

# Structured Data for DNS Access Denied Error Page

draft-wing-dnsop-structured-dns-error-page-02

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IETF#113

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# Purpose

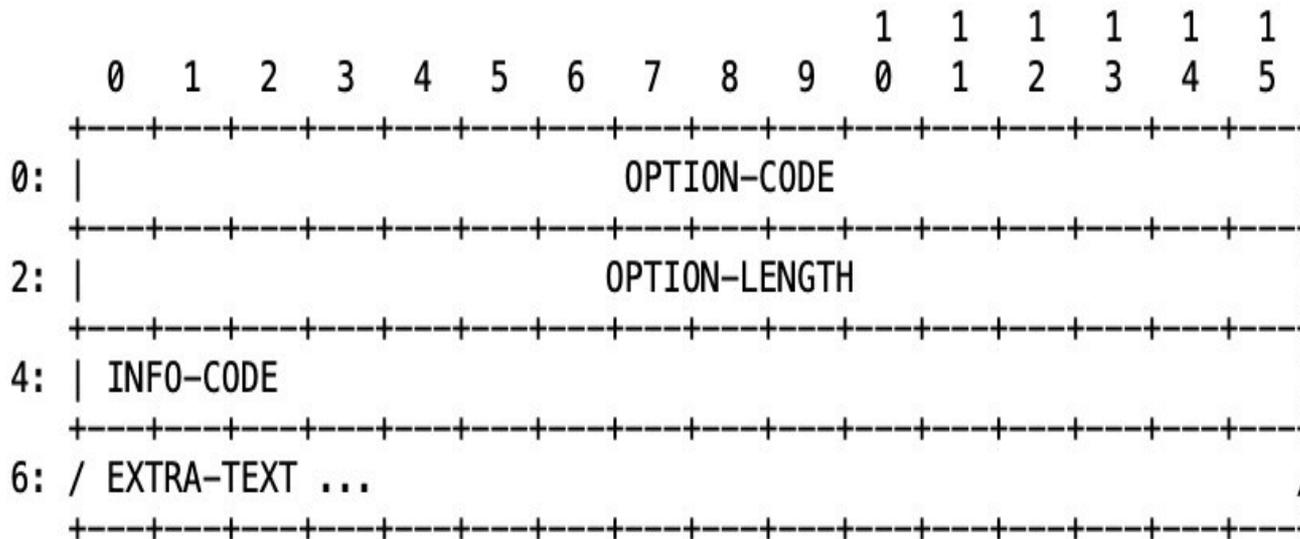
- Parsable JSON for user and IT troubleshooting DNS filtering
- Client displays/logs the JSON with its own UI
  
- **Updates to address comments**
- **Replaces draft-reddy-dnsop-error-page**

# Changes Since IETF#112

- Abandon the use of a new EDNS0 option to explain the reason for DNS filtering ...
- Instead, recast EXTRA-TEXT field in the EDE option for that purpose (updates RFC8914)
  - Structured as JSON

# JSON in EXTRA-TEXT Field

- JSON data in EXTRA-TEXT field of EDE option to explain the reason for DNS filtering



} JSON Attributes  
(Variable Length)

# Security Considerations

- Key updates:
  - Encrypted resolver has sufficient reputation (e.g., TRR).
  - Isolated environment to process the “c” and “r” pages (like captive portals)
    - Label the page as untrusted
    - Prevent user interaction
    - Prevent transmitting cookies, block JavaScript, block auto-fill of credentials or personal information, and be isolated from the user's normal environment
- (Non-Exhaustive) Security Cons
  - Encrypted and Authenticated DNS connection is mandatory.
  - Many others in the draft.

# Next Steps

- Addressed all the comments from the WG
- Consider for WG adoption

BACKUP

# An Example of Supplied Data

```
{  
  "c": "?time=1621902483", //Used to report a misclassified filter  
  "d": "ns.example.com", //FQDN of the encrypted server  
  "j": "malware present for 23 days", //Justification  
  "o": "example.net Filtering Service", //Organization responsible for  
  // the filtering  
  "r": "?country=atlantis" //Regulation  
}
```

**Mandatory**

<https://ns.example.com/?time=1621902483&type=a&name=malware.com>

**Blocked Domain**