

SIP Resource Priority Header

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<draft-polk-sip-resource-03.txt>

Resource-Priority Header

- History:
 - SIP **Priority** header:
 - Has existed since original SIP document
 - influence treatment by receiving human user only, not of any Proxy Servers, GWs or UAs
 - A new Header is needed for addressing Prioritized sessions at congested network points

Resource-Priority Header

- Goal:
 - create preferential (or deferential...) treatment for session establishment when competing for destination User Agent resources
 - Individual Domains control the Policy of the label (relative or absolute)
 - Use of namespace should create domain awareness and prevent “Leakage”
 - A Non-issue if resources available

Resource-Priority Header

- Goal (cont'd):
 - establish preferential (or deferential...) treatment for session retention when competing for destination UA resources
 - A Non-issue if resources available

Resource-Priority Header

- Where this could take place in a network:
 - typically telephony gateways (not necessarily PSTN)
 - within MLPP environments
 - could be at gateway and UA resources only
 - Or, could include Intermediate Servers
 - Proxy, Redirect and Registration
 - Can be mechanism for ETS
 - maybe 112/911(like) services
 - A Non-issue if resources available

Defines the Resource-Priority general header field

```
Resource-Priority _ "Resource-Priority" HCOLON  
                  Resource-value  
Resource-value   _ namespace "." priority  
namespace        _ alphanum / "-"  
priority         _ alphanum / "-"
```

**Included in INVITE, reINVITE, REDIRECT
200 OK responds with value chosen**

Behaviors

- IANA registration procedure for all namespace.priority value(s)
 - e.g., dsn.routine,q735.4, ets.auth_emergency
- Clearer definition of default behavior
 - overall goal: maximize call completion
 - **Resource-Priority** expected, but none
 - policy issue, recommend treat at default level
 - recipient doesn't understand "namespace"
 - policy issue, recommend ignore and treat as if no Resource-Priority header
 - recipient doesn't understand "priority" value
 - policy issue, recommend ignore and treat as if no Resource-Priority header

Behaviors (cont'd)

- Nothing preventing a domain from determining how to treat more than one namespace.priority
 - via SLA or internal choice (e.g. dsn.- and/or 911.- and ets.-)

Error behavior

- 407 Proxy Authentication Required
 - For that priority value chosen, or to a GW that's congested (and not the callee)
- 503 (Service Unavailable) if insufficient priority
- Warning: 370 (Insufficient Bandwidth)
- Open issue: separate codes for this new service type?

Open issues

- Policy implied
- Concept of implied vs. explicit authorization