

SIP Common Gateway Interface

- Problem: Need low-level interface for creating SIP services.
- Solution: Derive interface from HTTP CGI; text-based way of sending requests to scripts, returning responses/actions.
- Status: Approved for Informational RFC.

SIP Register Payload: Problem

- Want to be able to upload user control information (esp. SIP CGI and CPL scripts) to proxy servers.
- Also want to be able to download this information in the other direction, so you can edit it.
- Want it to be easy to associate this information with users with accounts at the proxy server.
- Want to make this lightweight — your client shouldn't need to speak additional protocols or have too many new procedures.

SIP Register Payload: Solution

- Include the control information in the payload of REGISTER messages for the user.
- Indicate general “type” of control information in Content-Disposition headers. (Originally used Content-Type, but SIP-CGI scripts can be any media type.)
- Server returns currently registered scripts in body of 2xx REGISTER response.
- Script upload, download modified by Accept and Accept-Disposition headers.
- Special syntax for deleting scripts.
- Timestamps, If-Unmodified-Since (from HTTP 1.1) prevent race conditions when editing and re-uploading scripts.

SIP Register Payload: Example

```
REGISTER sip:sip.example.com SIP/2.0
From: Joe User <sip:joe@example.com>
To: Joe User <sip:joe@example.com>
Content-Type: application/x-perl
Content-Disposition: sip-cgi; action=store
Accept-Disposition: sip-cgi, cpl
Accept: multipart/mixed, */*
```

```
[body]
```

SIP Register Payload: Next Steps

- Some details still to work out, but I believe that the basic semantics are largely resolved. Can finish pretty easily.
- Already a number of implementations.
- Would want to be a SIP working-group item.
(If the group weren't so overloaded...)
- Additional consideration: RFC 2183 requires that new Content-Disposition types be defined either in Standards Track or Experimental RFCs — not Informational.