stack environments.That is, no claimed capabilities are invalidated ifthis product is operated in a dual stack (6 and 4)network environment.*	**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, 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 capabilitiesare identical and unmodified for all the products cited above.*

10 Signature  **Date** 6/8/2021

Print Name / Title Mark Darnell / Senior Product Manager

See instructions for fields 1-12 on Page 4.

11	Suppliers Declaration of Conformity for USGv6 Products: Declared Capabilities and Test Results Summary								USGv6-v1 SDOC-v1.10 Page 2
Product Id:	**SUSE Linux Enterprise Server**			**Stack Id:**		**12 Service Pack 4**			
			Context /	Supported Capabilities			USGv6 Testing Program Results			
Spec / Reference	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 #, or Component Ref
SP500-267	6.1	**IPv6 Basic Requirements**								
		support of IPv6 base (IPv6;ICMPv6;PMTU;ND)	IPv6-Base	P			**Basic_v1.*_C**	UNH-IOL/31996	**Basic_V1.*_I**	UNH-IOL/31997
		support of PMTU Discovery Protocol requirements	PMTU	P			**Basic_v1.*_C**	UNH-IOL/31996	**Basic_V1.*_I**	UNH-IOL/31997
		support of stateless address auto-configuration	SLAAC	P			**SLAAC-V1.*_C**	UNH-IOL/31996	**SLAAC-V1.*_I**	UNH-IOL/31997
		support of Creation of Global Addresses	SLAAC - c(M)	P			**SLAAC-V1.*_C**	UNH-IOL/31996	**SLAAC-V1.*_I**	UNH-IOL/31997
		support of SLAAC privacy extensions.	PrivAddr				*Self Test*		*Self Test*	
		support of stateful (DHCP) address auto-	DHCP-Client	N			**DHCP_Client_v1.*_C**	UNH-IOL/32004 Notes 3-8	**DHCP_Client_v1.*_I**	UNH-IOL/32005
		support of automated router prefix delegation	DHCP-Prefix				*Self Test*		*Self Test*	
		support of neighbor discovery security extensions	SEND				*Self Test*		*Self Test*	
SP500-267	6.6	**Addressing Requirements**								
		support of addressing architecture reqts	Addr-Arch	P			**Addr_Arch_v1.*_C**	UNH-IOL/31998	**Addr_Arch_v1.*_I**	UNH-IOL/31999
		support of cryptographically generated addresses	CGA				*Self Test*		*Self Test*	
SP500-267	6.7	**IP Security Requirements**								
		support of the IP security architecture	IPsecv3	N			**IPsecv3_v1.*_C**	UNH-IOL/32000	**IPsecv3_v1.*_I**	UNH-IOL/32001, Note 1
		support for automated key management	IKEv2	N			**IKEv2_v1.*_C**	UNH-IOL/32002, Note 2	**IKEv2_v2.*_I**	UNH-IOL/32003
		support for encapsulating security payloads in IP	ESP	P			**ESPv3_v1.*_C**	UNH-IOL/32000	**ESP_v1.*_I**	UNH-IOL/32001
SP500-267	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*		*Self Test*	
SP500-267	6.2	**Routing Protocol Requirements**							**DHCP_Serv_v1.*_I**	
		support of the intra-domain (interior) routing protocols	IGW				*Self Test*		**OSPFv3_v1.*_I**	
		support for inter-domain (exterior) routing protocols	EGW				*Self Test*		**BGP_v1.*_I**	
SP500-267	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*	
SP500-267	6.8	**Network Management Requirements**							Self Test	
		support of network management services	SNMP				*Self Test*		Self Test	
SP500-267	6.9	**Multicast Requirements**								
		support of basic multicast	Mcast				*Self Test*			
		full support of multicast communications	SSM				*Self Test*		*Self Test*	
SP500-267	6.10	**Mobility Requirements**								
		support of mobile IP capability.	MIP				*Self Test*		*Self Test*	
		support of mobile network capabilities	NEMO				*Self Test*		*Self Test*	
SP500-267	6.3	**Quality of Service Requirements**								
		support of Differentiated Services capabilities	DS				*Self Test*		*Self Test*	
SP500-267	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**			
		support of application firewall capabilities	APFW				*Self Test*			
		support of intrusion detection capabilities	IDS				**N3_IDS_v1.3**			
		support of intrusion protection capabilities	IPS				**N4_IPS_v1.3**			
SP500-267	6.5	**Link Specific Technologies**								
		support of robust packet compression services	ROHC				Self Test		Self Test	
		support of link technology [O:1]	Link=Ethernet	P			Self Test	*Self Declaration*	Self Test	*Self Declaration*
		(repeat as needed) support of link technology	Link=							
12		**< 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.
	Blank - SDOC makes no declaration for this capability.
P	Passed required tests of USGv6-V1 requirements for these capabilities.
N	See notes page for details on the level of support of USGv6-v1 reequirements for this capability.
X	USGv6 capability not supported in product.

Color	Indication of USGv6-v1 Recommended Level of Support for device type / stack role.
	Indicates capability that is recommendend as mandatory (unconditional MUST) in the USGv6-v1 Profile.
	Indicates cabability that is unusal for a given device type / stack role. Do not select without careful analysis.
	Indicates capability that is left optional / ocnditional by the recommedations of the USGv6-v1 Profile.

Test Suite - Specific USGv6 Test suite used for test. See: http://www.antd.nist.gov/usgv6/test-specifications.html

Test Lab / Result ID - Abbreviation of accredited laboratory and its local identifier for this test result.

Note # - reference to a detailed note about this capability or result on attached page.

Component Ref - Supplier / Product / Stack ID of distinctly tested component that provides this capability.

Suppliers Declaration of Conformity for USGv6 Products: Notes Page and Detailed Test Results Summary										USGv
Field 13	Product Id:		SUSE Linux Enterprise Server		Stack Id:					12 Service Pack 4
					Supported Capabilities			Notes about USGv6-v1 Capabilities.		
Note #	Spec / Reference	Section	USGv6-v1 Profile Requirements	Context / Configuration Option	Host	Router	NPD	Test Suite Conformance/NPD	Test Lab / Result ID, Note	Test Suite Interoperability
1	RFC4301		**Security Architecture for the IP**	IPsec-v3	**M**					IPsecv3_v1.*_I
1	RFC4303		**Encapsulating Security Payload (ESP)**	IPsec-v3	**M**					IPsecv3_v1.*_I
Discussion:			This defect allows an ICMP Packet-too-big frame to stop all traffic on an IPsec tunnel. While this frame would normally be sent by a router between the two tunnel endpoints, the packet could be spo of the tunnel endpoint details. This defect is therefore classified as a denial of service attack. User data should not be compromised in the event that this occurs. To mitigate or recover if this event o establish the tunnel. SUSE is working in the upstream Linux code base to integrate the fix for this issue and will issue the fix in a kernel maintenance update as soon as feasible.							
2	RFC4306		**Internet Key Exchange (IKEv2) Protocol**	IKEv2	**M**			IKEv2_v1.*_C	UNH-IOL/32002, Note 2	
Discussion:			The device under test transmitted an unencrypted Echo Reply packet in response to an encrypted Echo Request packet from TN1 after receiving an IKE_AUTH packet from TN1 that specified TCP selectors.							
3	RFC3315		**Dynamic Host Config Protocol (DHCPv6)**	DHCP Client	c(M)			DHCP_Client_v1.2_C	UNH-IOL/32004 Notes 3	
Discussion:			The retransmit-time calculation does not include previous RAND factor of +/- 0.1s.							
4	RFC3315		**Dynamic Host Config Protocol (DHCPv6)**	DHCP Client	c(M)			DHCP_Client_v1.2_C	UNH-IOL/32004 Note 4	
Discussion:			After receiving an advertise message, the request message is deferred until current the RT is over, rather than immediately.							
5	RFC3315		**Dynamic Host Config Protocol (DHCPv6)**	DHCP Client	c(M)			DHCP_Client_v1.2_C	UNH-IOL/32004 Note 5	
Discussion:			Release messages are sent to the server before the addresses have been removed.							
6	RFC3315		**Dynamic Host Config Protocol (DHCPv6)**	DHCP Client	c(M)			DHCP_Client_v1.2_C	UNH-IOL/32004 Note 6	
Discussion:			Rebind reply messages with no IA are discarded instead of resending the rebind message							
7	RFC3315		**Dynamic Host Config Protocol (DHCPv6)**	DHCP Client	c(M)			DHCP_Client_v1.2_C	UNH-IOL/32004 Note 7	
Discussion:			Status codes in a reply to release messages are not checked, but rather it considers any reply as success							
8	RFC3315		**Dynamic Host Config Protocol (DHCPv6)**	DHCP Client	c(M)			DHCP_Client_v1.2_C	UNH-IOL/32004 Note 8	
Discussion:			UseMulticast, NoBinding, and UnspecFail status codes are not handled properly							
9										
Discussion:										
Vendor's General Notes / Discussion about this Product / Stack's capabilities:										

Test Lab / Result ID, Note
UNH-IOL/32001, Note 1
UNH-IOL/32001, Note 1
ofed by anyone with knowledge ccurs, simply bring down and re-
as the only protocol in the traffic