Secure Critical NMOS APIs with AMWA NMOS BCP-003
What Problem does BCP-003 Solve?

- NMOS APIs (such as IS-04 / IS-05) are very useful, but do not have any security mechanisms defined

- Common security methods are needed for the NMOS APIs to allow for multi-vendor interoperability & ease of development

- BCP-003-01/02 provides Best Current Practices for AMWA NMOS security
What is BCP-003-01?

• BCP-003-01 secures NMOS API communication

• Based on the use of TLS (Transport Layer Security)

• Calls for the use of HTTPS (HTTP over TLS) for REST API calls & WSS (WebSocket Secure) WebSocket Protocol over TLS for WS APIs
What is BCP-003-02?

- BCP-003-02 (currently AMWA “work in progress” status) defines authorization for NMOS APIs

- Based on the use of OAuth 2.0, a common IT industry protocol for authorization

- An Authorization Server distributes JSON Web Tokens (JWTs) to clients to authorize API calls
• Audio senders, receivers, and audio level meters
• NMOS APIs secured by TLS as per BCP-003-01
Demo shows BCP-003-02 Authorization for NMOS Explorer to access NMOS APIs on secured target devices:

= support for BCP-003-02 security
Use AMWA BCP-003 to stop sneaky hackers!

https://github.com/AMWA-TV/nmos-api-security
BCP-003 Demo Participants

- Atos BNCS
- Pebble Beach Systems
- Sony

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