

PowerDNS Lua Records

Dynamic DNS Records

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Test web server availability

Example

```
www      IN      LUA      A      "ifportup(443, {'192.0.2.1', '192.0.2.2'})"
```

- This turns the 'www' name within a zone into a special record that will randomly return 192.0.2.1 or 192.0.2.2, as long as both of these IP addresses listen on port 443.
- If either IP address stops listening, only the other address will be returned. If all IP addresses are down, all candidates are returned.
- Because DNS queries require rapid answers, server availability is not checked synchronously. In the background, a process periodically determines if IP addresses mentioned in availability rules are, in fact, available.

Pick closest server

Example

```
www    IN      LUA    A      "pickclosest({'192.0.2.1', '192.0.2.2', '198.51.100.1'})"
```

- This uses the GeoIP backend to find indications of the geographical location of the requester and the listed IP addresses. It will return with one of the closest addresses.

```
www    IN      LUA    A      ("ifportup(443, {'192.0.2.1', '192.0.2.2', '198.51.100.1'})"  
      ", {selector='pickclosest'})")
```

- “pickclosest” and “ifportup” can be combined as follows
- This will pick from the viable IP addresses the one deemed closest to the user.

URL Stringmatching

Example

```
west    IN    LUA    A    ( "ifurlup('https://www.lua.org/',           "  
      "{{'192.0.2.1', '192.0.2.2'}, {'198.51.100.1'}}},  "  
      "{stringmatch='Programming in Lua'}")           " )
```

- In this case, IP addresses are tested to see if they will serve https for 'www.lua.org', and if that page contains the string 'Programming in Lua'.
- Two sets of IP addresses are supplied. If an IP address from the first set is available, it will be returned. If no addresses work in the first set, the second set is tried.

Combined

Example

```
config    IN      LUA    LUA ("settings={stringmatch='Programming in Lua'} "
        "EUips={'192.0.2.1', '192.0.2.2'}           "
        "USAips={'198.51.100.1'}                    ")

www       IN      LUA    CNAME ( ";if(continent('EU')) then return 'west.powerdns.org' "
        "else return 'usa.powerdns.org' end" )

usa       IN      LUA    A      ( ";include('config')                               "
        "return ifurlup('https://www.lua.org/',         "
        "{USAips, EUips}, settings)                    " )

west      IN      LUA    A      ( ";include('config')                               "
        "return ifurlup('https://www.lua.org/',         "
        "{EUips, USAips}, settings)                    " )
```

Preset Variables

- who
 - IP address of requesting resolver
- ecswho
 - The EDNS Client Subnet, should one have been set on the query. Unset otherwise.
- bestwho
 - In absence of ECS, this is set to the IP address of requesting resolver. Otherwise set to the network part of the EDNS Client Subnet supplied by the resolver.

Functions

- Ifportup, ifurlup
- pickrandom, pickclosest
- view
- pickwhashed, pickwrandom
- createReverse
- createForward
- asnum, country, continent, netmask
- ...

Further Information

Example

- Documentation:
 - <https://doc.powerdns.com/authoritative/lua-records/>
- Technical Blog:
 - <https://blog.powerdns.com/2017/12/15/powerdns-authoritative-lua-records/>

ありがとうございます



連絡しようと思ったら...

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