



	Release 2.0	Release 3.0	Release 2.0.2	Release 3.0.2	Release 3.0.3	Master 2018-01-16	Master 2018-02-06	Release 4.0	Master 2018-03-14		
Туре	FRR	FRR	FRR	FRR	FRR	FRR	FRR	FRR	FRR		
Commit ID	3e71b5d	f633dc2	36a7e78	30283fd	5dff4ec	7c0c85a	5b8b08d	7a377a1	6са96сс		
Commit Date	2017-04-02	2017-10-14	2017-11-08	2017-11-08	2018-01-09	2018-01-17	2018-02-07	2018-03-12	2018-03-15		
ANVL-RIP-1.1	RFC 2453 s3.6 p	RFC 2453 s3.6 p20 Message Format									
MUST	Each router	RIP Message and Packet Formats Each router that uses RIP has a routing process that sends datagrams on UDP port number 520.									
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass		
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested		
ANVL-RIP-2.1		p21 Message Form .2 p30 Generating	nat Response Messa	ges							
	_	e between 1	and 25 (incl limit of 25	,							
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass		
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested		





	Release 2.0	Release 3.0	Release 2.0.2	Release 3.0.2	Release 3.0.3	Master 2018-01-16	Master 2018-02-06	Release 4.0	Master 2018-03-14				
ANVL-RIP-2.2		1 Protocol Extensi 20-21 Message F											
	RIP Packet The RIP Mes	Formats sage Format	is:										
	+-+-+-+-+ command	-+-+-+-+-+ (1) vers	-+-+-+-+-+ ion (1)	+-+-+-+-+- must be	3 3 4 5 6 7 8 9 0 +-+-+	+-+							
	 - 	+	RIP Entry		+	 ~ +							
		There may be between 1 and 25 (inclusive) RIP entries. (NOTE: Here we are testing that only valid RIP packets may be accepted.)											
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass				
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested				
ANVL-RIP-2.3	NEGATIVE: RFC 2453 s3.1 p	21 Message Form	at										
MUST	RIP Packet The command		d in version	n 1 and 2 are	e request and re	sponse							
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass				
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested				





	Release 2.0	Release 3.0	Release 2.0.2	Release 3.0.2	Release 3.0.3	Master 2018-01-16	Master 2018-02-06	Release 4.0	Master 2018-03-14			
ANVL-RIP-2.4	NEGATIVE RFC 2453 s3.6 p	o21 Message Form	nat									
MUST		Packet Formats RIP-1, only AF_INET (2) is generally supported.										
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass			
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested			
ANVL-RIP-2.5	NEGATIVE: RFC 2453 p21 N	lessage Format										
MUST	which speci	field contai	rent metric	for the dest	l 15 (inclusive) ination; or ion is not reac	hable.						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass			
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested			





	Release 2.0	Release 3.0	Release 2.0.2	Release 3.0.2	Release 3.0.3	Master 2018-01-16	Master 2018-02-06	Release 4.0	Master 2018-03-14			
ANVL-RIP-2.8		20 Message Form 1 Protocol Extensi										
MUST	RIP Packet The RIP Res		ge Format is:									
					3 4 5 6 7 8 9 0							
		+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-										
	There may b	•	·	lusive) RIP 6	•	· 						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass			
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested			
ANVL-RIP-3.1	RFC 2453 s3.7 p	22 Addressing Co	nsiderations			•	-					
MUST	If host rou				oe dropped when							
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass			
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested			





	Release 2.0	Release 3.0	Release 2.0.2	Release 3.0.2	Release 3.0.3	Master 2018-01-16	Master 2018-02-06	Release 4.0	Master 2018-03-14				
ANVL-RIP-3.2	NEGATIVE: RFC 2453 s3.7 p	22-23 Addressing	considerations										
MUST	The destina networks, h Normally ho networks. (NOTE: Here	RIP Addressing Consierations The destinations appearing in request and response messages can be networks, hosts, or a special code used to indicate a default address. Normally hosts only know the subnet masks for directly-connected networks. (NOTE: Here we are testing the DUT does not accept bad values in address fields.)											
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass				
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested				
ANVL-RIP-3.3	RFC 2453 s3.7 p	RFC 2453 s3.7 p22 Addressing Considerations											
MUST	RIP Addressing Consierations RIP-1 routes to a subnet must not be sent outside the network of which the subnet is a part.												
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass				
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested				
ANVL-RIP-3.5	RFC 2453 s3.7 p	23 Addressing Co	nsiderations										
SHOULD	These route just as if decision as the impleme	RIP Addressing Consierations These routers should create RIP entries for the address 0.0.0.0, just as if it were a network to which they are connected. The decision as to how routers create entries for 0.0.0.0 is left to the implementor. Most commonly, the system administrator will be provided with a way to specify which routers should create entries											
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass				
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested				





	Release 2.0	Release 3.0	Release 2.0.2	Release 3.0.2	Release 3.0.3	Master 2018-01-16	Master 2018-02-06	Release 4.0	Master 2018-03-14					
ANVL-RIP-4.3	RFC 2453 s3.8 p	24 Timers												
SHOULD		RIP Timers Route expiration timer should be 180 seconds and garbage collection timer should be 120 seconds.												
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass					
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested					
ANVL-RIP-4.4	RFC 2453 s3.8 p	23-24 Timers												
MUST			timer is res chable netwo		reception of									
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass					
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested					
ANVL-RIP-5.1	RFC 2453 s5 p3	4 Compatability												
MUST	Input Proce RIP message		. O are to be	discarded.										
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass					
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested					
ANVL-RIP-5.2	RFC 2453 s5 p3	4 Compatability												
MUST				discarded i	.f any Must Be Z	ero								
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass					
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested					





	Release 2.0	Release 3.0	Release 2.0.2	Release 3.0.2	Release 3.0.3	Master 2018-01-16	Master 2018-02-06	Release 4.0	Master 2018-03-14						
ANVL-RIP-5.3	RFC 2453 s5 p3	4 Compatability													
SHOULD	RIP message	Input Processing RIP messages of any version greater than 1 should not be discarded simply because an MBZ field contains a value other than zero.													
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested						
ANVL-RIP-6.1	RFC 2453 s3.9.1 p25 Request Messages														
MUST	Normally, R routers whi routing tab situations only a sing be sent dir RIP port.	RIP Requests Normally, Requests are sent as broadcasts, from the RIP port, by routers which have just come up and are seeking to fill in their routing tables as quickly as possible. However, there may be situations (e.g., router monitoring) where the routing table of only a single router is needed. In this case, the Request should be sent directly to that router from a UDP port other than the RIP port. If such a Request is received, the router responds directly to the requestor"s address and port.													
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested						
ANVL-RIP-6.5	NEGATIVE: RFC 2453 s3.9.1	p25 Request Mes	ssages												
MUST	family iden	exactly one		ric of infir	and it has an addity (i.e., 16),										
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested						





	Release 2.0	Release 3.0	Release 2.0.2	Release 3.0.2	Release 3.0.3	Master 2018-01-16	Master 2018-02-06	Release 4.0	Master 2018-03-14					
ANVL-RIP-6.6	RFC 2453 s3.9.1	p25 Request Mes	ssages											
MUST		RIP Requests Validate RIP Response Message in reply to Request Message.												
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass					
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested					
ANVL-RIP-7.1	RFC 2453 s3.9.2	2 p26 Response M	essages											
MUST	RIP Responses The Response must be ignored if it is not from the RIP port. (UDP Port 520).													
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass					
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested					
ANVL-RIP-7.2	NEGATIVE: RFC 2453 s3.9.2	2 p26 Response M	essages											
MUST					necked to see wh	ether								
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass					
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested					





	Release 2.0	Release 3.0	Release 2.0.2	Release 3.0.2	Release 3.0.3	Master 2018-01-16	Master 2018-02-06	Release 4.0	Master 2018-03-14			
ANVL-RIP-7.3	NEGATIVE: RFC 2453 s3.9.2	2 p26 Response M	essages									
MUST	the router" receive cop a router pr	worth checki s own addres ies of their	ses. Interformers own broadca	aces on broasts/multicas	esponse is from adcast networks asts immediately.	may If						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass			
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested			
ANVL-RIP-14.1	RFC 2453 s4.4 p	C 2453 s4.4 p33 Next hop										
MUST	An address	IP Next Hop n address specified as a next hop must, per force, be directly eachable on the logical subnet over which the advertisement is made.										
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass			
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested			
ANVL-RIP-14.2	RFC 2453 s4.4 p	33 Next hop										
MUST	routed thro	of the Next ugh extra ho ived Next Ho	ps in the sy	stem. It is	ate packets being s particularly u able, it should i	seful						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass			
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested			





	Release 2.0	Release 3.0	Release 2.0.2	Release 3.0.2	Release 3.0.3	Master 2018-01-16	Master 2018-02-06	Release 4.0	Master 2018-03-14					
ANVL-RIP-15.1	RFC 2453 s4.5 p	33 Multicasting												
MUST	In order to listening t periodic br In order to multicast a	RIP Multicasting In order to reduce unnecessary load on those hosts which are not listening to RIP-2 messages, an IP multicast address will be used for periodic broadcasts. The IP multicast address is 224.0.0.9. In order to maintain backwards compatibility, the use of the multicast address will be configurable (NOTE: Here we are testing DUT sends multicast RIP-2 update)												
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass					
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested					
ANVL-RIP-15.2	RFC 2453 s4.5 p	33 Multicasting												
MUST	RIP Multicasting In order to reduce unnecessary load on those hosts which are not listening to RIP-2 messages, an IP multicast address will be used for periodic broadcasts. The IP multicast address is 224.0.0.9. In order to maintain backwards compatibility, the use of the multicast address will be configurable (NOTE: Here we are testing DUT accepts multicast RIP-2 update)													
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass					
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested					
ANVL-RIP-16.1	RFC 2453 s5.1 p	34 Compatibility s	witch			-	-	-	-					
MUST	RIP Version Compatibility The switch has four settings: RIP-1, in which only RIP-1 messages are sent; RIP-1 compatibility, in which RIP-2 messages are broadcast; RIP-2, in which RIP-2 messages are multicast; and "none", which disables the sending of RIP messages. CASE: Only RIP-1 messages are sent													
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass					
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested					





	Release 2.0	Release 3.0	Release 2.0.2	Release 3.0.2	Release 3.0.3	Master 2018-01-16	Master 2018-02-06	Release 4.0	Master 2018-03-14			
ANVL-RIP-16.2	RFC 2453 s5.1 p	34 Compatibility s	witch									
MUST	RIP Version Compatibility The switch has four settings: RIP-1, in which only RIP-1 messages are sent; RIP-1 compatibility, in which RIP-2 messages are broadcast; RIP-2, in which RIP-2 messages are multicast; and "none", which disables the sending of RIP messages. CASE: RIP-2 messages are broadcast											
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass			
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested			
ANVL-RIP-17.1	RFC 2453 s3.10	p29 Output Proce	ssing				-					
MAY	RIP Parameter Setting It may be necessary to specify an actual list of neighboring routers and send a datagram to each one explicitly											
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass			
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: unpredict	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested			
ANVL-RIP-1.2	RFC 2453 s3.6 p	20 Message Form	nat									
MUST	Unsolicited	and Packet routing upo to the RIP p	late messages		source and desti	nation						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass			
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested			





	Release 2.0	Release 3.0	Release 2.0.2	Release 3.0.2	Release 3.0.3	Master 2018-01-16	Master 2018-02-06	Release 4.0	Master 2018-03-14				
ANVL-RIP-1.3	RFC 2453 s3.6 p	20 Message Form	nat					-	-				
MUST	RIP Message and Packet Formats Update messages sent in response to a request are sent to the port from which the request came.												
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass				
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested				
ANVL-RIP-7.9	NEGATIVE: RFC 2453 s3.10 RFC 2453 s5 p3		ı Response Messa	ages									
	to zero. RIP message	mand to Resp	1 are to be	-	peled "must be z .f any Must Be Z								
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass				
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested				
ANVL-RIP-7.10	RFC 2453 s3.4.	2 p27 Response N	lessages										
MUST	Once the encost of the greater tha	RIP Responses Once the entry has been validated, update the metric by adding the cost of the network on which the message arrived. If the result is greater than infinity, use infinity. That is, metric = MIN (metric + cost, infinity)											
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass				
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested				





	Release 2.0	Release 3.0	Release 2.0.2	Release 3.0.2	Release 3.0.3	Master 2018-01-16	Master 2018-02-06	Release 4.0	Master 2018-03-14			
ANVL-RIP-7.12	RFC 2453 s3.9.2 p27 Response Messages											
MUST	RIP Responses If there is no such route, add this route to the routing table, unless the metric is infinity (there is no point in adding a route which is unusable).											
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass			
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested			
ANVL-RIP-7.13	RFC 2453 s3.9.2 p28 Response Messages											
MUST	RIP Responses If the new metric is infinity, start the deletion process											
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass			
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested			
ANVL-RIP-7.14	RFC 2453 s3.9.2	2 p27 Response M	essages									
MUST	Any entry t	RIP Responses Any entry that fails these tests is ignored, as it is no better than the current route.										
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass			
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested			





	Release 2.0	Release 3.0	Release 2.0.2	Release 3.0.2	Release 3.0.3	Master 2018-01-16	Master 2018-02-06	Release 4.0	Master 2018-03-14			
ANVL-RIP-8.1	RFC 2453 s3.10	RFC 2453 s3.10 p28 Output Processing										
MUST	This proces	Output Processing This processing may be triggered by input processing, when a Request is received (this Response is unicast to the requestor)										
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass			
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested			
ANVL-RIP-8.3	RFC 2453 s3.10 p28 Output Processing											
MUST	This proces	Output Processing This processing may be triggered by triggered updates (broadcast/multicast when a route changes)										
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass			
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested			
ANVL-RIP-8.5	RFC 2453 s3.10	.1 p29 Triggered U	pdates									
SHOULD	After a tri interval be updates occ when the ti	Output Processing After a triggered update is sent, a timer should be set for a random interval between 1 and 5 seconds. If other changes that would trigger updates occur before the timer expires, a single update is triggered when the timer expires. The timer is then reset to another random value between 1 and 5 seconds.										
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass			
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested			





	Release 2.0	Release 3.0	Release 2.0.2	Release 3.0.2	Release 3.0.3	Master 2018-01-16	Master 2018-02-06	Release 4.0	Master 2018-03-14			
ANVL-RIP-8.17	RFC 2453 s3.4.3 p15-16 Split horizon											
MUST	Output Processing The "simple split horizon" scheme omits routes learned from one neighbor in updates sent to that neighbor. Thus implementors may at their option implement simple split horizon rather than split horizon with poisoned reverse The router requirements RFC [11] specifies that all implementation of RIP must use split horizon											
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass			
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested			
ANVL-RIP-9.1	RFC 2453 s3.6 p	20 Message form	at									
MUST		. 2 Packet Fo der format i										
	+-+-+-+-+	0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 +-++-++-++-++-++-++-++-++-++-++-++-++-+										
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass			
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested			





	Release 2.0	Release 3.0	Release 2.0.2	Release 3.0.2	Release 3.0.3	Master 2018-01-16	Master 2018-02-06	Release 4.0	Master 2018-03-14			
ANVL-RIP-9.2	RFC 2453 s4 p31 Protocol Extensions											
MUST	RIP Version 2 Packet Formats The format for the 20-octet route entry (RTE) for RIP-2 is:											
	0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 4 5 6 7 8 9 0 1 5 6 7 8 9 0 1 6 7 8 9 0 1 7 8 9 0 1 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9											
	Address F	amily Identi	fier (2)	Route								
			IP Addres	ss (4)								
			Subnet Ma									
	+		Next Hop	(4)	į							
	+		Metric (4	,	+ 							
	+				+							
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: unpredict	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass			
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested			
ANVL-RIP-10.1	RFC 2453 s4.1 p	31 Authentication										
MUST	RIP Version 2 Authentication If the Address Family Identifier of the first (and only the first) entry in the message is 0xFFFF, then the remainder of the entry contains the authentication.											
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: unpredict	Ubuntu 16.04: pass			
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested			





	Release 2.0	Release 3.0	Release 2.0.2	Release 3.0.2	Release 3.0.3	Master 2018-01-16	Master 2018-02-06	Release 4.0	Master 2018-03-14				
ANVL-RIP-10.2	NEGATIVE: RFC 2453 s4.1 p	NEGATIVE: RFC 2453 s4.1 p31 Authentication											
MUST	RIP Version 2 Authentication If authentication is not in use, then no entries in the message should have an Address Family Identifier of 0xFFFF.												
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass				
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested				
ANVL-RIP-10.3	NEGATIVE: RFC 2453 s4.1 p	NEGATIVE: RFC 2453 s4.1 p32 Authentication											
MUST	Currently, type 2. Th the passwor	RIP Version 2 Authentication Currently, the only Authentication Type is simple password and it is type 2. The remaining 16 octets contain the plain text password. If the password is under 16 octets, it must be left-justified and padded to the right with nulls (0x00).											
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass				
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested				
ANVL-RIP-16.3	RFC 2453 s5.1 p	34 Compatibility s	witch										
MUST	The switch sent; RIP-1 RIP-2, in w disables th	RIP Version Compatibility The switch has four settings: RIP-1, in which only RIP-1 messages are sent; RIP-1 compatibility, in which RIP-2 messages are broadcast; RIP-2, in which RIP-2 messages are multicast; and "none", which disables the sending of RIP messages. CASE: RIP-2 messages are multicast											
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass				
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested				





	Release 2.0	Release 3.0	Release 2.0.2	Release 3.0.2	Release 3.0.3	Master 2018-01-16	Master 2018-02-06	Release 4.0	Master 2018-03-14			
ANVL-RIP-16.4	RFC 2453 s5.1 p34 Compatibility switch											
MUST	RIP Version Compatibility The switch has four settings: RIP-1, in which only RIP-1 messages are sent; RIP-1 compatibility, in which RIP-2 messages are broadcast; RIP-2, in which RIP-2 messages are multicast; and "none", which disables the sending of RIP messages. CASE: No RIP messages are sent											
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass			
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested			
ANVL-RIP-16.5	RFC 2453 s5.1 p	RFC 2453 s5.1 p34 Compatibility Switch										
SHOULD	RIP Version Compatibility For completeness, routers should also implement a receive control switch which would determine whether to accept RIP-1 only.											
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass			
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested			
ANVL-RIP-16.6	RFC 2453 s5.1 p	34 Compatibility S	Switch									
SHOULD	For complet	RIP Version Compatibility For completeness, routers should also implement a receive control switch which would determine whether to accept RIP-2 only										
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass			
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested			





	Release 2.0	Release 3.0	Release 2.0.2	Release 3.0.2	Release 3.0.3	Master 2018-01-16	Master 2018-02-06	Release 4.0	Master 2018-03-14		
ANVL-RIP-16.7	RFC 2453 s5.1 p34 Compatibility Switch										
SHOULD	RIP Version Compatibility For completeness, routers should also implement a receive control switch which would determine whether to accept both										
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass		
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested		
ANVL-RIP-16.8	RFC 2453 s5.1 p	34 Compatibility S	Switch								
SHOULD	For complet	Compatibili eness, route h would dete	ers should al		a receive cont	rol					
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass		
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested		