Proposal for Backwards Compatibility between Session-ID Versions

draft-polk-insipid-bkwds-compatibility-proposal-03

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Agenda

- Propose a solution for Backwards Compatibility

- Are there any alternatives?

Purpose of this Separate Draft

- Putting an indication in to identify which version transmitter *and* receiver is
  - …without adding new code to one version
- The Alternatives
  - Add a new option tag or two
  - Add a new Contact header feature tag or two

First: the Alternatives

- Having a new Option tag(s)
  - Option tags are to determine remote UA's support for SIP extensions
    - Looking at this from wrong direction
    - Won't work if kaplan implementations don't write new code
      - Which isn't expected

- Having a new Contact header feature tag(s)
  - Can't be used in MESSAGE method SIP requests
    - Which seems unacceptable

The Challenges to Backwards Compatibility

- Hindered by the fact that we cannot expect any new kaplan indication
- Also hindered by the fact that kaplan implementations merely copy the contents of the header-value, and not **always** just sending out 1 UUID.
  - This was the impression the WG was lead to
  - Or, at least, this wasn't clear to the WG
- We don't exactly know how any/all kaplan implementations behave

Current Session-ID solution

```
Alice Jones                                          Bob Jones

INVITE
Session-ID: aeffa652b22911dfa81f12313a006823

                                                       200 OK
             Session-ID: be11afc8b22911df86c412313a006823;
                   remote=aeffa652b22911dfa81f12313a006823


ACK
Session-ID: aeffa652b22911dfa81f12313a006823;
             remote=be11afc8b22911df86c412313a006823
```

Current Conundrum with Session-ID Mismatch I

```
Alice Jones                                        Bob Kaplan

INVITE
Session-ID: aeffa652b22911dfa81f12313a006823


                                                      200 OK
            Session-ID: aeffa652b22911dfa81f12313a006823

ACK
Session-ID: aeffa652b22911dfa81f12313a006823;
```

Current Conundrum with Session-ID Mismatch II

Alice Jones   Bob Kaplan

```
                                                    INVITE
              Session-ID: be11afc8b22911df86c412313a006823


200 OK
Session-ID: aeffa652b22911dfa81f12313a006823;
         remote=be11afc8b22911df86c412313a006823

                                                    ACK
         Session-ID: aeffa652b22911dfa81f12313a006823;
              remote=be11afc8b22911df86c412313a006823
```

Proposal: keep within the Session-ID header I

```
Alice Jones                                        Bob Kaplan

INVITE
Session-ID: aeffa652b22911dfa81f12313a006823;
            remote=00000000000000000000000000000000

                                                      200 OK
        Session-ID: aeffa652b22911dfa81f12313a006823;
            remote=00000000000000000000000000000000

ACK
Session-ID: aeffa652b22911dfa81f12313a006823;
            remote=00000000000000000000000000000000
```

Proposal: keep within the Session-ID header II

```
Alice Jones                                          Bob Kaplan

                                                         INVITE
              Session-ID: be11afc8b22911df86c412313a006823

200 OK
Session-ID: be11afc8b22911df86c412313a006823;
            remote=00000000000000000000000000000000

                                                            ACK
          Session-ID: be11afc8b22911df86c412313a006823;
                remote=00000000000000000000000000000000
```

Proposal: works with transfer

- Alice Jones, the transferee, merely propagates

```
Session-ID: aeffa652b22911dfa81f12313a006823;
          remote=00000000000000000000000000000000
```

to **any** Carol

- Knowing that Carol Jones will see the null field and switch it with her UUID

- Bob Kaplan, the transferee, merely propagates

```
Session-ID: be11afc8b22911df86c412313a006823;
          remote=00000000000000000000000000000000
```

to **any** Carol

- Knowing that Carol Kaplan will merely mirror value back to Bob Kaplan

Next Steps

- Iron out in (before?) London

- … eventually meet in Hawai'i …