

# Session Announcement Protocol

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# The new **SAP** draft

The current spec (draft-ietf-mmusic-sap-v2-01.txt) is a merger of

- draft-ietf-mmusic-sap-00.txt (from November 1996!)
- draft-ietf-mmusic-sap-sec-04.txt
- draft-ietf-mmusic-sap-v2-00.txt

Aiming to get an experimental RFC out relatively soon.

# Overview of changes

- Support for IPv6 and directory sessions
- Update address/port usage
- Update bandwidth recommendations
- Compression using zlib
- Payload type field
- Authenticated announcements
- Assorted minor bug-fixes

## Support for IPv6

- Add an address type bit to the SAP header and allow the originating source field to be an IPv6 address
- The IPv6 SAP address is FF0X:0:0:0:0:0:2:7FFE, where X is the 4-bit scope value. The following scope values are defined in IPv6:

Value	Scope
0x1	Node-local
0x2	Link-local
0x5	Site-local
0x8	Organization-local
0xE	Global

# Directory Sessions

- Allow SAP directories to be announced within SAP – due to Ross Finlayson.
- SDP syntax:

```
v=0
o=cperkins 2890844526 2890842807 IN IP4 126.16.64.4
s=Sample directory session
m=directory 9875 SAP application/sdp
c=IN IP4 224.2.127.12/255
t=2873397496 2873404696
```

- Announced by SAP in the usual manner.

# Directory Sessions

- Anyone may announce sessions within a directory
  - Do we want to restrict this?
- Changes to the announcement of the directory **MUST** be authenticated
  - If the directory is deleted, **MUST** stop announcing sessions within it
  - If the directory moves, **MUST** move announcements of sessions to the new group

## Ports and TTLs

- Announcements MUST use port 9875 with TTL 255.
- Previous versions allowed TTL scoping - we do not - and admin scoped sessions were allowed to specify a different port.
- What do current implementations do?

## Bandwidth recommendations

- Bandwidth limit for each group is now 4 kbps - previous versions used 200 bps for global scope groups, and 2 kbps for local groups.
- Minimum timeout is increased from 30 minutes to 1 hour.

# Compression

- Specify zlib instead of gzip.
- Use of gzip was a mistake, and only implementation used zlib.

# Payload type

We now allow an optional payload type to be included in each announcement.

- May be omitted, in which case default is SDP
- All implementations **MUST** support application/SDP
- Use of non-SDP payloads is **NOT RECOMMENDED** due to interoperability concerns

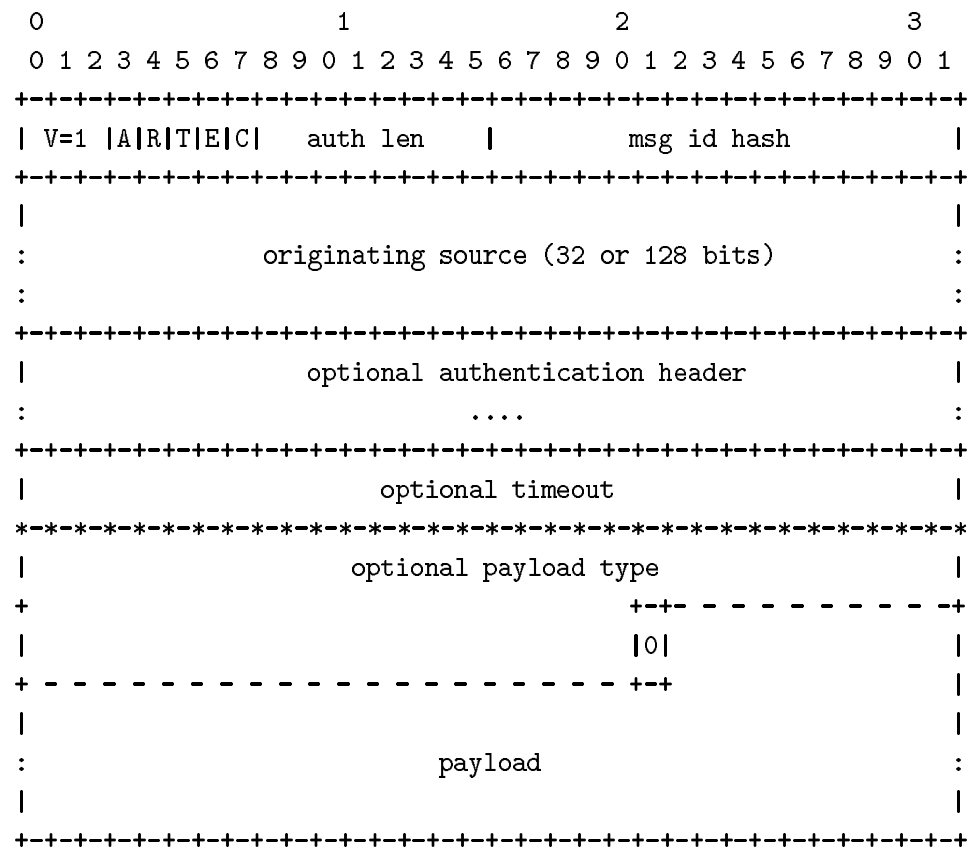
# Encryption

- The SAP header retains a single bit to indicate that the payload is encrypted.
- We do not specify any encryption algorithms in this draft: leave to other drafts if support is desired.
- Encrypted announcements are NOT RECOMMENDED on groups where there may be many receivers without the decryption key, due to waste to bandwidth.

# Authentication

- Specify authentication using either OpenPGP or CMS
- As in SAP security drafts, but updated for new versions of the authentication specs.

## Packet format



## Open Issues

- Should the SDP syntax for directory sessions be defined here?
- Calculation of announcement interval is not well specified