

## OPENIDR

**NETWORK DETECTION & RESPONSE** 

## **ZEEK® LOGS**

FIELD	TYPE	DESCRIPTION
ts	time	Timestamp of first packet
uid	string	Unique identifier of connection
id	record conn_id	Connection's 4-tuple of endpoints
> id.orig_h	addr	IP address of system initiating connection
> id.orig_p	port	Port from which the connection is initiated
> id.resp_h	addr	IP address of system responding to connection request
> id.resp_p	port	Port on which connection response is sent
proto	enum	Transport layer protocol of connection
service	string	Application protocol ID sent over connection
duration	interval	How long connection lasted
orig_bytes	count	Number of payload bytes originator sent
resp_bytes	count	Number of payload bytes responder sent
conn_state	string	Connection state (see conn.log > conn_state)
local_orig	bool	Value=T if connection originated locally
local_resp	bool	Value=T if connection responded locally
missed_bytes	count	Number of bytes missed (packet loss)
history	string	Connection state history (see conn.log > history)
orig_pkts	count	Number of packets originator sent
orig_ip_bytes	count	Number of originator IP bytes (via IP total_length header field)
resp_pkts	count	Number of packets responder sent
resp_ip_bytes	count	Number of responder IP bytes (via IP total_length header field)
tunnel_parents	table	If tunneled, connection UID value of encapsulating parent(s)
orig_l2_addr	string	Link-layer address of originator
resp_l2_addr	string	Link-layer address of responder
vlan	int	Outer VLAN for connection

Inner VLAN for connection

Underlying connection info > See conn.log

Transport layer protocol of connection 16-bit identifier assigned by program that

Reserved field, usually zero in queries

Set of resource descriptions in query answer

Caching intervals of RRs in answers field

DNS query was rejected by server

supports recursive queries

generated DNS query

dhcp.log I DHCP lease activity

string

string

string

dns.log | DNS query/response details

TYPE

enum

count

string

bool

bool

server\_addr

host name

client\_fqdn

requested\_addr

assigned\_addr

server\_message

lease\_time

duration

msg\_orig

circuit id

subscriber id

FIELD

uid & id

trans id

qtype\_name

rcode\_name

client\_chaddr

client\_software

#### conn\_state A summarized state for each connection Connection attempt seen, no reply

Connection established, not terminated (0 byte counts) Normal establish & termination (>0 byte counts) Established, Orig attempts close, no reply from Resp Established, Resp attempts close, no reply from Orig Established, Orig aborted (RST) Established, Resp aborted (RST) Orig sent SYN then RST; no Resp SYN-ACK Resp sent SYN-ACK then RST; no Orig SYN Orig sent SYN then FIN; no Resp SYN-ACK ("half-open") Resp sent SYN-ACK then FIN; no Orig SYN No SYN, not closed. Midstream traffic. Partial connection.

## history

Orig UPPERCASE, Resp lowercase A SYN without the ACK bit set A SYN-ACK ("handshake") A pure **A**CK Packet with payload ("data") Packet with FIN bit set Packet with RST bit set

#### result Successful or failed authentication Duration between first request and either Access-Accept message or an error

uid & id

username

framed\_addr

tunnel\_client

connect\_info

reply\_msg

radius.log

RADIUS authentication attempts

Timestamp for when event happened

MAC address, if present

end of tunnel, if present

Underlying connection info > See conn.log

Address given to network access server,

Address (IPv4, IPv6, or FQDN) of initiator

Reply message from server challenge

FIELD	TYPE	DESCRIPTION
ts	time	Timestamp when request happened
uid & id		Underlying connection info > See conn.lo
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, extract 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

#### http

DESCRIPTION	FIELD	TYPE	DESCRIPTION
Earliest time DHCP message observed	ts	time	Timestamp for when request happene
Unique identifiers of DHCP connections	uid & id		Underlying connection info > See conn
IP address of client	trans_depth	count	Pipelined depth into connection
IP address of server handing out lease	method	string	Verb used in HTTP request (GET, POST
Client port at time of server handing out IP	host	string	Value of HOST header
Server port at time of server handing out IP	uri	string	URI used in request
Client's hardware address	referrer	string	Value of referer header
Name given by client in Hostname option 12	version	string	Value of version portion of request
FQDN given by client in Client FQDN option 81	user_agent	string	Value of User-Agent header from clien
Domain given by server in option 15	origin	string	Value of Origin header from client
IP address requested by client	request_body_len	count	Uncompressed data size from client
IP address assigned by server	response_body	count	Uncompressed data size from server
IP address lease interval	_len		
Message with DHCP_DECLINE so client can	status_code	count	Status code returned by server
tell server why address was rejected	status_msg	string	Status message returned by server
Message with DHCP_NAK to let client know why request was rejected	info_code	count	Last seen 1xx info reply code from ser
DHCP message types seen by transaction	info_msg	string	Last seen 1xx info reply message from server
Duration of DHCP session	tags	table	Indicators of various attributes discove
Hardware address reported by the client	username	string	Username if basic-auth performed for request
Address originated from msg_types field	password	string	Password if basic-auth performed for
Software reported by client in vendor_class	passwora	301116	request
Software reported by server in vendor_class	proxied	table	All headers indicative of proxied reque
DHCP relay agents that terminate circuits	orig_fuids	vector	Ordered vector of file unique IDs
Globally unique ID added by relay agents to identify remote host end of circuit	orig_filenames	vector	Ordered vector of filenames from clier
Value independent of physical network	orig_mime_types	vector	Ordered vector of mime types
connection that provides customer DHCP	resp_fuids	vector	Ordered vector of file unique IDs
configuration regardless of physical location	resp_filenames	vector	Ordered vector of filenames from serv
	resp_mime_types	vector	Ordered vector of mime types
query/response details	client_header _names	vector	Vector of HTTP header names sent by
DESCRIPTION	server_header	vector	Vector of HTTP header names sent
Earliest timestamp of DNS protocol message	_names		by server

Round trip time for query and response	ii c.iog	IKC COII	imunication details
Domain name subject of DNS query	FIELD	TYPE	DESCRIPTION
QCLASS value specifying query class	ts	time	Timestamp when command seen
Descriptive name query class	uid & id		Underlying connection info > See conn.log
QTYPE value specifying query type	nick	string	Nickname given for connection
Descriptive name for query type	user	string	Username given for connection
Response code value in DNS response	command	string	Command given by client
Descriptive name of response code value	value	string	Value for command given by client
Authoritative Answer bit: responding name	addl	string	Any additional data for command
server is authority for domain name	dcc_file_name	string	DCC filename requested
Truncation bit: message was truncated	dcc_file_size	count	DCC transfer size as indicated by sender
Recursion Desired bit: client wants recursive	dcc_mime_type	string	Sniffed mime type of file
service for query	fuid	string	File unique ID
Recursion Available bit: name server		'6	and the second s

#### Authoritative responses for query Additional responses for query

S. P. S. T. Syriamic protocor actection familiares			
FIELD	TYPE	DESCRIPTION	
ts	time	Timestamp when protocol analysis failed	
uid & id		Underlying connection info > See conn.log	
proto	enum	Transport protocol for violation	
analyzer	string	Analyzer that generated violation	
failure_reason	string	Textual reason for analysis failure	
packet_segment	string	Payload chunk that most likely resulted in	

dpd.log | Dynamic protocol detection failures

## 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

FILLD	IIFE	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

ts	time	Timestamp for when request happened
uid & id		Underlying connection info > See conn.log
trans_depth	count	Pipelined depth into connection
method	string	Verb used in HTTP request (GET, POST, etc.
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 server
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 clien
server_header _names	vector	Vector of HTTP header names sent by server
cookie_vars	vector	Variable names extracted from all cookies
uri vars	vector	Variable names from URI

#### irc log Lipc communication details

	i iiic coii	initialiteation actails
FIELD	TYPE	DESCRIPTION
ts	time	Timestamp when command seen
uid & id		Underlying connection info > See conn.log
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

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

mysql.log   MysQL			
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

1 0		
FIELD	TYPE	DESCRIPTION
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 of string	Names of sections, in order

	Packet with	<b>R</b> ST bit set	response_mom	3011118	contents of response from neader
	Packet with	a bad <b>c</b> hecksum	response_to	string	Contents of response To: header
	Inconsistent	t packets (e.g., SYN & RST)	reply_to	string	Contents of Reply-To: header
	Content <b>G</b> ap			string	Contents of Call-ID: header from client
	Multi-flag pa	acket (SYN & FIN or SYN + RST)	seq	string	Contents of CSeq: header from client
	Re <b>t</b> ransmitt	ed packet	subject	string	Contents of Subject: header from client
		zero <b>w</b> indow advertisement	request_path	vector	Client message transmission path, extracted from headers
_	Flipped con	nection	response_path	vector	Server message transmission path, extracted from headers
o lo	$\sigma$ $_{\text{I}}$	P request/reply details	user_agent	string	Contents of User-Agent: header from client
J., O			status_code	count	Status code returned by server
	TYPE	DESCRIPTION	status_msg	string	Status message returned by server
	time	Timestamp for when request happened	warning	string	Contents of Warning: header
epth	count	Underlying connection info > See conn.log  Pipelined depth into connection	request_body_len	count	Contents of Content-Length: header from client
	string	Verb used in HTTP request (GET, POST, etc.)	response_body _ len	count	Contents of Content-Length: header from server
	string	Value of HOST header	content_type	string	Contents of Content-Type: header from
	string	URI used in request	-21	o o	server
	string	Value of referer header	¹ The tag= value usu	ally appended	d to the sender is stripped off and not logged.
	string	Value of version portion of request			
ent	string	Value of User-Agent header from client	smtp.lc	)g   <sub>SM</sub>	TP transactions
	string	Value of Origin header from client			
_body_len	count	Uncompressed data size from client	FIELD	TYPE	DESCRIPTION
e_body	count	Uncompressed data size from server	ts	time	Timestamp when message was first seen
		Chahara and a mahammad hara an man	uid & id		Underlying connection info > See conn.log
ode 	count	Status code returned by server	trans_depth	count	Transaction depth if there are multiple msgs
nsg	string	Status message returned by server	helo	string	Contents of Helo header
е	count	Last seen 1xx info reply code from server	mailfrom	string	Email addresses found in From header
g	string	Last seen 1xx info reply message from server	rcptto	table	Email addresses found in Rcpt header
	table	Indicators of various attributes discovered	date	string	Contents of Date header
ne	string	Username if basic-auth performed for	from	string	Contents of From header

cc

reply\_to

msg\_id

in\_reply\_to

x\_originating\_ip

second\_received

first\_received

last\_reply

user\_agent

#### File unique IDs attached to message

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

Contents of To header

Contents of CC header

Contents of ReplyTo header

Contents of MsgID header

Contents of Subject header

Contents of In-Reply-To header

Contents of X-Originating-IP header

Contents of second Received heade

Last message server sent to client

Message transmission path, from headers Value of User-Agent header from client

Indicates connection switched to using TLS

Contents of first Received header

## SOCKS.log | SOCKS proxy requests

FIELD	TYPE	DESCRIPTION
ts	time	Time when proxy connection detected
uid & id		Underlying connection info > See conn.log
version	count	Protocol version of SOCKS
user	string	Username used to request a login to proxy
password	string	Password used to request a login to proxy
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

## software.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

O		
FIELD	TYPE	DESCRIPTION
ts	time	Time when SSH connection began
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
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_ location	Add geographic data related to remote hos of connection

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## MICROSOFT LOGS

551.10g	SSL hai	ndshakes	ucc
FIELD	TYPE	DESCRIPTION	FIELD
ts	time	Time when SSL connection first detected	ts
uid & id		Underlying connection info > See conn.log	uid & id
version	string	SSL/TLS version server chose	rtt
cipher	string	SSL/TLS cipher suite server chose	named_
curve	string	Elliptic curve server chose when using ECDH/ECDHE	endpoin
server_name	string	Value of Server Name Indicator SSL/TLS extension	operatio
resumed	bool	Flag that indicates session was resumed	ntlr
last_alert	string	Last alert seen during connection	
next_protocol	string	Next protocol server chose using application	FIELD
		layer next protocol extension, if present	ts
established	bool	Flags if SSL session successfully established	uid & id
ssl_history	string	SSL history showing which types of packets	usernan
		were received in which order. Client-side letters are capitalized, server-side lowercase.	hostnam
		ietters are capitalized, server-side lowercase.	domainr

SSI_	_history		
^ H C S	direction flipped hello_request client_hello server_hello hello_verify_request	U A Z I B	certificate_status supplemental_data unassigned_handshake_type change_cipher_spec heartbeat
T X	NewSession <b>T</b> icket certificate	D E	application_ <b>d</b> ata end_of_ <b>e</b> arly_data
K R N Y G	server_key_exchange certificate_request server_hello_done certificate_verify client_key_exchange finished	O P M J L	encrypted_extensions key_update message_hash hello_retry_request alert unknown_content_type
W	certificate_url		
cort c	hain for vector	All fingerpr	into for the cortificator offered

cert_chain_fps	vector	All fingerprints for the certificates offered by the server
client_cert_chain_ fps	vector	All fingerprints for the certificates offered by the client
subject	string	Subject of X.509 cert offered by server
issuer	string	Subject of signer of X.509 server cert
client_subject	string	Subject of X.509 cert offered by client
client_issuer	string	Subject of signer of client cert
sni_matches_cert	bool	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.

		matches the certificate, false if it does not. Unset if the client did not send an SNI.
request_client_ certificate_ authorities	vector	List of client certificate CAs accepted by the server
server_version	count	Numeric version of the server in the server hello
client_version	count	Numeric version of the client in the client hello
client_ciphers	vector	Ciphers that were offered by the client for the connection
ssl_client_exts	vector	SSL client extensions
ssl_server_exts	vector	SSL server extensions
ticket_lifetime_ hint	count	Suggested ticket lifetime sent in the session ticket handshake by the server
dh_param_size	count	The diffie helman parameter size, when using DH

		danig bit
point_formats	vector	Supported elliptic curve point formats
client_curves	vector	The curves supported by the client
orig_alpn	vector	Application layer protocol negotiation extension sent by the client
client_supported_ versions	vector	TLS 1.3 supported versions
server_ supported_ version	count	TLS 1.3 supported version
psk_key_ exchange_modes	vector	TLS 1.3 Pre-shared key exchange modes
client_key_share_ groups	vector	Key share groups from client hello
server_key_share_ group	count	Selected key share group from server hello
client_comp_ methods	vector	Client supported compression methods
sigalgs	vector	Client supported signature algorithms

Client supported hash algorithms

Certificate validation result for this connection

Number of different logs for which valid

#### SCTs encountered in connection Number of different log operators for which

string

validation\_status

ocsp\_status

valid\_ct\_logs

FIELD

uid & id

tunnel\_type

Syslog.log   Syslog messages			
FIELD	TYPE	DESCRIPTION	
ts	time	Timestamp when syslog message was seen	
uid & id		Underlying connection info > See conn.log	
proto	enum	Protocol over which message was seen	
facility	string	Syslog facility for message	
severity	string	Syslog severity for message	
message	string	Plain text message	
4			

#### tunnel.log | Details of encapsulating tunnels

Tunnel type

DESCRIPTION

Time at which tunnel activity occurred

Underlying connection info > See conn.log

TYPE

enum

action	enum	Type of activity that occurred		
weird.log   Unexpected network/protocol activity				
FIELD	TYPE	DESCRIPTION		
ts	time	Time when weird occurred		
uid & id		Underlying connection info > See conn.log		
name	string	Name of weird that occurred		
addl	string	Additional information accompanying weird, if any		
notice	bool	If weird was turned into a notice		
peer	string	Peer that originated weird		
source	string	The source of the weird often an analyzer		

#### x509.log | x.509 certificate info

	O	
FIELD	TYPE	DESCRIPTION
ts	time	Current timestamp
fingerprint	string	Fingerprint of the certificate
certificate	record X509:: Certificate	Basic information about certificate
san	record X509:: Subject Alternative Name	Subject alternative name extension of certificate
hasic constraints	record Y500	Basic constraints extension of certificate

## Constraints

host_cert	bool	Indicates if this certificate was a end- host certificate, or sent as part of a chain
client_cert	bool	Indicates if this certificate was sent from the client
cert	string	Base64 encoded X.509 certificate

# corelight How to threat hunt with

## **ALERT LOGS**

dce_rpc.log   Details on DCE/RPC messages intel.log   Intellig				llige	
FIELD	TYPE	DESCRIPTION	FIELD	TYPE	D
ts	time	Timestamp for when event happened	ts	time	Tir
uid & id		Underlying connection info > See conn.log	uid & id		Un
rtt	interval	Round trip time from request to response	seen record Intel::- Seen		Wł
named_pipe	string	Remote pipe name			
endpoint	string	Endpoint name looked up from uuid			\ A / l-
operation	string	Operation seen in call	matched	set [enum]	Wł
ntlm.log   NT LAN Manager (NTLM)		sources	set [string]	So in	
I ICII I I I I O S   INT LAN Manager (INTLIM)			£:1	-41	15.5

•	0	<i>5</i>
FIELD	TYPE	DESCRIPTION
ts	time	Timestamp for when event happened
uid & id		Underlying connection info > See conn.log
username	string	Username given by client
hostname	string	Hostname given by client
domainname	string	Domainname given by client
server_nb _computer_name	string	NetBIOS name given by server in a CHALLENGE
server_dns _computer_name	string	DNS name given by server in a CHALLENGE
server_tree_name	string	Tree name given by server in a CHALLENGE
success	bool	Indicates whether or not authentication was successful

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

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_fil	es.lc	g   Details on SMB files
	FIELD	TYPE	DESCRIPTION
	ts	time	Time when file was first discovered
	uid & id		Underlying connection info > See conn.log
n	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

#### cmh manning lac

smp_m	app	Ing.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

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

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 notice, 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



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

#### suricata\_corelight.log

FIELD	TYPE	DESCRIPTION
ts	time	Timestamp of the Suricata alert
uid & id		Underlying connection info > See conn.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 mossevere
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 orig 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
tx_id	count	The Suricata-assigned transaction ID in

which the alert occurred

## **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:



**Known Entities** 

**Local Subnets** 

#### **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. **PACKAGE** DESCRIPTION

Extract, aggregate, summarize and log individual network entities, including hosts, devices, names, users, and domains

Application Identification	Identify over 150 applications, including BitTorrent, DropBox, Facebook, TeamViewer, WhatsApp, and many more
	C2 Collection

Identify local IPv4/v6 space subnets, both public and private

Identify command and control activity with over 50 unique insights and detections.

PACKAGE	DESCRIPTION
HTTP C2	Detect known families of malware that conduct C2 communications over HTTP, such as Empire, Metasploit, and Cobalt Strike
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 algorithms (DGAs)	Detect C2 traffic based on DNS activity from malware using domain generation algorithms
Meterpreter	Detect C2 activity from Metasploit's Meterpreter shell across HTTP and generic TCP/UDP traffic



#### **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.

## DISRUPT ATTACKS WITH NETWORK EVIDENCE