

AMWA NMOS BCP-002-01

Signaling “Natural Grouping” in
NMOS Senders and Receivers



Separate Flows → Grouping Info

- SMPTE 2110 Systems send each essence as a separate stream in the network
- A single “program” might contain
 - One or more Video streams (HD, UHD)
 - Several Audio streams (5.1, 2.0, alt language, VDS)
 - Several ANC data streams (HDR info, captions, TC)
- AMWA NMOS presents each of these streams as a separate resource in the registry
 - How to signal the natural relationship between them?

AMWA BCP-002 “grouphint”

- Label each Sender with a “grouphint” tag
- Label each Receiver with a “grouphint” tag
- The Controller matches up the tags within a device (or a node) to understand which signals naturally belong together
- This information can be used to build default groupings in the control system

AMWA BCP-002 “grouphint”

```
(sender 1): "tags": {"urn:x-nmos:tag:grouphint/v1.0": ["pgm_52:vid_01"]}
(sender 2): "tags": {"urn:x-nmos:tag:grouphint/v1.0": ["pgm_52:aud_01"]}
(sender 3): "tags": {"urn:x-nmos:tag:grouphint/v1.0": ["pgm_52:aud_02"]}
```

The URN is defined in the AMWA public parameter register on github, and points to the BCP-002 specification for grouphints.

The first value in the “hint” is matched across senders (or receivers) within a device, to identify the parts that go together naturally

The second value is the role of this specific sender (or receiver) in this grouping

There is also an optional syntax for scoping hints across a node instead of across the device

What is the Status of AMWA BCP-002?

- BCP-002 has been tested at a workshop, and a last-call for comments was issued
- The comments in the last-call were addressed
- The Specification has been approved by the AMWA Board and is a published AMWA Best-Practice BCP-002-01

ALL AMWA Specifications are available for FREE at <https://amwa-tv.github.io/nmos/>