# OPEN NDR

**NETWORK DETECTION & RESPONSE** 

#### **ZEEK® LOGS**

FIELD	TYPE	DESCRIPTION		conn	ctato
ts	time	Timestamp of first packet		-	_state
uid	string	Unique identifier of connection		A summ	narized state for each connection
id	record conn_id	Connection's 4-tuple of endpoints		S0 S1	Connection attempt seen, no reply Connection established, not terminated (0 byte counts
> id.orig_h	addr	IP address of system initiating connection		SF	Normal establish & termination (>0 byte counts)
> id.orig_p	port	Port from which the connection is initiated		REI	Connection attempt rejected
> id.resp_h	addr	IP address of system responding to connection request		S2	Established, Orig attempts close, no reply from Resp
> id.resp_p	port	Port on which connection response is sent		S3	Established, Resp attempts close, no reply from Orig
proto	enum	Transport layer protocol of connection		RSTO	Established, Orig aborted (RST)
service	string	A comma-separated list of confirmed protocols in the connection		RSTR RSTOS0	Established, Resp aborted (RST)  Orig sent SYN then RST; no Resp SYN-ACK
duration	interval	How long connection lasted		RSTRH	Resp sent SYN-ACK then RST; no Orig SYN
orig_bytes	count	Number of payload bytes originator sent		SH	Orig sent SYN then FIN; no Resp SYN-ACK ("half-open")
resp_bytes	count	Number of payload bytes responder sent		SHR	Resp sent SYN-ACK then FIN; no Orig SYN
conn_state	string	Connection state (see conn.log > conn_state)	<u> </u>	отн	No SYN, not closed. Midstream traffic.
local_orig	bool	Value=T if connection originated locally			Partial connection.
local_resp	bool	Value=T if connection responded locally		→ history	
missed_bytes	count	Number of bytes missed (packet loss)		Orig UP	PERCASE, Resp lowercase
history	string	Connection state history (see conn.log > history)	Ш,	S	A <b>S</b> YN without the ACK bit set
orig_pkts	count	Number of packets originator sent		Н	A SYN-ACK (" <b>h</b> andshake")
orig_ip_bytes	count	Number of originator IP bytes		A	A pure <b>A</b> CK
		(via IP total_length header field)		D	Packet with payload (" <b>d</b> ata")
resp_pkts	count	Number of packets responder sent		F	Packet with <b>F</b> IN bit set
resp_ip_bytes	count	Number of responder IP bytes (via IP total_length header field)		R C	Packet with <b>R</b> ST bit set  Packet with a bad <b>c</b> hecksum
tunnel_parents	table	If tunneled, connection UID value of encapsulating parent(s)		I	Inconsistent packets (e.g., SYN & RST)
ip_proto	count	For IP-based connections, this holds the protocol identifier passed in the IP header		G Q	Content <b>G</b> ap  Multi-flag packet (SYN & FIN or SYN + RST)
orig_I2_addr	string	Link-layer address of originator		т	Re <b>t</b> ransmitted packet
resp_I2_addr	string	Link-layer address of responder	1	w	Packet with zero <b>w</b> indow advertisement
vlan	int	Outer VLAN for connection		^	Flipped connection
nner_vlan	int	Inner VLAN for connection		X	Connection analysis partial

#### analyzer.log | Protocol analysis violations

FIELD	TYPE	DESCRIPTION
ts	time	Timestamp when protocol analysis failed
analyzer_kind	string	The kind of analyzer: packet, file, or protocol
analyzer_name	string	The name of the analyzer
uid & id		Underlying connection info > See conn.log
proto	enum	Transport protocol for violation
failure_reason	string	Textual reason for analysis failure
failure_data	string	Data causing failure or violation, if available

#### dhcp.log | DHCP lease activity

FIELD	TYPE	DESCRIPTION
ts	time	Earliest time DHCP message observed
uids	table	Unique identifiers of DHCP connections
client_addr	addr	IP address of client
server_addr	addr	IP address of server handing out lease
client_port	port	Client port at time of server handing out IP
server_port	port	Server port at time of server handing out IP
mac	string	Client's hardware address
host_name	string	Name given by client in Hostname option 12
client_fqdn	string	FQDN given by client in Client FQDN option 81
domain	string	Domain given by server in option 15
requested_addr	addr	IP address requested by client
assigned_addr	addr	IP address assigned by server
lease_time	interval	IP address lease interval
client_message	string	Message with DHCP_DECLINE so client can tell server why address was rejected
server_message	string	Message with DHCP_NAK to let client know why request was rejected
msg_types	vector	DHCP message types seen by transaction
duration	interval	Duration of DHCP session
client_chaddr	string	Hardware address reported by the client
msg_orig	vector	Address originated from msg_types field
client_software	string	Software reported by client in vendor_class
server_software	string	Software reported by server in vendor_class
circuit_id	string	DHCP relay agents that terminate circuits
agent_remote_id	string	Globally unique ID added by relay agents to identify remote host end of circuit
subscriber_id	string	Value independent of physical network connection that provides customer DHCP configuration regardless of physical location

### dns.log | DNS query/response

FIELD	TYPE	DESCRIPTION
ts	time	Earliest timestamp of DNS protocol message
uid & id		Underlying connection info > See conn.log
proto	enum	Transport layer protocol of connection
trans_id	count	16-bit identifier assigned by program that generated DNS query
rtt	interval	Round trip time for query and response
query	string	Domain name subject of DNS query
qclass	count	QCLASS value specifying query class
qclass_name	string	Descriptive name query class
qtype	count	QTYPE value specifying query type
qtype_name	string	Descriptive name for query type
rcode	count	Response code value in DNS response
rcode_name	string	Descriptive name of response code value
AA	bool	Authoritative Answer bit: responding name server is authority for domain name
TC	bool	Truncation bit: message was truncated
RD	bool	Recursion Desired bit: client wants recursive service for query
RA	bool	Recursion Available bit: name server supports recursive queries
Z	count	Reserved field, zero in queries and responses unless using DNSSEC. Represents 3-bit Z field using spec from RFC 1035
answers	vector	Set of resource descriptions in query answer
TTLs	vector	Caching intervals of RRs in answers field
rejected	bool	DNS query was rejected by server
auth	table	Authoritative responses for query
addl	table	Additional responses for query

#### files.log | File analysis results

_	,	•
FIELD	TYPE	DESCRIPTION
ts	time	Time when file first seen
fuid	string	Identifier associated with single file
uid & id		Underlying connection info > See conn.log
source	string	Identification of file data source
depth	count	Value to represent depth of file in relation to source
analyzers	table	Set of analysis types done during file analysis
mime_type	string	Mime type, as determined by Zeek's signatures
filename	string	Filename, if available from file source
duration	interval	Duration file was analyzed for
local_orig	bool	Indicates if data originated from local network
is_orig	bool	If file sent by connection originator or responder
seen_bytes	count	Number of bytes provided to file analysis engine
total_bytes	count	Total number of bytes that should comprise full file
missing_bytes	count	Number of bytes in file stream missed
overflow_bytes	count	Number of bytes in file stream not delivered to stream file analyzers
timedout	bool	If file analysis timed out at least once
parent_fuid	string	Container file ID was extracted from
md5	string	MD5 digest of file contents
sha1	string	SHA1 digest of file contents
sha256	string	SHA256 digest of file contents
extracted	string	Local filename of extracted file
extracted_cutoff	bool	Set to true if file being extracted was cut off so whole file was not logged
extracted_size	count	Number of bytes extracted to disk
entropy	double	Information density of file contents

#### ftp.log | FTP request/reply

FIELD	TYPE	DESCRIPTION
ts	time	Timestamp when command sent
uid & id		Underlying connection info > See conn.log
user	string	Username for current FTP session
password	string	Password for current FTP session
command	string	Command given by client
arg	string	Argument for command, if given
mime_type	string	Sniffed mime type of file
file_size	count	Size of file
reply_code	count	Reply code from server in response to command
reply_msg	string	Reply message from server in response to command
data_channel	record FTP:: Expected Data Channel	Expected FTP data channel
fuid	string	File unique ID

FIELD	TYPE	DESCRIPTION
ts	time	Timestamp for when request happened
uid & id		Underlying connection info > See conn.lo
trans_depth	count	Pipelined depth into connection
method	string	Verb used in HTTP request (GET, POST, e
host	string	Value of HOST header
uri	string	URI used in request
referrer	string	Value of referer header
version	string	Value of version portion of request
user_agent	string	Value of User-Agent header from client
origin	string	Value of Origin header from client
request_body_len	count	Uncompressed data size from client
response_body _len	count	Uncompressed data size from server
status_code	count	Status code returned by server
status_msg	string	Status message returned by server
info_code	count	Last seen 1xx info reply code from serve
info_msg	string	Last seen 1xx info reply message from server
tags	table	Indicators of various attributes discovered
username	string	Username if basic-auth performed for request
password	string	Password if basic-auth performed for request
proxied	table	All headers indicative of proxied request
orig_fuids	vector	Ordered vector of file unique IDs
orig_filenames	vector	Ordered vector of filenames from client
orig_mime_types	vector	Ordered vector of mime types
resp_fuids	vector	Ordered vector of file unique IDs
resp_filenames	vector	Ordered vector of filenames from server
resp_mime_types	vector	Ordered vector of mime types
client_header _names	vector	Vector of HTTP header names sent by cli
server_header _names	vector	Vector of HTTP header names sent by server
cookie_vars	vector	Variable names extracted from all cookie
uri_vars	vector	Variable names from URI

irc.log   IRC communication			
FIELD	TYPE	DESCRIPTION	
ts	time	Timestamp when command seen	
uid & id		Underlying connection info > See conn.lo	
nick	string	Nickname given for connection	
user	string	Username given for connection	
command	string	Command given by client	
value	string	Value for command given by client	
addl	string	Any additional data for command	
dcc_file_name	string	DCC filename requested	
dcc_file_size	count	DCC transfer size as indicated by sender	
dcc_mime_type	string	Sniffed mime type of file	
fuid	string	File unique ID	

# kerberos.log | Kerberos authentication

ici bei e	JJ.10	5 Ref belos authentication
ts	time	Timestamp for when event happened
uid & id		Underlying connection info > See conn.log
request_type	string	Authentication Service (AS) or Ticket Granting Service (TGS)
client	string	Client
service	string	Service
success	bool	Request result
error_msg	string	Error message
from	time	Ticket valid from
till	time	Ticket valid until
cipher	string	Ticket encryption type
forwardable	bool	Forwardable ticket requested
renewable	bool	Renewable ticket requested
client_cert _subject	string	Subject of client certificate, if any
client_cert_fuid	string	File unique ID of client cert, if any
server_cert _subject	string	Subject of server certificate, if any
server_cert_fuid	string	File unique ID of server cert, if any
auth_ticket	string	Ticket hash authorizing request/transaction
new_ticket	string	Ticket hash returned by KDC

#### Idan Ing

Idap.iog   LDAP transactions				
FIELD	TYPE	DESCRIPTION		
ts	time	Timestamp for when event happened		
uid & id		Underlying connection info > See conr		
message_id	int	Numeric message ID		
version	int	LDAP version number		
opcode	string	Normalized message opcode		
result	string	Result code		
diagnostic_msg	string	Result diagnostic		
object	string	Object identifier		
argument	string	Message argument		
mysql.log   MysQL				

··· <b>y</b> = 4 6, 54-				
FIELD	TYPE	DESCRIPTION		
ts	time	Timestamp for when event happened		
uid & id		Underlying connection info > See conn.log		
cmd	string	Command that was issued		
arg	string	Argument issued to command		
success	bool	Server replied command succeeded		
rows	count	Number of affected rows, if any		
response	string	Server message, if any		

#### pe.log | Portable executable

	ts	time	Timestamp for when event happened
	id	string	File id of this portable executable file
	machine	string	Target machine file was compiled for
	compile_ts	time	Time file was created
	os	string	Required operating system
	subsystem	string	Subsystem required to run this file
	is_exe	bool	Is file an executable, or just an object file?
	is_64bit	bool	Is file a 64-bit executable?
	uses_aslr	bool	Does file support Address Space Layout Randomization?
	uses_dep	bool	Does file support Data Execution Prevention?
	uses_code _integrity	bool	Does file enforce code integrity checks?
	uses_seh	bool	Does file use structured exception handing?
	has_import_table	bool	Does file have import table?
	has_export_table	bool	Does file have export table?
	has_cert_table	bool	Does file have attribute certificate table?
	has_debug_data	bool	Does file have debug table?
	section_names	vector	Names of sections, in order

#### quic.log | QUIC connection updates SSI.log | SSL handshakes FIELD TYPE

uid & id

version cipher

curve

server\_name

resumed

last\_alert next\_protocol

established

ssl\_history

ssl\_history

direction flipped

hello verify request

certificate\_verify client\_key\_exchange

**f**inished certificate url

client\_cert\_chain\_ vector

cert\_chain\_fps

subject

client subject

sni\_matches\_cert

request client certificate

client\_ciphers

ssl\_client\_exts

ssl\_server\_exts ticket lifetime

dh\_param\_size

point\_formats

client curves orig\_alpn

versions server\_

supported\_

psk\_key\_

client\_supported\_

exchange\_modes client\_key\_share\_

client\_comp\_

ocsp\_status

valid\_ct\_logs

uid & id

proto

facility

severity

message

FIELD

uid & id

action

FIELD

uid & id

FIELD

uid & id

name

addl

notice

fingerprint

certificate

host\_cert

client\_cert

uid & id

last seen ts

file name

mime\_type

md5

sha256

archive\_path

match\_meta file\_matches

match\_namespace match\_rule

sigalgs hashalgs

server\_key\_share\_ count

valid\_ct\_operators count

Syslog.log | Syslog messages

TYPE

TYPE

TYPE

 $x509.log \mid \textit{x.509 certificate info}$ 

string

Certificate

Subject

Alternative Name

record X509::

Constraints

yara\_corelight.log

YARA-based file analysis

authorities

hello\_request

DESCRIPTION

Time when SSL connection first detected

SSL/TLS cipher suite server chose

Value of Server Name Indicator SSL/TLS

Flag that indicates session was resumed

Next protocol server chose using application laver next protocol extension, if present

Flags if SSL session successfully established

SSL history showing which types of packets

supplemental\_data

end\_of\_early\_data

All fingerprints for the certificates offered

All fingerprints for the certificates offered

Subject of X.509 cert offered by server

Subject of signer of X.509 server cert

Subject of X.509 cert offered by client

Set to true if the hostname sent in the SNI matches the certificate, false if it does not Unset if the client did not send an SNI. List of client certificate CAs accepted by the

Numeric version of the server in the server

Numeric version of the client in the client

Ciphers that were offered by the client for

Suggested ticket lifetime sent in the session

Supported elliptic curve point formats The curves supported by the client

TLS 1.3 Pre-shared key exchange modes

Selected key share group from server hello

Client supported compression methods

OCSP validation result for this connection

Number of different log operators for which

Timestamp when syslog message was seen

Underlying connection info > See conn.log Protocol over which message was seen

Syslog severity for message

Time at which tunnel activity occurred

Timestamp for when event happened

Underlying connection info > See conn.log

VebSocket subprotocol selected by server

Underlying connection info > See conn.log

Additional information accompanying

The source of the weird, often an analyze

Protocols requested by the client

Extensions requested by the client

Type of activity that occurred

Underlying connection info > See conn.log

tunnel.log | Details of encapsulating tunnels

websocket.log | Websocket handshakes

weird.log | Unexpected network/protocol activity

DESCRIPTION

weird, if any

Time when weird occurred

Name of weird that occurred

If weird was turned into a

Current timestamp

record X509:: Basic information about certificate

certificate

the client

DESCRIPTION

File extracted to disk

Mime type

An MD5 hash

A SHA1 hash

A SHA256 hash

Location of archive

record X509:: Subject alternative name extension of

Fingerprint of the certificate

Basic constraints extension of certificate

Indicates if this certificate was a endhost certificate, or sent as part of a

Indicates if this certificate was sent from

Base64 encoded X.509 certificate

Timestamp for when event happened

Protocol of stream where observed

Namespace of YARA rule matched

Tags included in matched YARA rule

Meta included in matched YARA rule

Total number of YARA matches for file

The last time the file was seen

Underlying connection info > See conn.log

DESCRIPTION

Same as in the HTTP log

Key share groups from client hello

ticket handshake by the server

TLS 1.3 supported versions

TLS 1.3 supported version

SSL client extensions

unassigned\_handshake\_type

were received in which order. Client-side letters are capitalized, server-side lowercase.

Underlying connection info > See conn.log

FIELD	TYPE	DESCRIPTION
ts	time	Timestamp for when event happened
uid & id		Underlying connection info > See conn.l
version	string	QUIC version found in INITIAL packet
client_initial_dcid	string	First Destination Connection ID
client_scid	string	Client's Source Connection ID
server_scid	string	Server chosen Connection ID
server_name	string	Server name extracted from SNI extensi
client_protocol	string	First protocol extracted from ALPN
history	string	Experimental QUIC history

# radius.log | RADIUS authentication attempts

FIELD	TYPE	DESCRIPTION
ts	time	Timestamp for when event happened
uid & id		Underlying connection info > See conn.log
username	string	Username, if present
mac	string	MAC address, if present
framed_addr	addr	Address given to network access server, if present
tunnel_client	string	Address (IPv4, IPv6, or FQDN) of initiator end of tunnel, if present
connect_info	string	Connect info, if present
reply_msg	string	Reply message from server challenge
result	string	Successful or failed authentication
ttl	interval	Duration between first request and either Access-Accept message or an error

#### sip.log | SIP analysis

FIELD	TYPE	DESCRIPTION
ts	time	Timestamp when request happened
uid & id		Underlying connection info > See conn.log
trans_depth	count	Pipelined depth into request/response transaction
method	string	Verb used in SIP request (INVITE, etc)
uri	string	URI used in request
date	string	Contents of Date: header from client
request_from	string	Contents of request From: header <sup>1</sup>
request_to	string	Contents of To: header
response_from	string	Contents of response From: header <sup>1</sup>
response_to	string	Contents of response To: header
reply_to	string	Contents of Reply-To: header
call_id	string	Contents of Call-ID: header from client
seq	string	Contents of CSeq: header from client
subject	string	Contents of Subject: header from client
request_path	vector	Client message transmission path, extracte from headers
response_path	vector	Server message transmission path, extracted from headers
user_agent	string	Contents of User-Agent: header from clien
status_code	count	Status code returned by server
status_msg	string	Status message returned by server
warning	string	Contents of Warning: header
request_body_len	count	Contents of Content-Length: header from client
response_body _ len	count	Contents of Content-Length: header from server
content_type	string	Contents of Content-Type: header from server

FIELD	TYPE	DESCRIPTION
ts	time	Timestamp when message was first seen
uid & id		Underlying connection info > See conn.log
rans_depth	count	Transaction depth if there are multiple msg
nelo	string	Contents of Helo header
mailfrom	string	Email addresses found in From header
rcptto	table	Email addresses found in Rcpt header
date	string	Contents of Date header
from	string	Contents of From header
to	table	Contents of To header
сс	table	Contents of CC header
reply_to	string	Contents of ReplyTo header
msg_id	string	Contents of MsgID header
in_reply_to	string	Contents of In-Reply-To header
subject	string	Contents of Subject header
x_originating_ip	addr	Contents of X-Originating-IP header
first_received	string	Contents of first Received header
second_received	string	Contents of second Received header
last_reply	string	Last message server sent to client
path	vector	Message transmission path, from headers
user_agent	string	Value of User-Agent header from client
tls	bool	Indicates connection switched to using TLS
fuids	vector	File unique IDs attached to message
is_webmail	bool	If message sent via webmail

SNMP messages		
FIELD	TYPE	DESCRIPTION
ts	time	Timestamp of first packet of SNMP session
uid & id		Underlying connection info > See conn.log
duration	interval	Amount of time between first packet belonging to SNMP session and latest seen
version	string	Version of SNMP being used
community	string	Community string of first SNMP packet associated with session
get_requests	count	Number of variable bindings in GetRequest GetNextRequest PDUs seen for session
get_bulk_requests	count	Number of variable bindings in GetBulkRequest PDUs seen for session
get_responses	count	Number of variable bindings in Get- Response/Response PDUs seen for session
set_requests	count	Number of variable bindings in SetRequest PDUs seen for session
display_string	string	System description of SNMP responder endpoint
up_since	time	Time at which SNMP responder endpoint claims it's been up since
socks log		

#### SOCKS. IOG | SOCKS proxy requests

	0	1 3 1
FIELD	TYPE	DESCRIPTION
ts	time	Time when proxy connection detected
uid & id		Underlying connection info > See conn.l
version	count	Protocol version of SOCKS
user	string	Username used to request a login to pro
password	string	Password used to request a login to pro
status	string	Server status for attempt at using proxy
request	record SOCKS:: Address	Client requested SOCKS address
request_p	port	Client requested port
bound	record SOCKS:: Address	Server bound address
bound_p	port	Server bound port

#### coftware log

SOILWare.log   Software observed on network		
FIELD	TYPE	DESCRIPTION
ts	time	Time at which software was detected
host	addr	IP address detected running the software
host_p	port	Port on which software is running
software_type	enum	Type of software detected (e.g., HTTP::SERVER)
name	string	Name of software (e.g., Apache)
version	record Software:: Version	Software version
unparsed_version	string	Full, unparsed version string found
url	string	Root URL where software was discovered

#### ssh.log ssh handshakes

uid & id       Underlying connection info > See conn.log         version       count       SSH major version (1 or 2)         auth_success       bool       Authentication result (T=success, F=failure, unset=unknown)         auth_attempts       count       Number of authentication attempts observed unset=unknown)         direction       enum       Direction of connection         client       string       Client's version string         server       string       Server's version string         cipher_alg       string       Encryption algorithm in use         mac_alg       string       Signing (MAC) algorithm in use         compression_alg       string       Compression algorithm in use         kex_alg       string       Key exchange algorithm in use         host_key_alg       string       Server host key's algorithm         host_key       string       Server's key fingerprint         remote_location       Add geographic data related to remote host of connection			
auth_success bool Authentication result (T=success, F=failure unset=unknown)  auth_attempts count Number of authentication attempts observed direction enum Direction of connection client string Client's version string server string Server's version string cipher_alg string Encryption algorithm in use mac_alg string Signing (MAC) algorithm in use compression_alg string Compression algorithm in use kex_alg string Key exchange algorithm in use host_key_alg string Server host key's algorithm host_key string Server's key fingerprint remote_location record add geographic data related to remote host connection	uid & id		Underlying connection info > See conn.log
unset=unknown)  auth_attempts count Number of authentication attempts observed direction enum Direction of connection client string Client's version string server string Server's version string cipher_alg string Encryption algorithm in use mac_alg string Signing (MAC) algorithm in use compression_alg string Compression algorithm in use kex_alg string Key exchange algorithm in use host_key_alg string Server host key's algorithm host_key string Server's key fingerprint remote_location record Add geographic data related to remote host connection	version	count	SSH major version (1 or 2)
direction       enum       Direction of connection         client       string       Client's version string         server       string       Server's version string         cipher_alg       string       Encryption algorithm in use         mac_alg       string       Signing (MAC) algorithm in use         compression_alg       string       Compression algorithm in use         kex_alg       string       Key exchange algorithm in use         host_key_alg       string       Server host key's algorithm         host_key       string       Server's key fingerprint         remote_location       record geo_       Add geographic data related to remote ho of connection	auth_success	bool	
client       string       Client's version string         server       string       Server's version string         cipher_alg       string       Encryption algorithm in use         mac_alg       string       Signing (MAC) algorithm in use         compression_alg       string       Compression algorithm in use         kex_alg       string       Key exchange algorithm in use         host_key_alg       string       Server host key's algorithm         host_key       string       Server's key fingerprint         remote_location       record geo_       Add geographic data related to remote ho of connection	auth_attempts	count	Number of authentication attempts observe
server       string       Server's version string         cipher_alg       string       Encryption algorithm in use         mac_alg       string       Signing (MAC) algorithm in use         compression_alg       string       Compression algorithm in use         kex_alg       string       Key exchange algorithm in use         host_key_alg       string       Server host key's algorithm         host_key       string       Server's key fingerprint         remote_location       record geo_       Add geographic data related to remote ho of connection	direction	enum	Direction of connection
cipher_alg string Encryption algorithm in use  mac_alg string Signing (MAC) algorithm in use  compression_alg string Compression algorithm in use  kex_alg string Key exchange algorithm in use  host_key_alg string Server host key's algorithm  host_key string Server's key fingerprint  remote_location record geo_ Add geographic data related to remote ho of connection	client	string	Client's version string
mac_alg       string       Signing (MAC) algorithm in use         compression_alg       string       Compression algorithm in use         kex_alg       string       Key exchange algorithm in use         host_key_alg       string       Server host key's algorithm         host_key       string       Server's key fingerprint         remote_location       record geo_       Add geographic data related to remote ho of connection	server	string	Server's version string
compression_alg string Compression algorithm in use  kex_alg string Key exchange algorithm in use  host_key_alg string Server host key's algorithm  host_key string Server's key fingerprint  remote_location record Add geographic data related to remote ho of connection	cipher_alg	string	Encryption algorithm in use
kex_alg     string     Key exchange algorithm in use       host_key_alg     string     Server host key's algorithm       host_key     string     Server's key fingerprint       remote_location     record geo_     Add geographic data related to remote ho of connection	mac_alg	string	Signing (MAC) algorithm in use
host_key_alg string Server host key's algorithm host_key string Server's key fingerprint remote_location record Add geographic data related to remote ho of connection	compression_alg	string	Compression algorithm in use
host_key string Server's key fingerprint  remote_location record geo_ of connection	kex_alg	string	Key exchange algorithm in use
remote_location record Add geographic data related to remote ho geo_ of connection	host_key_alg	string	Server host key's algorithm
geo_ of connection	host_key	string	Server's key fingerprint
	remote_location	geo_	

Time when SSH connection began

# MICROSOFT LOGS

FIELD	TYPE	DESCRIPTION
ts	time	Timestamp for when event happened
uid & id		Underlying connection info > See conn.log
rtt	interval	Round trip time from request to response
named_pipe	string	Remote pipe name
endpoint	string	Endpoint name looked up from uuid
operation	string	Operation seen in call
operation string Operation seen in call		

FIELD	TYPE	DESCRIPTION
ts	time	Timestamp for when event happened
uid & id		Underlying connection info > See conn.log
ısername	string	Username given by client
ostname	string	Hostname given by client
lomainname	string	Domainname given by client
erver_nb computer_name	string	NetBIOS name given by server in a CHALLENGE
erver_dns computer_name	string	DNS name given by server in a CHALLENG
server_tree_name	string	Tree name given by server in a CHALLENG
uccess	bool	Indicates whether or not authentication was successful
rdn log.		

#### rap.log | Remote Desktop Protocol (RDP)

1 0		•
FIELD	TYPE	DESCRIPTION
ts	time	Timestamp for when event happened
uid & id		Underlying connection info > See conn.log
cookie	string	Cookie value used by client machine
result	string	Status result for connection
security_protocol	string	Security protocol chosen by server
client_channels	vector	Channels requested by the client
keyboard_layout	string	Keyboard layout (language) of client machine
client_build	string	RDP client version used by client machine
client_name	string	Name of client machine
client_dig_product _id	string	Product ID of client machine
desktop_width	count	Desktop width of client machine
desktop_height	count	Desktop height of client machine
requested _color_depth	string	Color depth requested by client in high_color_depth field
cert_type	string	If connection is encrypted with native RDP encryption, type of cert being used
cert_count	count	Number of certs seen
cert_permanent	bool	Indicates if provided certificate or certificate chain is permanent or temporary
encryption_level	string	Encryption level of connection
encryption _method	string	Encryption method of connection
ssl	bool	Flag connection if seen over SSL

#### smb files.log | Details on SMB files

		56   Details off Sivib files
FIELD	TYPE	DESCRIPTION
ts	time	Time when file was first discovered
uid & id		Underlying connection info > See conn.log
fuid	string	Unique ID of file
action	enum	Action this log record represents
path	string	Path pulled from tree that file was transferred to or from
name	string	Filename if one was seen
size	count	Total size of file
prev_name	string	If rename action was seen, this will be file's previous name
times	record SMB:: MAC- Times	Last time file was modified

smb_mapping.log   SMB mappings		
FIELD	TYPE	DESCRIPTION
ts	time	Time when tree was mapped
uid & id		Underlying connection info > See conn.log
path	string	Name of tree path
service	string	Type of resource of tree (disk share, printer share, named pipe, etc)
native_file_system	string	File system of tree
share_type	string	If this is SMB2, share type will be included

### **ALERT LOGS**

intel.log   Intelligence data matches					
FIELD	TYPE	DESCRIPTION			
ts	time	Timestamp when data discovered			
uid & id		Underlying connection info > See conn.log			
seen	record Intel::- Seen	Where data was seen			
matched	set [enum]	Which indicator types matched			
sources	set [string]	Sources which supplied data that resulted in match			
fuid	string	If file was associated with this intelligence hit, this is uid for file			
file_mime_type	string	Mime type if intelligence hit is related to file			
file_desc	string	Files 'described' to give more context			
cif	record Intel::CIF	CIF			

#### notice.log Interesting events and activity

TYPE DESCRIPTION

ts	time	Timestamp for when notice occurred
uid & id		Underlying connection info > See conn.log
fuid	string	File unique ID if notice related to a file
file_mime_type	string	Mime type if notice related to a file
file_desc	string	Files 'described' to give more context
proto	enum	Transport protocol
note	enum	Notice::Type of notice
msg	string	Human readable message for notice
sub	string	Human readable sub-message
src	addr	Source address, if no conn_id
dst	addr	Destination address
p	port	Associated port, if no conn_id
n	count	Associated count or status code
peer_descr	string	Text description for peer that raised notic including name, host address and port
actions	set[e- num]	Actions applied to this notice
email_dest	set	The email address(es) where to send this notice
suppress_for	interval	Field indicates length of time that unique notice should be suppressed
remote_location	record geo_loca- tion	If GeoIP support is built in, notices have geographic information attached to them
dropped	bool	Indicate if \$src IP address was dropped and denied network access



FIELD

uid & id

Corelight's Suricata® and Zeek logs link alerts and evidence to **SURICATA** accelerate incident response

Timestamp of the Suricata alert

Underlying connection info > See conn.log

The Suricata-assigned transaction ID in

which the alert occurred

#### suricata\_corelight.log

alert.category	string	Type of attack being detected
alert.metadata	vector	All metadata keywords from signature in "name:value" format. Conveys info such as modification time, deployment location, etc.
alert.rev	integer	Revision number of signature
alert.severity	count	Seriousness of attack, with 1 being most severe
alert.signature	string	Human-readable description of the attack type
alert.signature_id	count	Numeric signature identifier
community_id	string	The community ID generated by Suricata, if community ID is configured
flow_id	count	The Suricata-assigned flow ID in which the alert occurred
metadata	vector of strings	Application layer metadata, if any, associated with the alert (for example, flowbits)
pcap_cnt	count	The PCAP record count, present when the packet that generated the alert origi- nated from a PCAP field
retries	count	The number of retries performed to write this log entry. Used in diagnostic sessions.
service	string	The application protocol
suri_id	string	The unique ID for the log record

# **CORELIGHT COLLECTIONS**

Corelight delivers a comprehensive suite of network security analytics that help organizations identify more than 75 adversarial TTPs across the MITRE ATT&CK® spectrum. These detections reveal known and unknown threats via hundreds of unique insights and alerts using machine learning, behavioral analysis, and signature-based approaches. The following Corelight Collections focus on our behavioral and statistical analyses and are organized by focus areas:

tx\_id

count



**PACKAGE** 

### **Entity Collection**

The Corelight Entity Collection gives security teams powerful identification capabilities around applications, devices, services, certs, hosts, and more to help them comprehensively understand and defend their environment.

Known Entities	Extract, aggregate, summarize and log individual network entities, including hosts, devices, names, users, and domains
Local Subnets	Identify local IPv4/v6 space subnets, both public and private
Application Identification	Identify over 150 applications, including BitTorrent, DropBox, Facebook, TeamViewer, WhatsApp, and many more



### C2 Collection

**DESCRIPTION** 

Identify command and control activity with over 50 unique insights

**PACKAGE** Detect known families of malware that conduct C2 communications over HTTP, such as Empire, Metasploit, and Cobalt Strike HTTP C2 DNS tunneling Detect DNS tunneling behavior as well as the presence of specific tunneling tools such as lodine ICMP tunneling Detect ICMP tunneling behavior as well as the presence of specific tunneling tools such as ICMP Shell Domain generation Detect C2 traffic based on DNS activity from malware using domain generation algorithms algorithms (DGAs) Detect C2 activity from Metasploit's Meterpreter shell across HTTP and generic TCP/UDP traffic Meterpreter



# **Encrypted Traffic Collection**

Combining observable elements like timestamps and packet sizes with known behavior of protocols, our encrypted traffic analytics offer a practical approach to visibility that lets you see and act on what matters.

PACKAGE	DESCRIPTION
Cert Hygiene	Identify risk indicators in your TLS traffic, such as newly minted certificates, expiring certificates, and the use of weak encryption keys
Encrypted DNS Server Detection	Detect DNS-over-HTTPS traffic
Encryption Detection	Track and log information related to unknown or unusual encryption methods
RDP Inference	Capture information and inferences about encrypted and unencrypted RDP connections through client, authentication, and behavioral inferences
SSH Inference	Generate inferences about SSH connections, such as keystrokes, file transfers, or authentication attempts
SSH Stepping Stones	Detect a series of intermediary hosts connected via SSH
VPN Insights	Identify and log VPN traffic, including over 300 unique protocols, and providers

For more info on Corelight's analytics and detections, visit corelight.com/products/analytics.

### **COMMUNITY ID**

When processing flow data from a variety of monitoring applications (such as Zeek and Suricata), it's often desirable to pivot quickly from one dataset to another. While the required flow tuple information is usually present in the datasets, the details of such "joins" can be tedious, particularly in corner cases. The "Community ID" spec for flow hashing standardizes the production of a string identifier representing a given network flow to reduce pivots to simple string comparisons. Learn more at github.com/corelight/community-id-spec.