

bigbrotr_data_overview

July 4, 2025

1 Bigbrotr Database Data Overview

1.1 Database Schema

'Events'

column_name	data_type
id	character
pubkey	character
created_at	bigint
kind	integer
tags	jsonb
content	text
sig	character

'Events_relays'

column_name	data_type
event_id	character
relay_url	text
seen_at	bigint

'Relay_metadata'

column_name	data_type
relay_url	text
generated_at	bigint
connection_success	boolean
nip11_success	boolean
openable	boolean
readable	boolean
writable	boolean
rtt_open	integer
rtt_read	integer

rtt_write	integer	
name	text	
description	text	
banner	text	
icon	text	
pubkey	text	
contact	text	
supported_nips	jsonb	
software	text	
version	text	
privacy_policy	text	
terms_of_service	text	
limitation	jsonb	
extra_fields	jsonb	

'Relays'

column_name	data_type	
:-----	:-----	
url	text	
network	text	
inserted_at	bigint	

1.2 Row Counts per Table

Analisi dello spazio per tabella:

TABELLA: events

Numero righe: 172132336

Colonna	Avg (bytes)	Totale (GB)
id	65.00	10.42
pubkey	65.00	10.42
created_at	8.00	1.28
kind	4.00	0.64
tags	287.11	46.03
content	340.92	54.65
sig	132.00	21.16

Totale dati stimati: 144.61 GB

Indici:

Indice	Size (GB)
events_pkey	20.00
idx_events_pubkey	3.63
idx_events_created_at	3.08
idx_events_kind	1.45

idx_events_kind_created_at 5.48
Totale indici: 33.65 GB
Totale complessivo stimato: 178.25 GB

TABELLA: relays
Numero righe: 8865
Colonna Avg (bytes) Totale (GB)
url 30.61 0.00
network 8.48 0.00
inserted_at 8.00 0.00
Totale dati stimati: 0.00 GB

Indici:
Indice Size (GB)
relays_pkey 0.00
Totale indici: 0.00 GB
Totale complessivo stimato: 0.00 GB

TABELLA: events_relays
Numero righe: 788099004
Colonna Avg (bytes) Totale (GB)
event_id 65.00 47.71
relay_url 25.09 18.41
seen_at 8.00 5.87
Totale dati stimati: 71.99 GB

Indici:
Indice Size (GB)
events_relays_pkey 117.02
idx_events_relays_event_id 26.76
idx_events_relays_relay_url 4.94
idx_events_relays_seen_at 7.72
Totale indici: 156.44 GB
Totale complessivo stimato: 228.44 GB

TABELLA: relay_metadata
Numero righe: 56179
Colonna Avg (bytes) Totale (GB)
relay_url 34.32 0.00
generated_at 8.00 0.00
connection_success 1.00 0.00
nip11_success 1.00 0.00
openable 1.00 0.00
readable 1.00 0.00
writable 1.00 0.00

rtt_open	4.00	0.00
rtt_read	4.00	0.00
rtt_write	4.00	0.00
name	21.00	0.00
description	46.44	0.00
banner	1.52	0.00
icon	52.65	0.00
pubkey	61.40	0.00
contact	21.28	0.00
supported_nips	14.06	0.00
software	42.00	0.00
version	7.35	0.00
privacy_policy	29.72	0.00
terms_of_service	25.00	0.00
limitation	118.24	0.01
extra_fields	54.31	0.00

Totale dati stimati: 0.03 GB

Indici:

Indice	Size (GB)
relay_metadata_pkey	0.00
idx_relay_metadata_relay_url	0.00
idx_relay_metadata_generated_at	0.00
idx_relay_metadata_connection_success	0.00
idx_relay_metadata_nip11_success	0.00

Totale indici: 0.01 GB
 Totale complessivo stimato: 0.04 GB

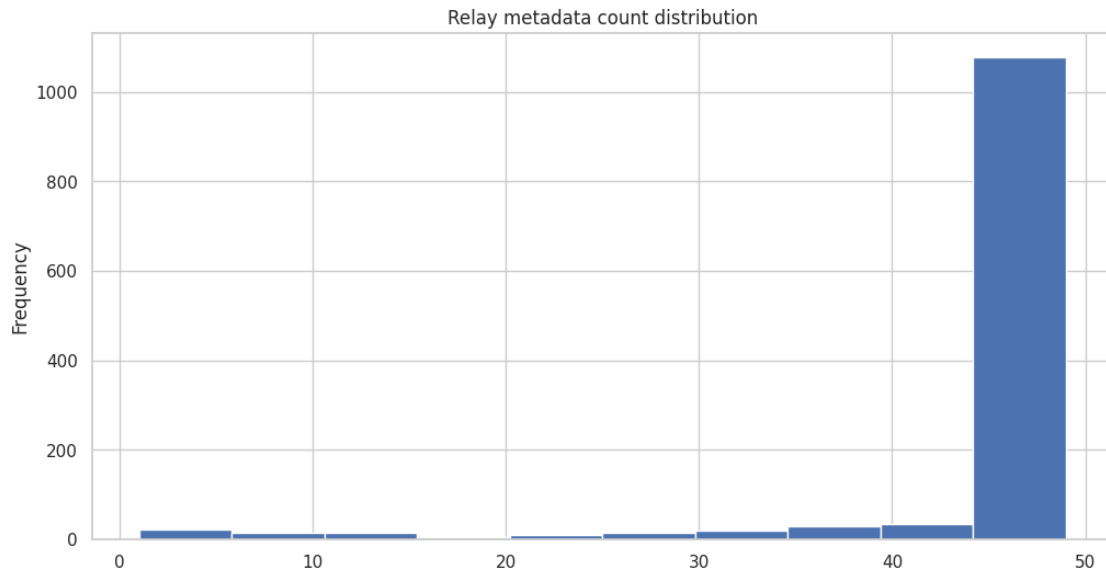
1.3 Relays Overview

Total relays: 8865, with metadata: 1238 (13.97%)

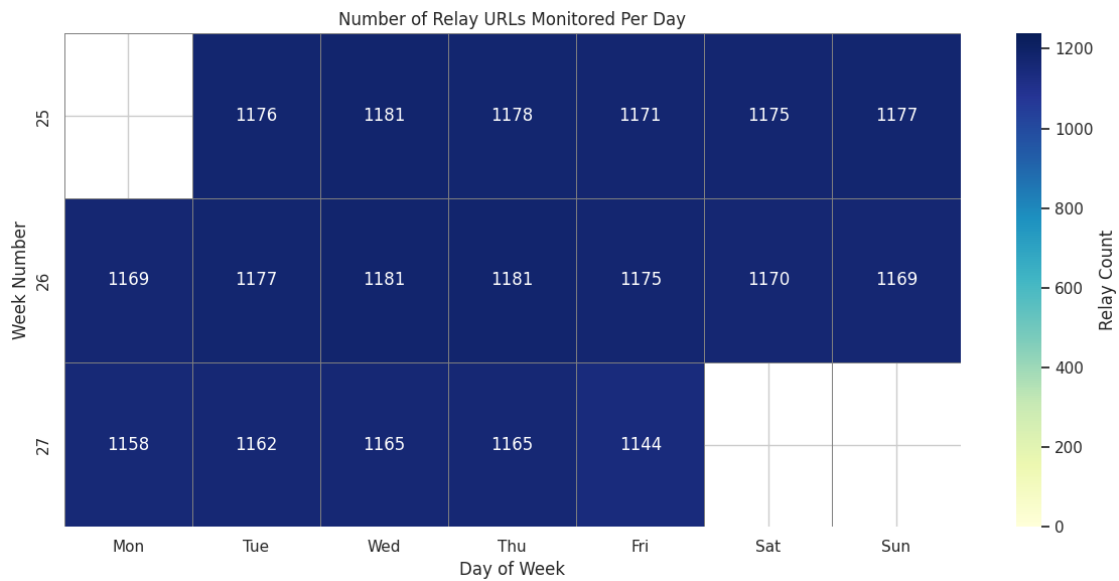
Network distribution for relays with metadata:

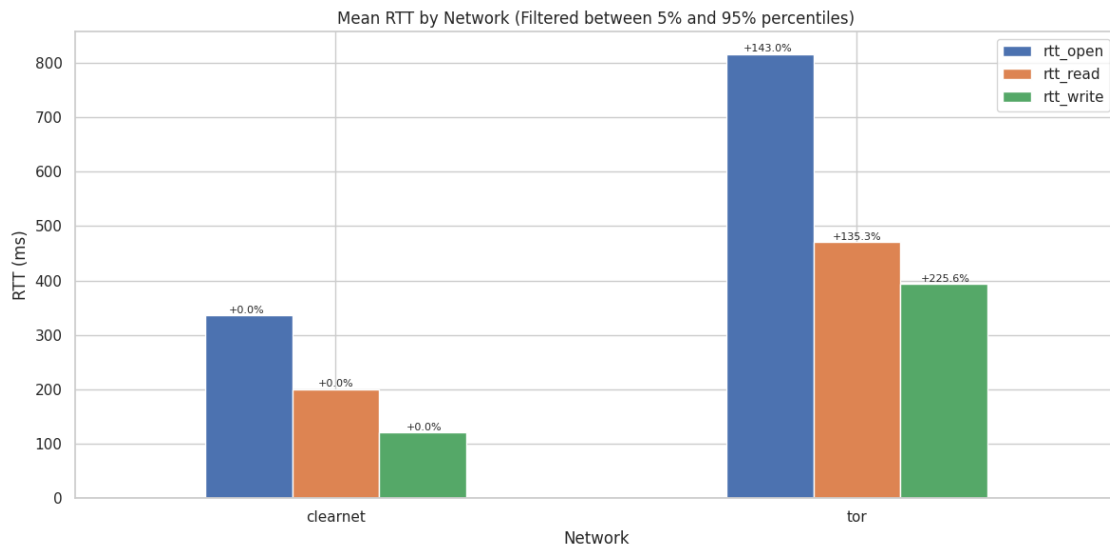
- clearnet: 990 (79.97%)
- tor: 248 (20.03%)

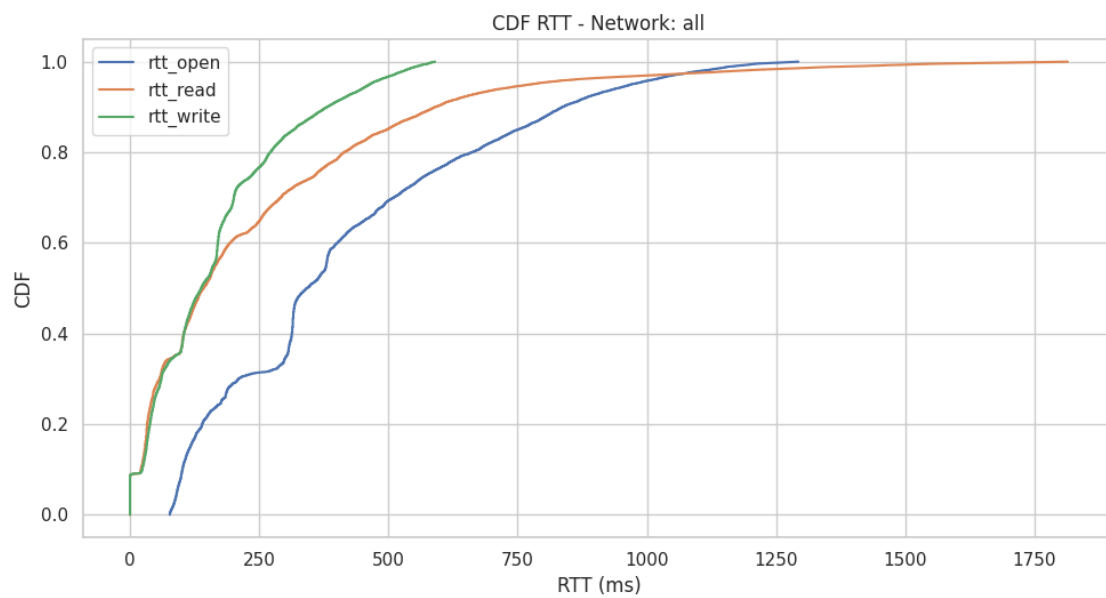
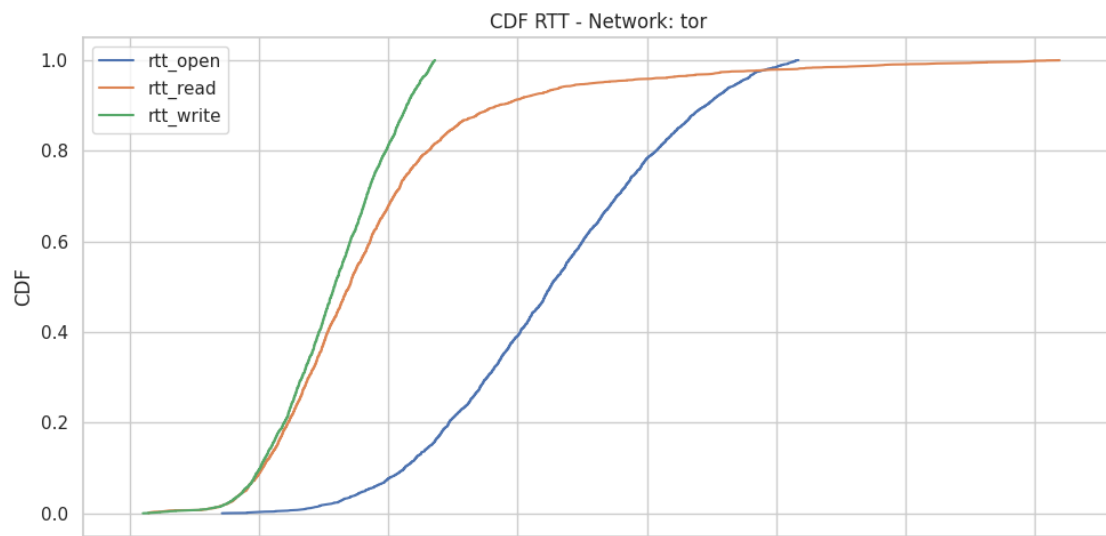
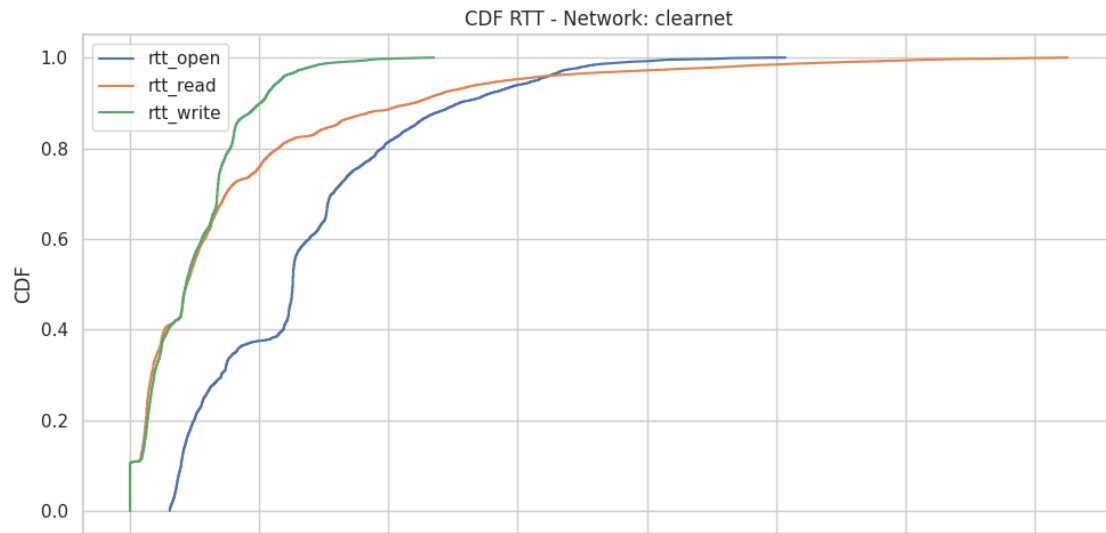
```
<Axes: title={'center': 'Relay metadata count distribution'},
ylabel='Frequency'>
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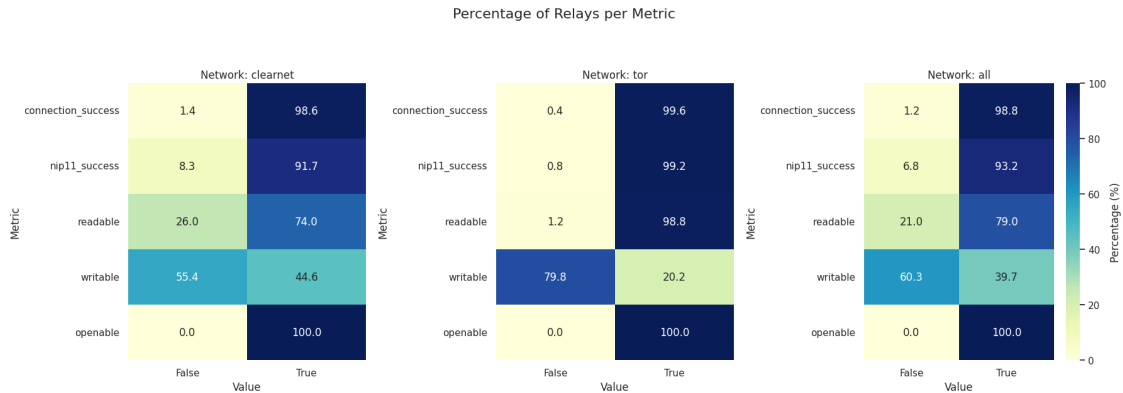


Total unique relays with metadata: 1238









Network: clearnet

	connection_success	nip11_success	readable	writable	openable	count
0	True	True	True	True	True	418
1	True	True	True	False	True	273
2	True	True	False	False	True	199
3	True	False	False	False	True	49
4	True	False	True	False	True	19
5	True	False	True	True	True	12
6	True	True	False	True	True	4
7	True	False	False	True	True	2
8	False	True	True	False	True	1

Network: tor

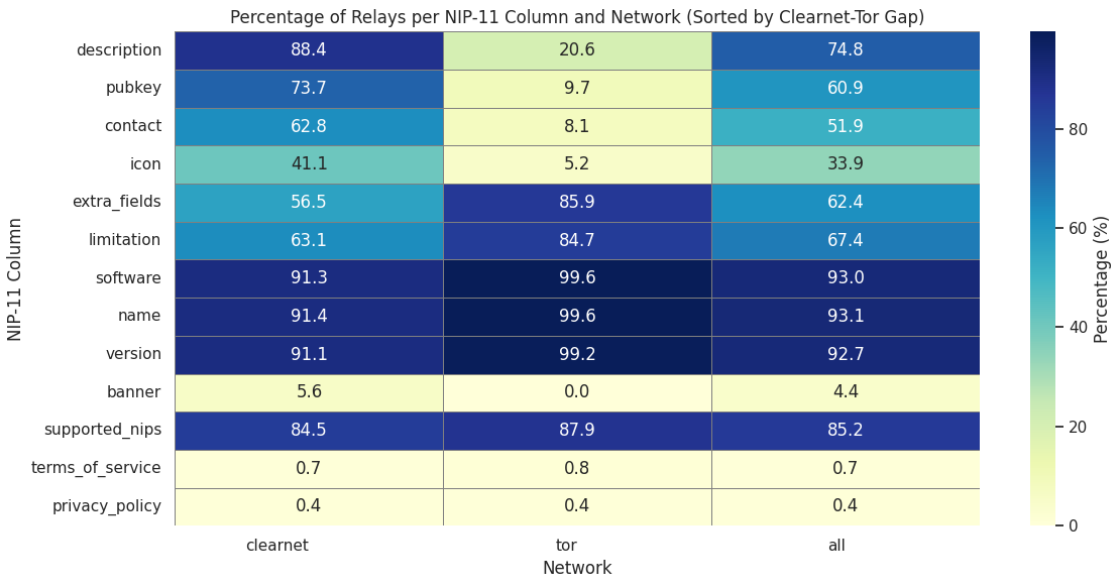
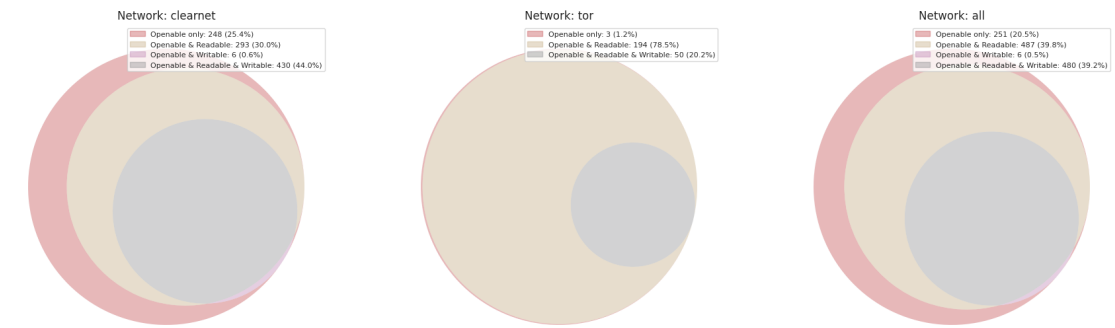
	connection_success	nip11_success	readable	writable	openable	count
0	True	True	True	False	True	192
1	True	True	True	True	True	50
2	True	True	False	False	True	3
3	True	False	True	False	True	2

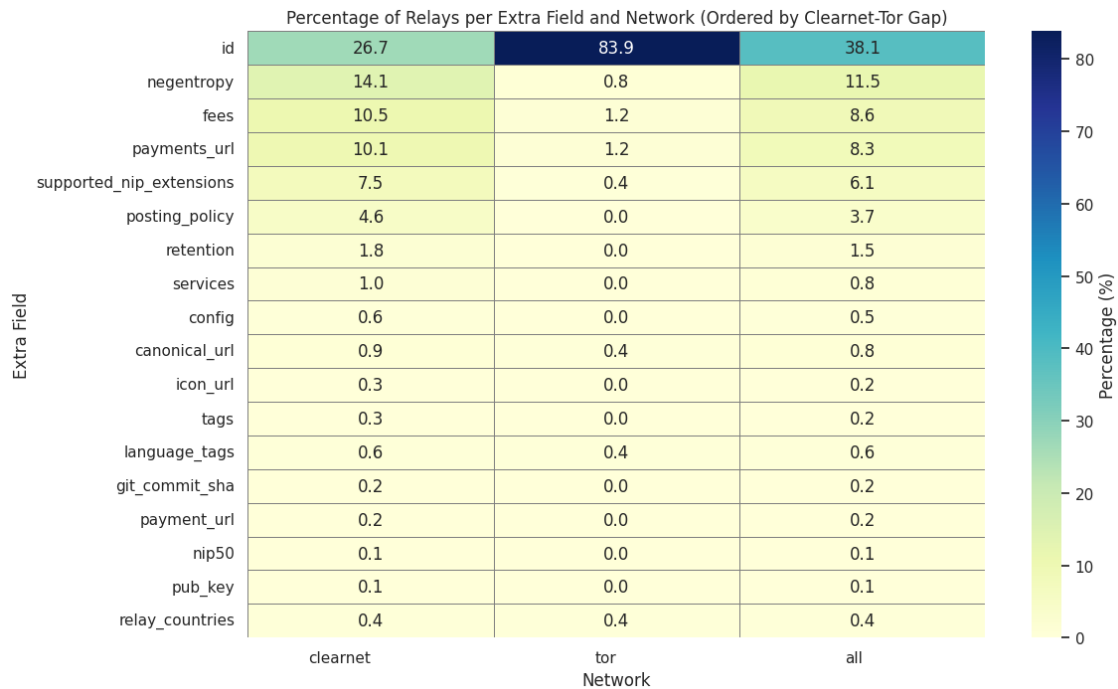
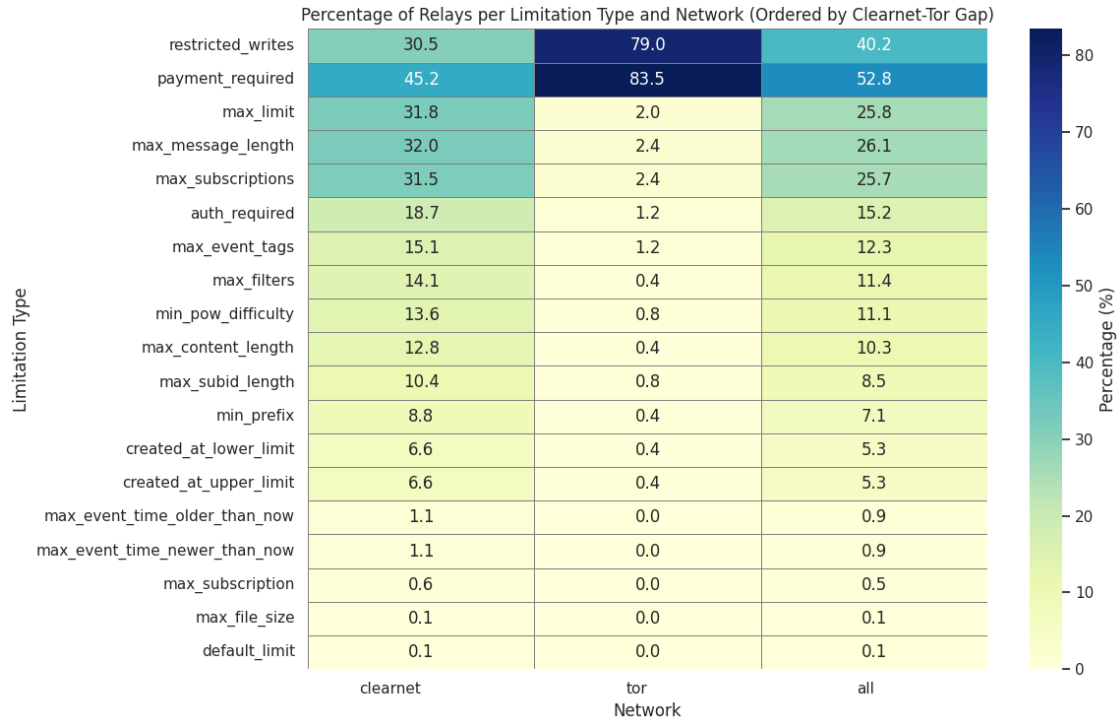
Network: all

	connection_success	nip11_success	readable	writable	openable	count
0	True	True	True	True	True	468
1	True	True	True	False	True	465
2	True	True	False	False	True	202
3	True	False	False	False	True	49
4	True	False	True	False	True	21
5	True	False	True	True	True	12

6	True	True	False	True	True	4
7	True	False	False	True	True	2
8	False	True	True	False	True	1

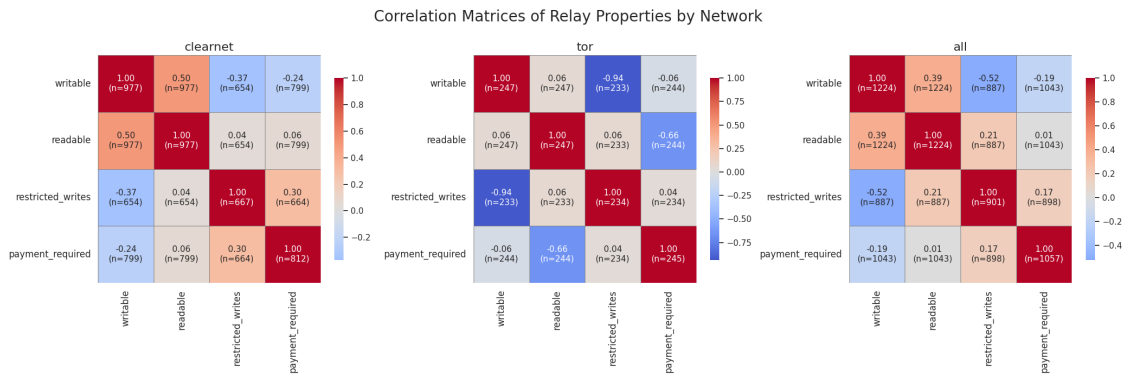
Relay Status Combinations





Number of relays in cleanet and tor: 1238
 Number of relays in cleanet: 990

Number of relays in tor: 248



Network: clearnet

	writable	readable	restricted_writes	payment_required	count
0	True	True	False	False	273
1	False	False	False	False	175
2	False	True	False	False	95
3	False	True	True	False	67
4	False	False	True	False	24
5	False	True	True	True	7
6	True	False	False	False	5
7	False	False	True	True	4
8	True	True	True	False	1

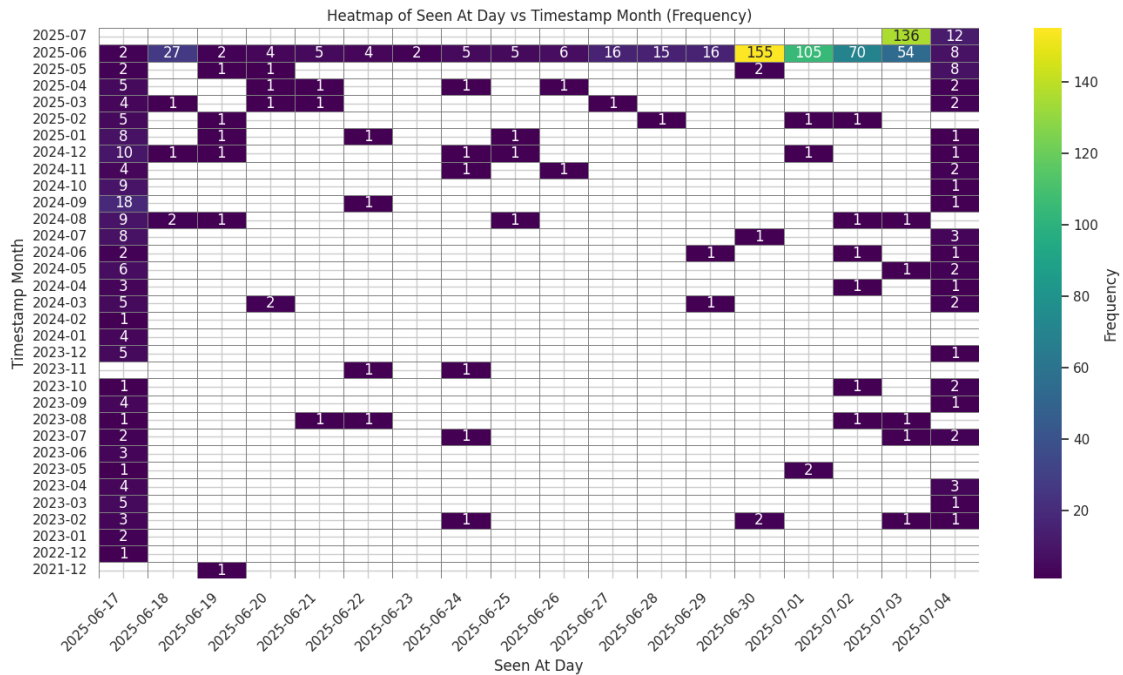
Network: tor

	writable	readable	restricted_writes	payment_required	count
0	False	True	True	False	180
1	True	True	False	False	47
2	False	True	False	False	4
3	False	False	False	False	1
4	False	False	True	True	1

Network: all

	writable	readable	restricted_writes	payment_required	count
0	True	True	False	False	320
1	False	True	True	False	247
2	False	False	False	False	176
3	False	True	False	False	99
4	False	False	True	False	24
5	False	True	True	True	7
6	False	False	True	True	5

7	True	False	False	False	5
8	True	True	True	False	1

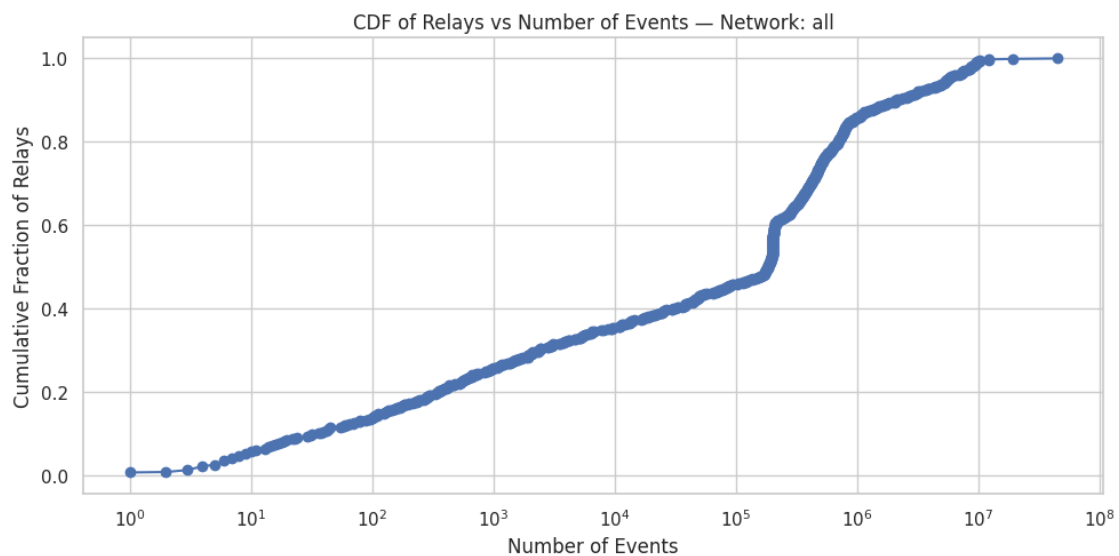
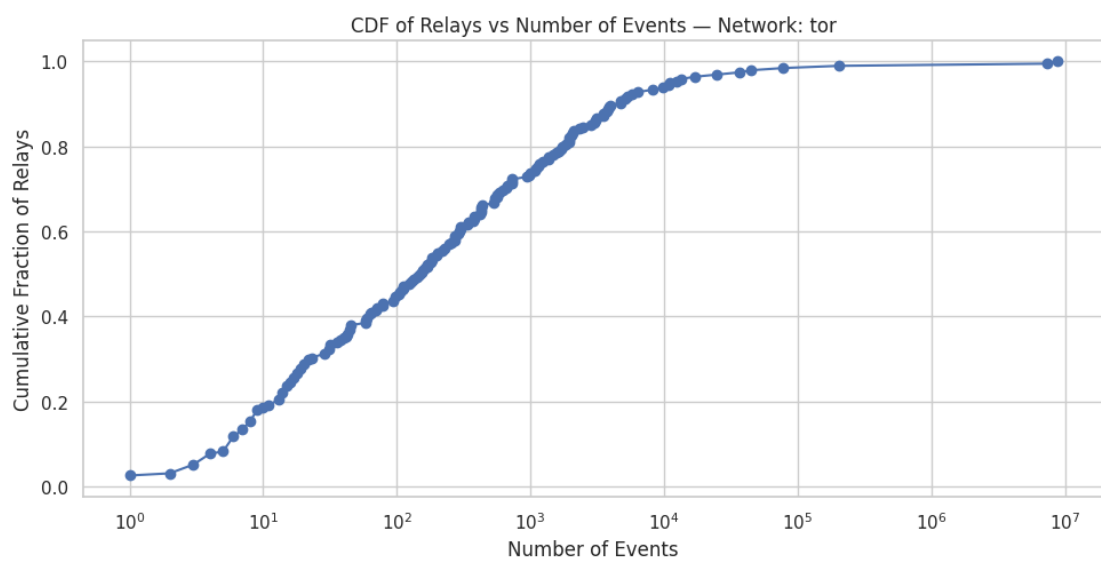
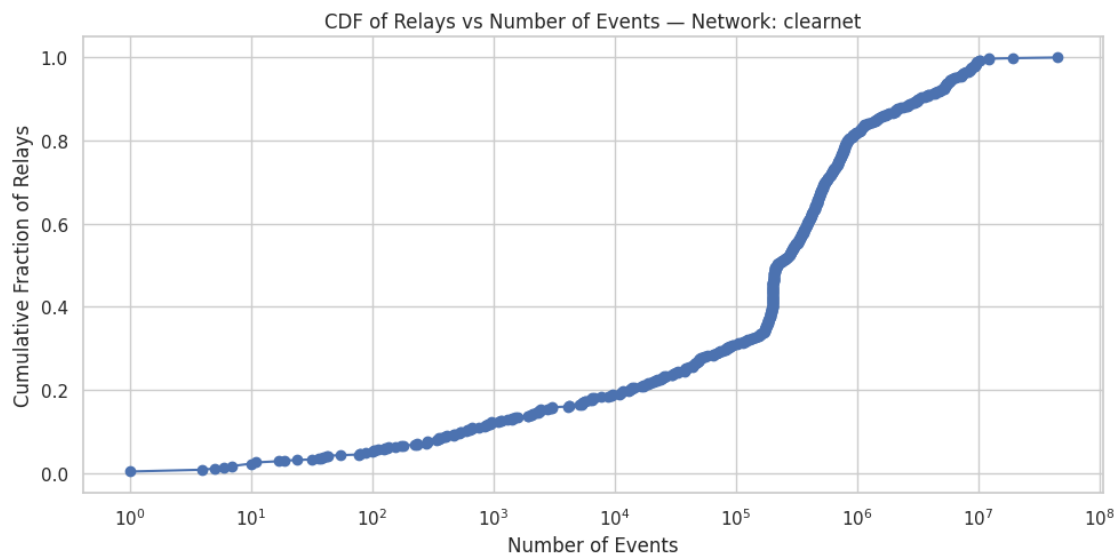


Top 3 relays with most events in clearnet:

- wss://relay.nostr.band: 44635361 events
- wss://a.nos.lol: 19150103 events
- wss://nos.lol: 12103793 events
- wss://dave.st.germa.in/nostr: 12103598 events
- wss://nostr-01.yakihonne.com: 10262997 events

Top 3 relays with most events in tor:

- wss://oxtrdevav64z64yb7x6rjg4ntzqjhedm5b5zjqulugknhzr46ny2qbad.onion: 8726537 events
- wss://sovbitm2enxfr5ot6qscwy5ermdffqbqscy66wirkbsigvcshumyzbbqd.onion: 7390935 events
- wss://3rpykuwfpvgijym45svczvzpbur6t6x4b67lnvp6wxdre2cqoy6a4dyd.onion: 202968 events
- wss://sovbitgz5uqyh7jwcsudq4sspxlj4kbnurvd3xarkkx2use3k6rllibqd.onion: 78420 events
- wss://cmuqxreb6oma3x3iq3zh62im7w4266uo3txac6e75qtlfqs7scwqyqyd.onion: 45099 events



	relay_url	network	timestamp	\
19	wss://nostr.oxtr.dev	clearnet	1751188203	
134	wss://oxtrdevav64z64yb7x6rjg4ntzqjhedm5b5zjqul...	tor	1751371575	

	seen_at	timestamp_month	seen_at_day	event_count
19	1751417168	2025-06	2025-07-02	8576968
134	1751588624	2025-07	2025-07-04	8726537

	relay_url	network	timestamp	\
275	wss://sovbitm2enxfr5ot6qscwy5ermdffbqscy66wirk...	tor	1751473067	
358	wss://sovbitgz5uqyh7jwcsudq4sspxlj4kbnurvd3xar...	tor	1751166521	
387	wss://freelay.sovbit.host	clearnet	1751473181	
396	wss://nostr.sovbit.host	clearnet	1751056247	

	seen_at	timestamp_month	seen_at_day	event_count
275	1751576506	2025-07	2025-07-03	7390935
358	1751289267	2025-06	2025-06-30	78420
387	1751576877	2025-07	2025-07-03	7396293
396	1751415488	2025-06	2025-07-02	78415