# relays\_overview

July 7, 2025

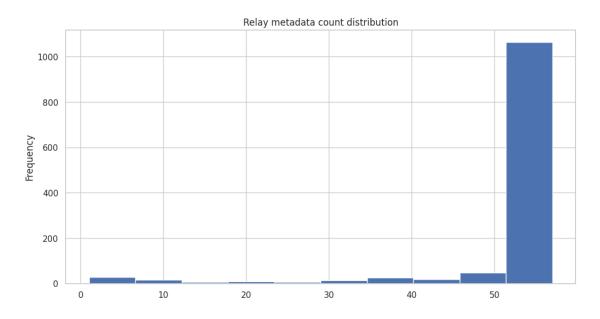
Total relays: 8865, with metadata: 1241 (14.00%) Network distribution for relays with metadata:

- clearnet: 993 (80.02%)

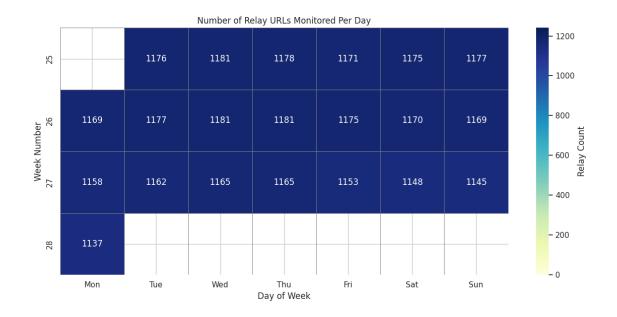
- tor: 248 (19.98%)

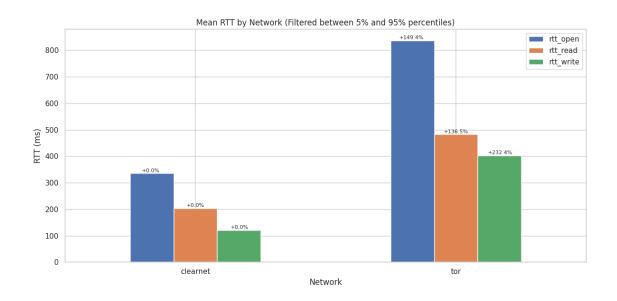
<Axes: title={'center': 'Relay metadata count distribution'},</pre>

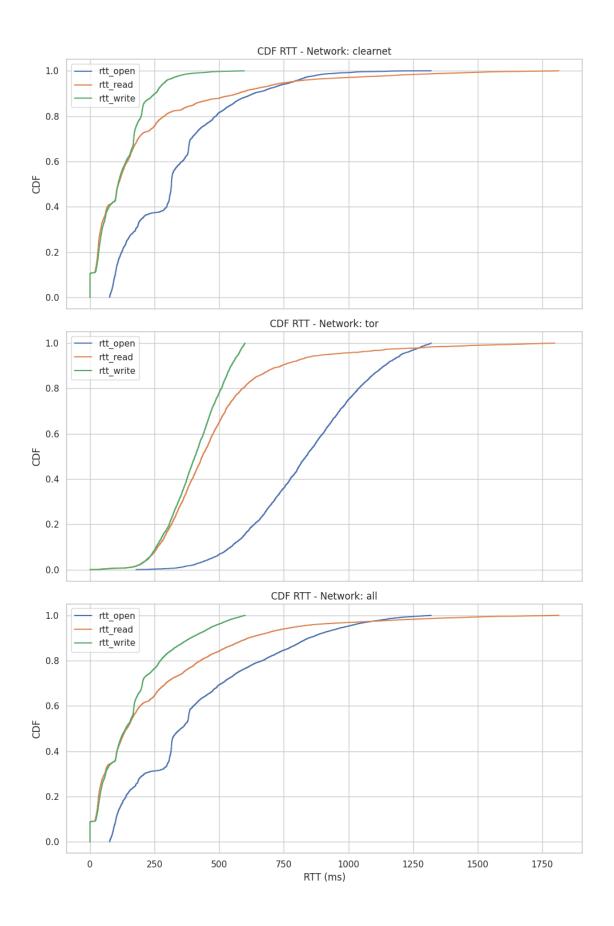
ylabel='Frequency'>



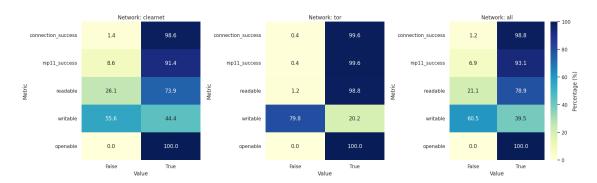
Total unique relays with metadata: 1241







#### Percentage of Relays per Metric



## Network: clearnet

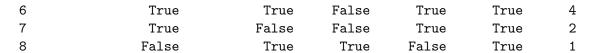
	connection_success	nip11_success	readable	writable	openable	count
0	True	True	True	True	True	417
1	True	True	True	False	True	274
2	True	True	False	False	True	199
3	True	False	False	False	True	51
4	True	False	True	False	True	20
5	True	False	True	True	True	12
6	True	True	False	True	True	4
7	True	False	False	True	True	2
8	False	True	True	False	True	1

## Network: tor

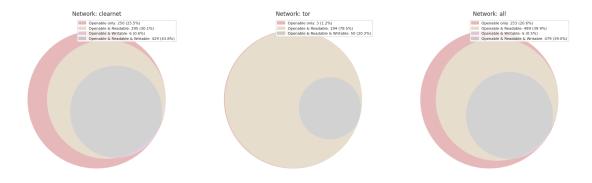
	connection_success	nip11_success	readable	writable	openable	count
0	True	True	True	False	True	193
1	True	True	True	True	True	50
2	True	True	False	False	True	3
3	True	False	True	False	True	1

## Network: all

	connection_success	nip11_success	readable	writable	openable	count
0	True	True	True	False	True	467
1	True	True	True	True	True	467
2	True	True	False	False	True	202
3	True	False	False	False	True	51
4	True	False	True	False	True	21
5	True	False	True	True	True	12



Relay Status Combinations



		Percentage of Relays per	NIP-11 Column and Network (Sc	orted by Clearnet-Tor Gap)	100	
	description	88.1	20.6	74.6	100	
	pubkey	73.5	9.7	60.8		
	contact	62.6	8.1	51.7	- 80	
	icon	41.0	5.2	33.8		
	extra_fields	56.3	86.3	62.3		
Column	limitation	62.9	85.1	67.4	- 60 🛞	
1 Co	software	91.0	100.0	92.8	- 00 09 Percentage (%)	)
NIP-11	name	91.1	100.0	92.9	- 40 - 40	į
~	version	90.8	99.6	92.6	۵.	
	supported_nips	85.2	92.7	86.7		
	banner	5.5	0.0	4.4	<del>-</del> 20	
	terms_of_service	0.7	0.8	0.7		
	privacy_policy	0.4	0.4	0.4	- 0	
clearnet tor Network				all	- 0	

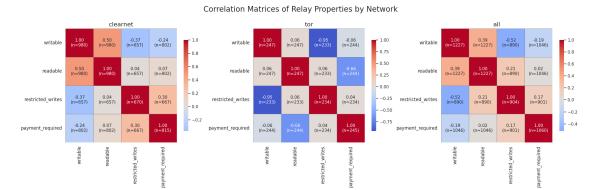
F	Percentage of Relays per Lin	nitation Type and Network (0	Ordered by Clearnet-Tor Gap)	
restricted_writes	30.4	79.4	40.2	- 80
payment_required	45.0	83.9	52.8	00
max_limit	31.7	2.0	25.8	
$max\_message\_length$	31.9	2.4	26.0	<del>-</del> 70
max_subscriptions	31.4	2.4	25.6	
auth_required	18.6	1.2	15.1	- 60
max_event_tags	15.0	1.2	12.2	
max_filters	14.1	0.4	11.4	- 50 🦳
min_pow_difficulty	13.6	0.8	11.0	e (%
max_content_length	12.8	0.4	10.3	- ortag
min_pow_difficulty max_content_length max_subid_length	10.4	0.8	8.5	- - - - - - - - - - - - - - - - - - -
□ min_prefix	8.8	0.4	7.1	
created_at_lower_limit	6.5	0.4	5.3	- 30
created_at_upper_limit	6.5	0.4	5.3	
max_event_time_older_than_now	1.1	0.0	0.9	- 20
max_event_time_newer_than_now	1.1	0.0	0.9	
max_subscription	0.6	0.0	0.5	- 10
max_file_size	0.1	0.0	0.1	
default_limit	0.1	0.0	0.1	- 0
	clearnet	tor Network	all	-0

	Percentage of Relays pe	r Extra Field and Network (Ord	ered by Clearnet-Tor Gap)	
	id 26.6	84.3	38.1	- 80
negentro	py 14.1	0.8	11.4	50
fe	es 10.5	1.2	8.6	70
payments_	url 10.1	1.2	8.3	<del>-</del> 70
supported_nip_extension	ns 7.5	0.4	6.0	
posting_poli	4.6	0.0	3.7	- 60
retenti	on 1.8	0.0	1.5	
servic	es 1.0	0.0	0.8	- 50 8
Extra canonical con	ig 0.6	0.0	0.5	age
canonical_	url 0.9	0.4	0.8	- 40 tst
ய் icon_i	url 0.3	0.0	0.2	- 05 06 Percentage (%)
ta	gs 0.3	0.0	0.2	- 30
payment_	ırl 0.2	0.0	0.2	
git_commit_s	na 0.2	0.0	0.2	- 20
language_ta	gs 0.6	0.4	0.6	
nip	0.1	0.0	0.1	- 10
pub_k	ey 0.1	0.0	0.1	10
relay_countri	es 0.4	0.4	0.4	- 0
	clearnet	tor Network	all	-0

Number of relays in cleanet and tor: 1241

Number of relays in cleanet: 993

# Number of relays in tor: 248



Network:	clearnet
Network:	crearnet

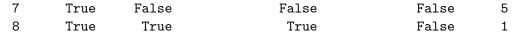
	writable	readable	restricted_writes	<pre>payment_required</pre>	count
0	True	True	False	False	272
1	False	False	False	False	177
2	False	True	False	False	97
3	False	True	True	False	67
4	False	False	True	False	24
5	False	True	True	True	7
6	True	False	False	False	5
7	False	False	True	True	4
8	True	True	True	False	1

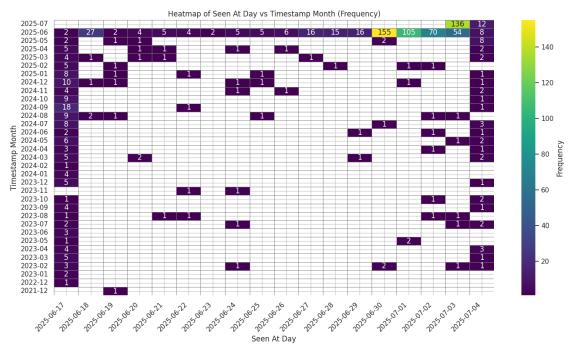
## Network: tor

	writable	readable	restricted_writes	<pre>payment_required</pre>	count
0	False	True	True	False	181
1	True	True	False	False	47
2	False	True	False	False	3
3	False	False	False	False	1
4	False	False	True	True	1

#### Network: all

	writable	readable	restricted_writes	<pre>payment_required</pre>	count
0	True	True	False	False	319
1	False	True	True	False	248
2	False	False	False	False	178
3	False	True	False	False	100
4	False	False	True	False	24
5	False	True	True	True	7
6	False	False	True	True	5



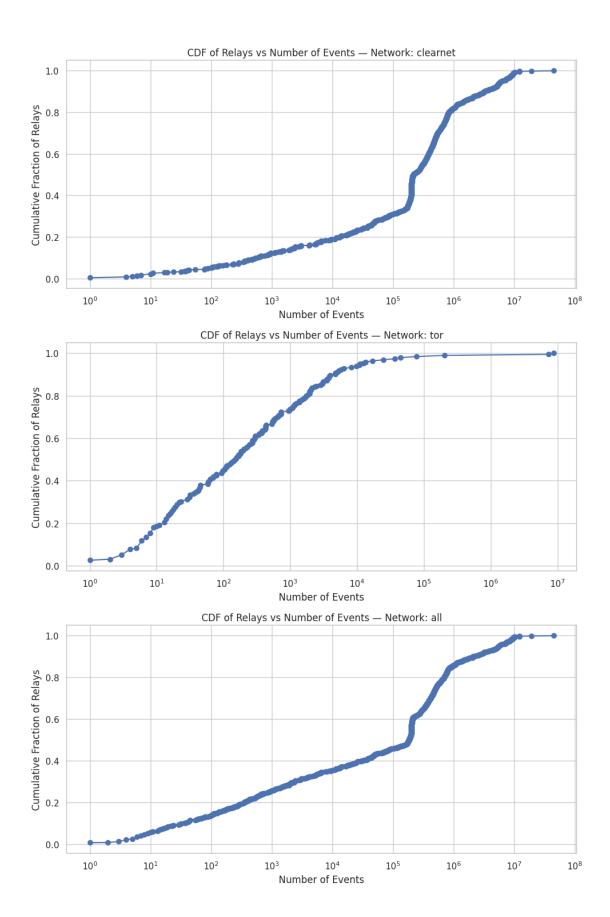


Top 3 relays with most events in clearnet:

- 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://sovbitm2enxfr5ot6qscwy5ermdffbqscy66wirkbsigvcshumyzbbqd.onion: 7390935
- wss://3rpykuwfpgjijym45svczvzpbur6t6x4b67lnvp6wxdre2cqoy6a4dyd.onion: 202968 events
- wss://sovbitgz5uqyh7jwcsudq4sspxlj4kbnurvd3xarkkx2use3k6rlibqd.onion: 78420
- wss://cmuqxreb6oma3x3iq3zh62im7w4266uo3txac6e75qtlfqs7scwqyqyd.onion: 45099 events



19 134	wss://oxtrdev	w av64z64yb7x6rjg4n		relay_url r.oxtr.dev b5zjqul…		timestamp 1751188203 751371575	\
	seen_at ti	mestamp_month see	n_at_day	event_count	t		
19	1751417168	2025-06 20	25-07-02	8576968	3		
134	1751588624	2025-07 20	25-07-04	8726537	7		
275 358 387 396	wss://sovbitg	wss:	pxlj4kbnu freelay.so //nostr.so	•		timestamp 751473067 751166521 1751473181 1751056247	\
	_	mestamp_month see	•	event_count			
275	1751576506	2025-07 20	25-07-03	739093	5		
358	1751289267	2025-06 20	25-06-30	78420	)		
387	1751576877	2025-07 20	25-07-03	7396293	3		
396	1751415488	2025-06 20	25-07-02	7841	5		