

PBS Kids goes Live in Australia Directly from the USA

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OPEN
BROADCAST SYSTEMS



PBS Kids Australia

- 24x7 live channel
 - Award-winning content from USA
- Foxtel cable channel
 - 2nd Largest provider in Australia (5 million households)
- Live playout suitable for time zone
 - Sydney is currently 14 hours ahead of New York
- Quick launch required
 - <30 days from project approval to July 1, 2021 on-air date



FOXTEL



Playout Alternatives

- Brklyn has existing relationship with PBS
 - Cloud Mess archive: Responsible for repurposing on-demand content & playout
 - Large content library already up and running
- Foxtel
- Alternative 1: Remote playout in Australia
 - Remotely managed from New York
 - Files transferred to playout servers located in Sydney
- Alternative 2: Local playout in New York
 - Use local servers, assets and personnel
 - Feeds delivered to Sydney in real time via fixed fiber
- Alternative 3: Local playout in New York
 - Use local servers, assets and personnel
 - Live stream delivered to Sydney in real time via Public Internet

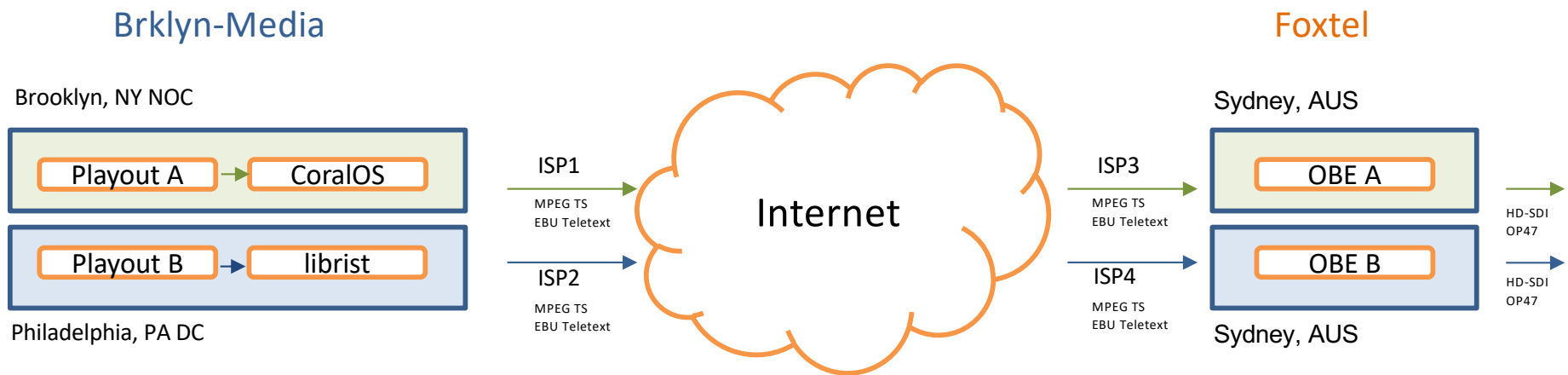


Playout Alternatives

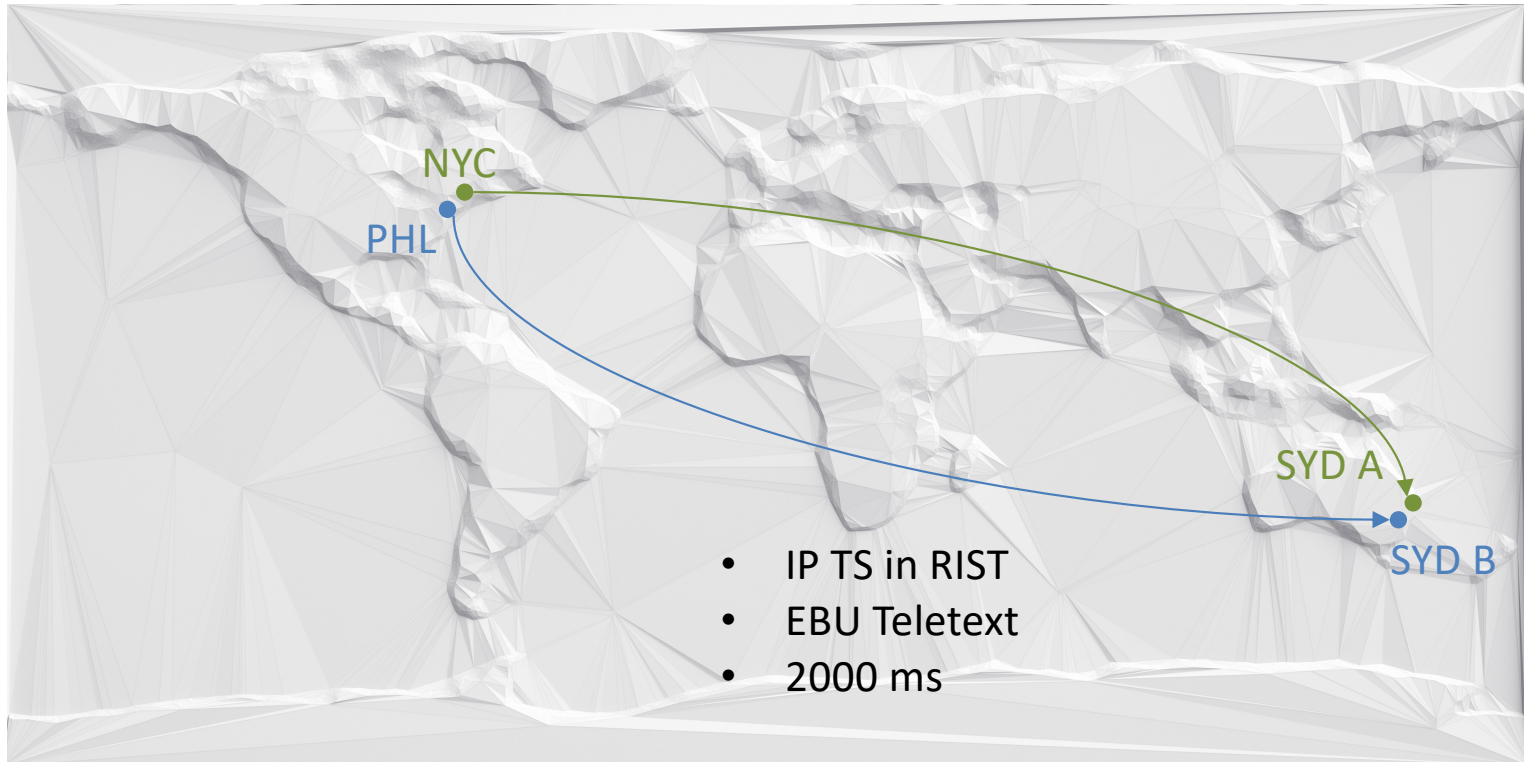
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 - Responsible for repurposing much on-demand content & playout
 - Large content libraries already up and running
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System Architecture



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Why RIST?

- Economics drove use of Internet-based transport
 - Leased lines, multi-hop satellite too expensive
- Requirements:
 - Bounded end-to-end delay (so no TCP)
 - High reliability
 - Migration path to IP & ST 2022-7 highly desirable
 - Preference for open standard solution



Issue: Captions Conversion

- OP-42/47 used in Australia
 - Not compatible with CEA-608/708 captions
 - Conversion required for material containing US-generated captions
- Decision: Where to do caption conversion?
 - Choice A: Modify content files pre-playout
 - Choice B: Convert captions in US at output of playout server
 - Choice C: Convert captions in receiver/decoder



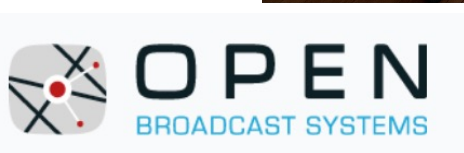
Lessons Learned

- Don't agree to 3 weeks delivery!!



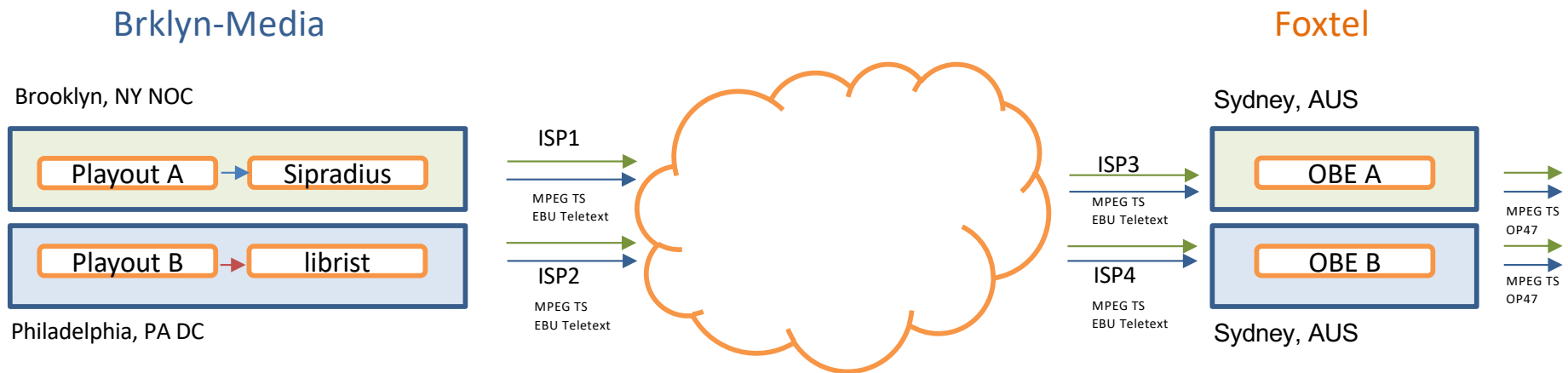
Lessons Learned

- Or redo the floor in your home office



Future Plans

IP and ST 2022-7 Seamless Protection Switching



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Thank You!

For more info on Brklyn-Media: <https://brklyn-media.io/>

For more info on OBS: <https://www.obe.tv/>

