

NOSTR Kind 30303: Top 3 List Specification

Overview

****Kind**:** 30303 (Parameterized Replaceable Event)

****Purpose**:** Allow users to publish curated "top 3" lists on any topic with discoverable IDs that enable aggregation across multiple users.

Event Structure

```
```json
{
 "kind": 30303,
 "tags": [
 ["d", "<list-id>"],
 ["title", "<list title>"],
 ["description", "<optional description>"],
 ["item", "<item-1>", "<url>", "<optional-note>"],
 ["item", "<item-2>", "<url>", "<optional-note>"],
 ["item", "<item-3>", "<url>", "<optional-note>"]
],
 "content": "",
 "created_at": <timestamp>,
 "pubkey": "<author-pubkey>",
 "id": "<event-id>",
 "sig": "<signature>"
}
```

## ## Tag Definitions

### ### Required Tags

- **\*\*`d`\*\*:** List identifier - a short, URL-friendly slug that enables cross-user aggregation
  - Examples: `"important-links"`, `"best-bitcoin-resources"`, `"favorite-books-2024"`
  - Must be lowercase, hyphen-separated
  - This creates a global namespace for discovering similar lists from different users
- **\*\*`title`\*\*:** Human-readable list title
  - Examples: `"My Top 3 Important Links"`, `"Essential Bitcoin Resources"`
- **\*\*`item`\*\*:** List item (exactly 3 required)
  - Format: `["item", "<name>", "<url>", "<optional-note>"]`
  - Order matters: first item is #1, second is #2, third is #3
  - Name: Short title for the item
  - URL: Link to the resource
  - Note (optional): Additional context or reason for inclusion

### ### Optional Tags

- **\*\*`description`\*\*:** Additional context about the list and selection criteria

## ## Why Parameterized Replaceable?

Using kind range 30000-39999 makes this a parameterized replaceable event, which means:

1. Users can update their lists over time (newer events replace older ones)

2. The combination of `d` tag + pubkey creates a unique identifier
3. Enables efficient querying of all users' lists with the same `d` value
4. Relays only need to store the latest version per user per list-id

## Example: Top 3 Important Links

```
```json
{
  "kind": 30303,
  "tags": [
    ["d", "important-links"],
    ["title", "My Top 3 Important Links"],
    ["description", "Essential resources I reference constantly"],
    ["item", "NOSTR Protocol Spec", "https://github.com/nostr-protocol/nips/blob/master/01.md", "The foundation
- read this first"],
    ["item", "Bitcoin Whitepaper", "https://bitcoin.org/bitcoin.pdf", "Changed everything"],
    ["item", "Anthropic Claude Docs", "https://docs.anthropic.com", "Best AI documentation"]
  ],
  "content": "",
  "created_at": 1700000000,
  "pubkey": "854c79b78954da8aeea3c634c67de3b815952ed6b6dfd6987ce590cdca6f1296",
  "id": "2bf8fe4734bb4467dd7b1e946f79f2b2ee426a0464290a158e5954503683ee3b",
  "sig":
"a5d9290ef9659083c490b303eb7ee41356a8648bcf8420271d36be97ad3832a766826fb5c67ac6e19aaf1e16ddcf1fb7206f01c19e98ed0
}
```
```

## Querying Examples

### Find all "important-links" lists across the network

```
```json
{
  "kinds": [30303],
  "#d": ["important-links"]
}
```
```

This returns all users' "important-links" lists, enabling community aggregation.

### Find all lists from a specific user

```
```json
{
  "kinds": [30303],
  "authors": ["854c79b78954da8aeea3c634c67de3b815952ed6b6dfd6987ce590cdca6f1296"]
}
```
```

### Find a specific user's specific list

```
```json
{
  "kinds": [30303],
  "authors": ["854c79b78954da8aeea3c634c67de3b815952ed6b6dfd6987ce590cdca6f1296"],
  "#d": ["important-links"]
}
```
```

## Common List IDs (Suggested Standards)

To maximize cross-user aggregation, consider using these common list identifiers:

- **`important-links`**: Essential resources and references
- **`best-nostr-clients`**: Top 3 NOSTR client recommendations
- **`must-read-books-YYYY`**: Annual reading recommendations (e.g., `must-read-books-2024`)
- **`bitcoin-podcasts`**: Favorite Bitcoin-related shows
- **`learning-resources-<topic>`**: Educational materials by topic (e.g., `learning-resources-rust`)
- **`best-tools-<category>`**: Tool recommendations (e.g., `best-tools-privacy`)
- **`favorite-articles-<topic>`**: Topic-specific article recommendations

## ## Use Cases & Applications

### ### Individual Use

- Personal reference lists
- Public recommendations
- Curated resource sharing
- Time-capsule lists (e.g., yearly favorites)

### ### Aggregated Discovery

- **Community Rankings**: Aggregate all lists with same `d` tag to find most-recommended items
- **Leaderboards**: Count frequency of URLs across all users' lists
- **Discovery Engine**: Find new resources based on what similar users recommend
- **Trend Analysis**: Track how popular items change over time

### ### Client Features

- Display user's complete list collection
- Show "Top 10" by aggregating community lists
- Compare your list with friends' lists
- Subscribe to list updates from specific users
- Export lists to other formats (bookmarks, RSS, etc.)

## ## Implementation Notes

1. **Validation**: Clients should enforce exactly 3 items per list
2. **URL Format**: URLs should be valid HTTP/HTTPS links
3. **List ID Format**: Recommend kebab-case (lowercase-with-hyphens)
4. **Updates**: When users update a list, create new event with same `d` tag
5. **Deletion**: To remove a list, publish event with same `d` tag and empty item tags
6. **Privacy**: All lists are public; don't include sensitive information

## ## Future Extensions

Potential additions for future NIPs:

- Support for ranked items beyond top 3 (e.g., Kind 30304 for top 5)
- Category/tag system for list organization
- Collaborative lists (multi-author)
- Private lists using NIP-04 encryption
- List comments/reviews from other users

## ## Rationale

This specification enables a simple yet powerful pattern:

- Users can share curated recommendations
- Common list IDs create emergent standards
- Aggregation reveals community consensus
- Parameterized replaceable events keep storage efficient

- The constraint of "top 3" forces thoughtful curation

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