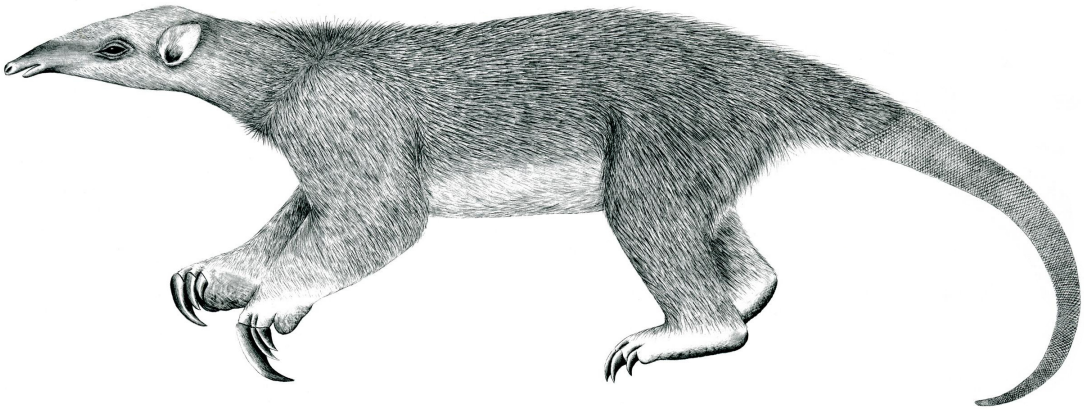
Tranalyzer2

vrrpDecode

Virtual Router Redundancy Protocol (VRRP)



Tranalyzer Development Team

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1.1 Description

The vrrpDecode plugin analyzes Virtual Router Redundancy Protocol (VRRP) traffic.

1.2 Configuration Flags

The following flags can be used to control the output of the plugin:

Name	Default	Description	Flags
VRRP_NUM_VRID	5	number of unique virtual router ID to store	
VRRP_NUM_IP	25	number of unique IPs to store	
VRRP_RT	1	output routing tables	
VRRP_SUFFIX	"_vrrp.txt"	Suffix for routing tables file	VRRP_RT=1

1.2.1 Environment Variable Configuration Flags

The following configuration flags can also be configured with environment variables (ENVCNTRL>0):

- VRRP_SUFFIX

1.3 Flow File Output

The vrrpDecode plugin outputs the following columns:

Column	Type	Description
vrrpStat	H16	Status
vrrpVer	H8	Version
vrrpType	H8	Type
vrrpVRIDCnt	U32	Virtual router ID count
vrrpVRID	R(U8)	Virtual router ID
vrrpMinPri	U8	Minimum priority
vrrpMaxPri	U8	Maximum priority
vrrpMinAdvInt	U8	Minimum advertisement interval (seconds)
vrrpMaxAdvInt	U8	Maximum advertisement interval (seconds)
vrrpAuthType	H8	Authentication type
vrrpAuth	SC	Authentication string
vrrpIPCnt	U32	IP address count
vrrpIP	R(IP)	IP addresses

1.3.1 vrrpStat

The vrrpStat column is to be interpreted as follows:

vrrpStat	Description
0x0001	flow is VRRP
0x0002	invalid version
0x0004	invalid type
0x0008	invalid checksum
0x0010	invalid TTL (should be 255)
0x0020	invalid destination IP (should be 224.0.0.18)
0x0040	—
0x0080	—
0x0100	Virtual Router ID list truncated... increase VRRP_NUM_VRID
0x0200	IP list truncated... increase VRRP_NUM_IP
0x0400	—
0x0800	—
0x1000	—
0x2000	—
0x4000	Packet snapped
0x8000	Malformed packet... covert channel?

1.3.2 vrrpVer

The vrrpVer column is to be interpreted as follows:

vrrpVer	Description
0x04	VRRPv2
0x08	VRRPv3

1.3.3 vrrpType

The vrrpType column is to be interpreted as follows:

vrrpType	Description
0x01	Advertisement

1.3.4 vrrpAuthType

The vrrpAuthType column is to be interpreted as follows:

vrrpAuthType	Description
0x01	No authentication
0x02	Simple text password
0x04	IP Authentication Header

1.4 Monitoring Output

In monitoring mode, the vrrpDecode plugin outputs the following columns:

Column	Type	Description	Flags
vrrp2NPkts	U64	Number of VRRPv2 packets	
vrrp3NPkts	U64	Number of VRRPv3 packets	
vrrpStat	H16	Status	

1.5 Plugin Report Output

The following information is reported:

- Aggregated vrrpStat
- Number of VRRPv2 packets
- Number of VRRPv3 packets

1.6 Additional Output

Non-standard output:

- PREFIX_vrrp.txt: VRRP routing tables

The routing tables contain the following columns:

Name	Description
VirtualRtrID	Virtual router ID
Priority	Priority
SkewTime	Skew time (seconds)
MasterDownInterval	Master down interval (seconds)
AddrCount	Number of addresses
Addresses	List of addresses
Version	VRRP version
Type	Message type
AdverInt	Advertisement interval (seconds)
AuthType	Authentication type
AuthString	Authentication string
Checksum	Stored checksum
CalcChecksum	Calculated checksum
flowInd	Flow index

1.7 Post-Processing

The routing tables can be pruned by using the following command:

```
sort -u PREFIX_vrrp.txt > PREFIX_vrrp_pruned.txt
```