

# RDAP-X

draft-newton-regext-rdap-x-media-type

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# The Problem

RDAP does not define a mechanism to allow RDAP clients to send a list of supported extensions to RDAP servers.

Client extension signalling can be used to negotiate content, such as using SimpleContact or JSContact instead of jCard (saves bandwidth for large search results).

# Solution: New Media Type

In HTTP, content negotiation is done with the accept header.

This document defines a new RDAP media type that has an extensions parameter.

```
application/rdap-x+json;extensions="rdap_level_0 fred"
```

# Client Behavior

Clients use the existing RDAP media type and the RDAP-X media type in accept header.

accept:

```
application/rdap+json,
```

```
application/rdap-x+json;extensions="rdap_level_0 fred"
```

# Server Behavior

When a server is programmed to understand the RDAP-X media type, it SHOULD respond with this media type in the Content-Type header. By doing so, clients will be able to detect if the server recognizes the media type. Otherwise, the server will use the 'application/rdap+json' media type signalling to the client that the RDAP-X media type is not recognized by the server. This updates the usage of the Content-Type header with RDAP defined in RFC 7480, but this usage is backward compatible.

# Why a new media type?

Section 4.3 of [RFC6838] strongly discourages the creation of new parameters on existing media types to enable new features.

Adding a new parameter to the existing media type may not be backward compatible with some server software.

# Why not query parameters?

In summary:

- Copy & Paste issues with URLs.
- May not survive redirects.
- Query parameter preservation on redirects is not inherently supported by most HTTP libraries.
- Incompatible with RFC 7480.
- Incompatible with current RDAP deployments.
- Removes content negotiation from the accept header.

See appendix A.2, which includes sample code.

# Extension Versioning

Appendix A.3 describes how RDAP-X can be compatible with extension versioning.

This draft does not define extension versioning. That is being worked on by others.



# Feedback Received So Far

- The server SHOULD respond with no additional extensions as far as the server capable of doing so (Pawel).
- Indicate 'application/json' and or 'application/rdap+json' with different (lower) weight than 'application/rdap-x+json' (Pawel).
- Why not a custom HTTP header? (Pawel).
- Discovery via OPTIONS or /help (Pawel).
- Cannot be used with raw web browser i.e. not browser-based client (Mario).