RMC ECE Computer Security Lab (CSL) – zeek logs v0.1





Field	Туре	Description			
ts	time	Timestamp			
uid	string	Unique ID of Connection			
id.orig_h	addr	Originating endpoint's IP address (AKA ORIG)			
id.orig_p	port	Originating endpoint's TCP/UDP port (or ICMP code)			
id.resp_h	addr	Responding endpoint's IP address (AKA RESP)			
id.resp_p	port	Responding endpoint's TCP/UDP port (or ICMP code)			
proto	protocol	Transport layer protocol of connection			
service	string	Dynamically detected application protocol, if any			
duration	interval	Time of last packet seen – time of first packet seen			
orig_bytes	count	Originator payload bytes; from sequence numbers if TCP			
resp_bytes	count	Responder payload bytes; from sequence numbers if TCP			
conn_state	string	Connection state (see conn.log:conn_state table)			
local_orig	bool	If conn originated locally T; if remotely F.			
local_resp	bool	If Site::local_nets empty, always unset.			
missed_bytes	count	Number of missing bytes in content gaps			
history	string	Connection state history (see conn.log:history table)			
orig_pkts	count	Number of ORIG packets			
orig_ip_bytes	count	Number of ORIG IP bytes (via IP total_length header field)			
resp_pkts	count	Number of RESP packets			
resp_ip_bytes	count	Number of RESP IP bytes (via IP total_length header field)			
tunnel_parents	string	If tunneled, connection UID of encapsulating parent (s)			
orig_cc	string	ORIG GeoIP Country Code			
resp_cc	string	RESP GeoIP Country Cod			
community_id	string	Correlation ID with suricata alerts			

app_stats.log

Field	Туре	Description	
ts	time	Measurement timestamp	
ts_delta	interval	Time difference from previous measurement	
peer	string	Name of application	
gaps	count	Number of unique hosts that used app	
acks	count	Number of visits to app	
percent_lost	count	Total bytes transferred to/from app	

reporter.log

Field	Туре	Description	
ts	time	Time when event was generated	
level	String	Severity	
message	String	Message text	
location	String	If avail, script location where event occurred	

known_services.log

Field	Туре	Description	
ts	time	The time at which the service was detected	
host	addr	The host on which the service is running	
port_num	port	The port number on which service is running	
port_proto	proto	The transport-layer protocol used by the svc	
service	string	A protocol set, matching svc's payload(s)	

conn.log: conn_state

Field	Туре
S0	Connection attempt seen, no reply
S1	Connection established, not terminated (0 byte count)
SF	Normal establishment and termination (>0 byte count
REJ	Connection attempt rejected
S2	Established, ORIG attempts close, no RESP reply
S3	Established, RESP attempts close, no ORIG reply
RSTO	Connection established, ORIG aborted (RST)
RSTR	RESP sent a RST.
RSTOS0	ORIG sent SYN followed by RST, no RESP SYN-ACK
RSTRH	RESP sent SYN-ACK then RST; no ORIG SYN
SH	ORIG sent SYN then FIN, no RESP SYN-ACK (half-open)
SHR	RESP sent SYN-ACK then FIN; no ORIG SYN
ОТН	No SYN seen, just midstream traffic

conn.log: history

Field	Туре
Α	Pure ACK
С	Packet with a bad checksum (applies to UDP too)
D	Packet with payload ("data")
F	Packet with FIN bit set
G	A content gap
Н	A SYN+ACK ("handshake")
- 1	Inconsistent packet (e.g. FIN+RST bits set)
Q	Multi-flag packet (SYN+FIN or SYN+RST bits set)
R	Packet with RST bit set
S	A SYN w/o the ACK bit set
Т	Packet with retransmitted payload
W	Packet with a zero window advertisement
٨	Connection direction was flipped by Zeek's heuristic

known_hosts.log

Field	Туре	Description	
ts	time	Time when event was generated	
host	addr	Host IP address	

weird.log

Field	Туре	Description		
ts	time	The time at which the service was detected		
uid	string	Connection ID		
id	conn_id	4-tuple for the connection (see conn.log)		
name	string	The name of the weird that occurred		
addl	string	Additional info about the weird, if any		
notice	bool	Indicate if this weird was also a notice		
peer	string	The peer that generated this weird		
source	string	Analyzer that detected the weird		

dns.log

Туре	Description			
time	The earliest time of the DNS msg			
string	Unique id of the connection			
addr	Originating endpoint's IP address			
port	Originating endpoint's TCP/UDP port (or ICMP code)			
addr	Responding endpoint's IP address			
port	Responding endpoint's TCP/UDP port (or ICMP code)			
protocol	Protocol of DNS transaction			
count	16 bit identifier assigned by DNS client; responses match			
interval	Round trip time for the query and response			
string	Domain name subject of the query			
string	Value specifying the query class			
string	Descriptive name of the query class			
count	Value specifying the query type			
string	Name of the query type (e.g. A, AAAA, PTR)			
count	Response code value in the DNS response			
string	Descriptive name of the response code (e.g. NOERROR, NXDOMAIN)			
bool	Authoritative Answer. T = server is authoritative for query			
bool	Truncation. T = message was truncated			
bool	Recursion Desired. T = request recursive lookup of query			
bool	Recursion Available. T = server supports recursive queries			
count	Reserved field, should be 0 in queries and responses			
vector	List of resource descriptions in answer to the query			
vector	Caching intervals of the answers			
bool	Whether the DNS query was rejected by the server			
	Type time string addr port addr port protocol count interval string string count string count string bool bool bool count count vector			

ftp.log

Field	Type	Description		
ts	time	Command timestamp		
uid	string	Unique id of the connection		
id_orig_h	addr	Originating endpoint's IP address		
id_orig_p	port	Originating endpoint's TCP port		
id_resp_h	addr	Responding endpoint's IP address		
id_resp_p	port	Responding endpoint's TCP port		
user	string	Username for FTP session		
password	string	Password for FTP session		
command	string	Command issued by the client		
arg	string	Command argument, if present		
mime_type	string	Value specifying the query class		
file_size	count	Libmagic file type, if transferred		
reply_code	count	Reply code from svr in response to cmd		
reply_msg	string	Reply msg from svr in response to cmd		
data_channel_passive	bool	Passive or active mode		
data_channel_orig_h addr		Client IP address		
data_channel_resp_h addr		Server address for data channel		
data_channel_resp_p port		Server port for data channel		
fuid	string	Unique file ID		

dns_entropy.log

Field Type		Description	
ts	time	The earliest time of the DNS msg	
uid	string	Unique id of the connection	
id.orig_h	addr	Originating endpoint's IP address	
id.orig_p	port	Originating endpoint's TCP/UDP port	
id.resp_h	addr	Responding endpoint's IP address	
id.resp_p	port	Responding endpoint's TCP/UDP port	
proto	protocol	Transport layer protocol of connection	
query	string	Domain name subject of the query	
query_entropy	count	Entropy value of the query	
qtype	count	Value specifying the query type	
qtype_name	string	Name of the query type (e.g. A, AAAA, PTR)	
rcode	count	Response code value in the DNS response	
rcode_name	string	Descriptive name of the response code (e.g. NOERROR, NXDOMAIN)	
ans	string	List of answers to the query	
ans_entropy	count	Entropy value of the response	
high_answer_entropy count		Highest entropy value in the response	

ssh.log

Field	Type	Description
ts	time	Time shen SSH connection detected
uid	string	string
id.orig_h	addr	Originating endpoint's IP address
id.orig_p	port	Originating endpoint's TCP port
id.resp_h	addr	Responding endpoint's IP address
id.resp_p	port	Responding endpoint's TCP port
version	count	Major SSH verison
auth_success	bool	Authentication result
auth_attempts	count	The number of attempts observed
direction	direction	Direction of the connection
client	string	The client's version string
server	string	The server's version string
cipher_alg	string	The encryption algorithm in use
mac_alg	string	The signing (MAC) algorithm in use
compression_alg	string	The compression algorithm in use
kex_alg	string	The key exchange algorithm in use
host_key_alg	string	The server host key's algorithm
host_key	string	The server's key fingerprint
remote_location.country_ code	geo-location	Geo Data
remote_location.region	geo-location	Geo Data
remote_location.city	geo-location	Geo Data
remote_location.latitude	geo-location	Geo Data
remote_location.longitude	geo-location	Geo Data
hasshversion	count	Version of HASSH
hassh	string	HASSH identifier for the client
hasshServer	string	HASSH identifier for the server
cshka	string	Client host key algos
hasshAlgorithms	string	Client hash algos
sshka	string	Server host key algos
hasshServerAlgorithms	string	Server algos

http.log

iittp.iog		
Field	Туре	Description
ts	time	Timestamp for when the request happened
uid	string	Unique ID for the connection
id_orig_h	addr	Originating endpoint's IP address
id_orig_p	port	Originating endpoint's TCP port
id_resp_h	addr	Responding endpoint's IP address
id_resp_p	port	Responding endpoint's TCP port
trans_depth	count	Represents the pipelined depth into the connection of this request/response transaction
method	string	HTTP method
host	string	Value of host header
uri	string	URI used in the request
referer	string	Value of referer header
version	string	Value of the version portion of the reply
user_agent	string	Value of the User-Agent header from the client
origin	string	Value of the Origin header from the client
request_body_len	count	Actual uncompressed content size of the data transferred from the client
response_body_len	count	Actual uncompressed content size of the data transferred from the server
status_code	count	Status code returned by the server
status_msg	string	Status message returned by the server
info_code	count	Last seen 1xx informational reply code returned by the server
info_msg	string	Last seen 1xx informational reply message returned by the server
tags	set[enum]	A set of indicators of various attributes discovered and related to a particular request/response pair
username	string	Username if basic-auth is performed for the request
password	string	Password if basic-auth is performed for the request
proxied	set[string]	All of the headers that may indicate if the request was proxied
orig_fuids	vector[string]	An ordered vector of file unique IDs
orig_filenames	vector[string]	An ordered vector of filenames from the client
orig_mime_types	vector[string]	An ordered vector of mime types
resp_fuids	vector[string]	An ordered vector of file unique IDs
resp_filenames	vector[string]	An ordered vector of filenames from the server
resp_mime_types	vector[string]	An ordered vector of mime types

http_entropy.log

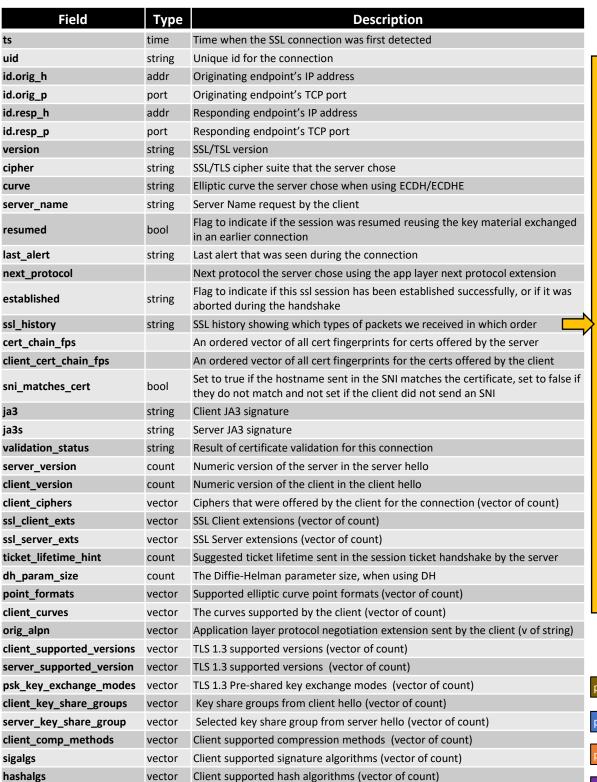
	17 0	
Field	Туре	Description
ts	time	Timestamp for when the request happened
uid	string	Unique ID for the connection
id_orig_h	addr	Originating endpoint's IP address
id_orig_p	port	Originating endpoint's TCP port
id_resp_h	addr	Responding endpoint's IP address
id_resp_p	port	Responding endpoint's TCP port
trans_depth	count	Represents the pipelined depth into the connection of this request/response transaction
method	string	HTTP method
host	string	Value of host header
uri	string	URI used in the request
uri_entropy	double	1-gram URI entropy
referer	string	Value of referer header
user_agent	string	Value of the User-Agent header from the client
request_body_len	count	Actual uncompressed content size of the data transferred from the client
response_body_len	count	Actual uncompressed content size of the data transferred from the server
status_code	count	Status code returned by the server
status_msg	string	Status message returned by the server
info_code	count	Last seen 1xx informational reply code returned by the server
info_msg	string	Last seen 1xx informational reply message returned by the server
orig_filenames	vector[string]	An ordered vector of filenames from the client
resp_filenames	vector[string]	An ordered vector of filenames from the server
username	string	Username if basic-auth is performed for the request
password	string	Password if basic-auth is performed for the request
proxied	set[string]	All of the headers that may indicate if the request was proxied

weird.log

Field	Туре	Description
ts	time	Timestamp of the event
uid	string	Connection ID
id.orig_h	addr	Originating endpoint's IP address
id.orig_p	port	Originating endpoint's TCP/UDP port
id.resp_h	addr	Responding endpoint's IP address
id.resp_p	Port	Responding endpoint's TCP/UDP port
name	string	Name of the weird that occurred
addl	string	Additional information accompanying the weird, if any
notice	bool	Indicate if this weird was also turned into a notice
peer	string	The peer that generated this weird



ssl.log





TLS History Packet Types		
Α	supplemental_data	
В	heartbeat	
С	client_hello	
D	application_data	
Е	end_of_early_data	
F	finished	
G	client_key_exchange	
Н	hello_request	
J	hello_retry_request	
K	server_key_exchange	
L	alert	
М	message_hash	
N	server_hello_done	
0	encrypted_extensions	
Р	key_update	
Q	unknown_content_type	
R	certificate_request	
S	server_hello	
Т	NewSessionTicket	
U	certificate_status	
٧	hello_verify_request	
W	certificate_url	
X	certificate	
Y	certificate_verify	
z	unassigned_handshake_type I change_cipher_spec	

packages/ja3

policy/protocols/ssl/validate-certs

policy/protocols/ssl/ssl-log-ext

policy/protocols/ssl/validate-ocsp

policy/protocols/ssl/validate-sct

packet filter.log

string

count

count

ocsp_status

valid_ct_logs

valid ct operators

Field	Туре	Description
ts	time	The time at which the packet filter installation attempt was made
node	string	This is a string representation of the node that applied this packet filter
filter	string	The packet filter that is being set
init	bool	Indicate if this is the filter set during initialization
success	bool	Indicate if the filter was applied successfully

Result of OCSP validation for this connection

Number of different Logs for which valid SCTs were seen in the connection

Number of different Log operators related to valid SCTs in the connection

x509.log

Field	Туре	Description
ts	time	Current timestamp
fingerprint	string	Fingerprint of the certificate - uses chosen algorithm
certificate_version	count	Version number
certificate_serial	string	Serial number
certificate_subject	string	Subject
certificate_issuer	string	Issuer
certificate_not_valid_before	time	Timestamp before when certificate is not valid
certificate_not_valid_after	time	Timestamp after when certificate is not valid
certificate_key_alg	string	Name of the key algorithm
certificate_sig_alg	string	Name of the signature algorithm
certificate_key_type	string	Key type, if key parseable by openssl (either rsa, dsa or ec)
certificate_key_length	count	Key length in bits
certificate_exponent	string	Exponent, if RSA-certificate
certificate_curve	string	Curve, if EC-certificate
san_dns	vector[string]	List of DNS entries in SAN
san_uri	vector[string]	List of URI entries in SAN
san_email	vector[string]	List of email entries in SAN
san_ip	vector[addr]	List of IP entries in SAN
basic_constraints_ca	bool	CA flag set?
basic_constraints_path_len	count	Maximum path length
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

dhcp.log

Field	Туре	Description
ts	time	Timestamp of the event
uids	set[string]	Connection UID
client_addr	addr	Client IP
server_addr	addr	Server IP
mac	string	Client MAC Address
host_name	string	Name given by client
client_fqdn	string	FQDN given by client
domain	string	Domain given by sever
requested_addr	Addr	IP requested by client
assigned_addr	addr	IP issued by server
lease_time	interval	Leave interval
client_message	string	Msg with DHCP_DECLINE from client
server_message	string	Msg with DHCP_NAK from server
msg_types	vector[string]	DHCP msgs in transaction
duration	interval	Duration of DHCP transaction

smtp.log

Field	Туре	Description
ts	time	Timestamp of the event
uid	string	Connection ID
id_orig_h	addr	Originating endpoint's IP
id_orig_p	port	Originating endpoint's TCP port
id_resp_h	addr	Responding endpoint's IP address
id_resp_p	port	Responding endpoint's TCP
trans_depth	count	Transaction depth if multiple msgs
helo	string	Contents of HELO header
mailfrom	string	E-mail addresses in From header
rcptto	set[string]	E-mail addresses in Rcpt header
date	string	Contents of date header
from	string	Contents of from header
to	set[string]	Contents of To header
сс	set[string]	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 header
first_received	string	Contents of First-Received header
second_received	string	Contents of Second-Recevied header
last_reply	string	Last msg svr sent to client
path	vector[addr]	Message tx path
user_agent	string	Value of User-Agent from header
tls	bool	Was connection switched to TLS?
fuids	vector[string]	Unique File IDs attached to msg

irc.log

Field	Туре	Description
ts	time	timestamp when the command was seen
uid	string	Unique ID for the connection
id_orig_h	addr	Originating endpoint's IP
id_orig_p	port	Originating endpoint's TCP/UDP port
id_resp_h	addr	Responding endpoint's IP address
id_resp_p	port	Responding endpoint's TCP/UDP port
nick	string	Nickname given for the connection
user	string	Username given for the connection
command	string	Command given by the client
value	string	Value for the command given by the client
addl	string	Any additional data for the command
dcc_file_name	string	DCC filename requested
dcc_file_size	count	Size of the DCC transfer as indicated by the sender
dcc_mime_type	string	Sniffed mime type of the file
fuid	string	File unique ID



notice.log

Field	Туре	Description
ts	time	Timestamp of the event
uid	string	Connection ID
id.orig_h	addr	Originating endpoint's IP address
id.orig_p	port	Originating endpoint's TCP/UDP port (or ICMP code)
id.resp_h	addr	Responding endpoint's IP address
id.resp_p	port	Responding endpoint's TCP/UDP port (or ICMP code)
fuid		string File unique identifier
file_mime_type	string	Libmagic sniffed file type
file_desc	string	Additional context for file, if available
proto	proto	Transport protocol
note	string	The type of notice
msg	string	Human readable message for the notice
sub	string	Sub-message for the notice
src	addr	Source address
dst	addr	Destination address
р	port	Associated port, if any
n	count	Associated count or status code
peer_descr	string	Description for peer that raised this notice
actions	set	Actions applied to this notice
email_dest	set	The email address(es) where to send this notice
suppress_for	interval	Indicates the length of time that this unique notice should be suppressed
remote_location.country_code	string	Geo_IP info
remote_location.region	string	Geo_IP info
remote_location.city	string	Geo_IP info
remote_location.latitude	string	Geo_IP info
remote_location.longitude	string	Geo_IP info

dpd.log

Field	Туре	Description
ts	time	Timestamp for when protocol analysis failed
uid	string	Connection unique ID
id_orig_h	addr	Originating endpoint's IP address
id_orig_p	port	Originating endpoint's TCP/UDP port
id_resp_h	addr	Responding endpoint's IP address
id_resp_p	port	Responding endpoint's TCP/UDP port
proto	enum	Transport protocol for the violation
analyzer	string	The analyzer that generated the violation
failure_reason	string	The textual reason for the analysis failure
packet_segment	string	chunk of the payload that most likely resulted in the analyzer violation

files.log

Field	Туре	Description
ts	time	Timestamp of the event
fuid	string	Unique file ID
tx_hosts	set[addr]	Source host of the file
rx_hosts	set[addr]	Receiving host of the file
conn_uids	set[string]	Connection UID
source	string	Source protocol for how the file was transferred
depth	count	Depth of file related to the source
analyzers	set[string]	Set of analysis types conducted
mime_type	string	Libmagic file type
filename	string	File name if available
duration	interval	Duration of the file analysis
local_orig	bool	If transferred via network, did data originate locally?
is_orig	bool	If transferred via network, was file sent by the originator?
seen_bytes	count	Number of bytes provided to file analysis engine
total_bytes	count	Total number of bytes that should comprise the file
missing_bytes	count	Number of bytes in the file stream missed
overflow_bytes	count	Number of not all-in-sequence bytes in the file stream delivered to file analyzers due to reassembly buffer overflow
timedout	bool	If the file analysis time out at least once per file
parent_fuid	string	ID associated with a container file from which this one was extracted as a part of the analysis
md5	string	Hash of file
sha1	string	Hash of file
sha256	string	Hash of file
extracted	string	Local filename of extracted files, if enabled
extracted_cutoff	bool	Was complete file extracted?
extracted_size	count	Size of of extracted file

ntlm.log

Field	Туре	Description
ts	time	Timestamp of the event
uid	string	Connection ID
id.orig_h	addr	Originating endpoint's IP address
id.orig_p	port	Originating endpoint's TCP port
id.resp_h	addr	Responding endpoint's IP address
id.resp_p	port	Responding endpoint's TCP port
username	string	
hostname	string	
domainname	string	
server_nb_computer_name	string	
server_dns_computer_name	string	
server_tree_name	string	
success	bool	



stats.log		
Field	Туре	Description
ts	time	Timestamp for the measurement
peer	string	Peer that generated this log. Mostly for clusters
mem	count	Amount of memory currently in use in MB
pkts_proc	count	Number of packets processed since the last stats interval
bytes_recv	count	Number of bytes received since the last stats interval if reading live traffic
pkts_dropped	count	Number of packets dropped since the last stats interval if reading live traffic
pkts_link	count	Number of packets seen on the link since the last stats interval if reading live traffic
pkt_lag	interval	Lag between the wall clock and packet timestamps if reading live traffic
events_proc	count	Number of events processed since the last stats interval
events_queued	count	Number of events that have been queued since the last stats interval
active_tcp_conns	count	TCP connections currently in memory
active_udp_conns	count	UDP connections currently in memory
active_icmp_conns	count	ICMP connections currently in memory
tcp_conns	count	TCP connections seen since last stats interval
udp_conns	count	UDP connections seen since last stats interval
icmp_conns	count	ICMP connections seen since last stats interval
timers	count	Number of timers scheduled since last stats interval
active_timers	count	Current number of scheduled timers
files	count	Number of files seen since last stats interval
active_files	count	Current number of files actively being seen
dns_requests	count	Number of DNS requests seen since last stats interval
active_dns_requests	count	Current number of DNS requests awaiting a reply
reassem_tcp_size	count	Current size of TCP data in reassembly
reassem_file_size	count	Current size of File data in reassembly
reassem_frag_size	count	Current size of packet fragment data in reassembly
reassem_unknown_size	count	Current size of unknown data in reassembly (this is only PIA buffer right now)

smb_mapping.log

Field	Туре	Description
ts	time	Timestamp of the event
uid	string	Connection ID
id.orig_h	addr	Originating endpoint's IP address
id.orig_p	port	Originating endpoint's TCP/UDP port
id.resp_h	addr	Responding endpoint's IP address
id.resp_p	Port	Responding endpoint's TCP/UDP port
path	string	Name of tree path
service	string	Type of resource of tree (share, pipe, etc(
native_file_system	string	File system of tree
share_type	string	If SMB2, share type will be included

ntp.log

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Field	Туре	Description		
ts	time	Timestamp of the event		
uid	string	Connection ID		
id_orig_h	addr	Originating endpoint's IP		
id_orig_p	port	Originating endpoint's TCP port		
id_resp_h	addr	Responding endpoint's IP address		
id_resp_p	port	Responding endpoint's TCP		
version	count	NTP version		
mode	count	Mode identifier		
stratum	count	Stratum identifier		
poll	interval	Max interval between successive msgs		
precision	interval	Precision of system clock in log2 sec		
root_delay	interval	Total round-trip delay to the reference clock, in NTP short format		
root_disp	interval	Total dispersion to the reference clock, in NTP short format		
ref_id	string	32-bit code identifying the particular server or reference clock		
ref_time	time	Time when the system clock was last set or corrected, in NTP timestamp format		
org_time	time	Time at the client when the request departed for the server, in NTP timestamp format		
rec_time	time	Time at the server when the request arrived from the client, in NTP timestamp format		
xmt_time	time	Time at the server when the response left for the client, in NTP timestamp format		
num_exts	count	Time at the client when the reply arrived from the server, in NTP timestamp forma		

smb_files.log

Field	Туре	Description
ts	time	Timestamp of the event
uid	string	Connection ID
id.orig_h	addr	Originating endpoint's IP address
id.orig_p	port	Originating endpoint's TCP/UDP port
id.resp_h	addr	Responding endpoint's IP address
id.resp_p	port	Responding endpoint's TCP/UDP port
fuid	string	string File unique identifier
action	enum	Action this log record represents
path	string	Path pulled from the tree this file was transferred to or from
name	string	Filename if one was seen
size	count	Total size of the file
prev_name	string	If the rename action was seen, this will be the file's previous name
times.modified	time	File modified time
times.accessed	time	File accessed time
times.created	time	File creation time
times.changed	time	File changed time

