QUICR

@ MOQ IETF Interim

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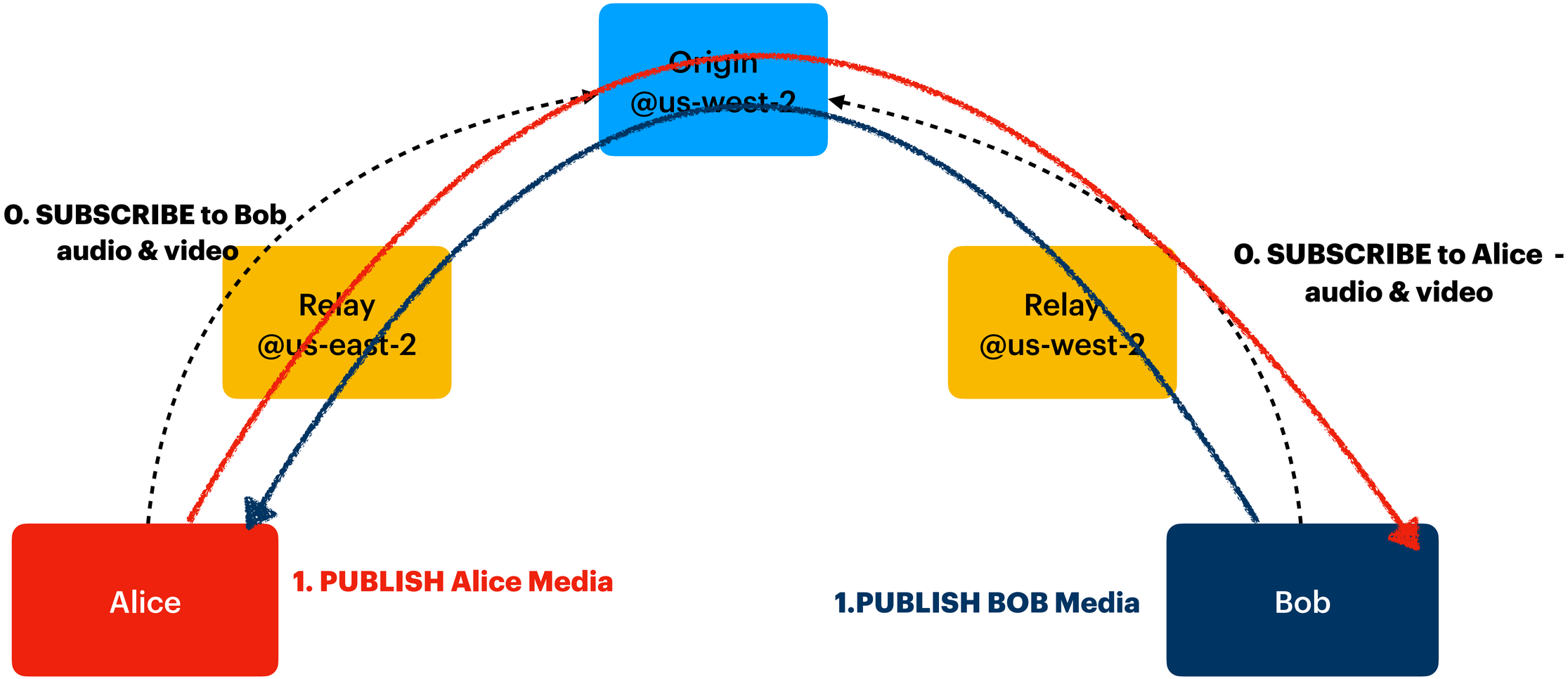
QUICR

- Publish/Subscribe based end-to-end encrypted media delivery protocol
- Unifies streaming and interactive media flows
- Caches and Relay Friendly
- Common ingest and distribution protocol
- Supports QUIC Streams and QUIC Datagrams
- Control Streams for configuring media streams and Media Streams for delivering media
- Knobs and Metadata to control/react to congestion control at media senders (sources, relays)
- Use-cases - Unified Media (Streaming + Interactive), Mixed Reality , Gaming

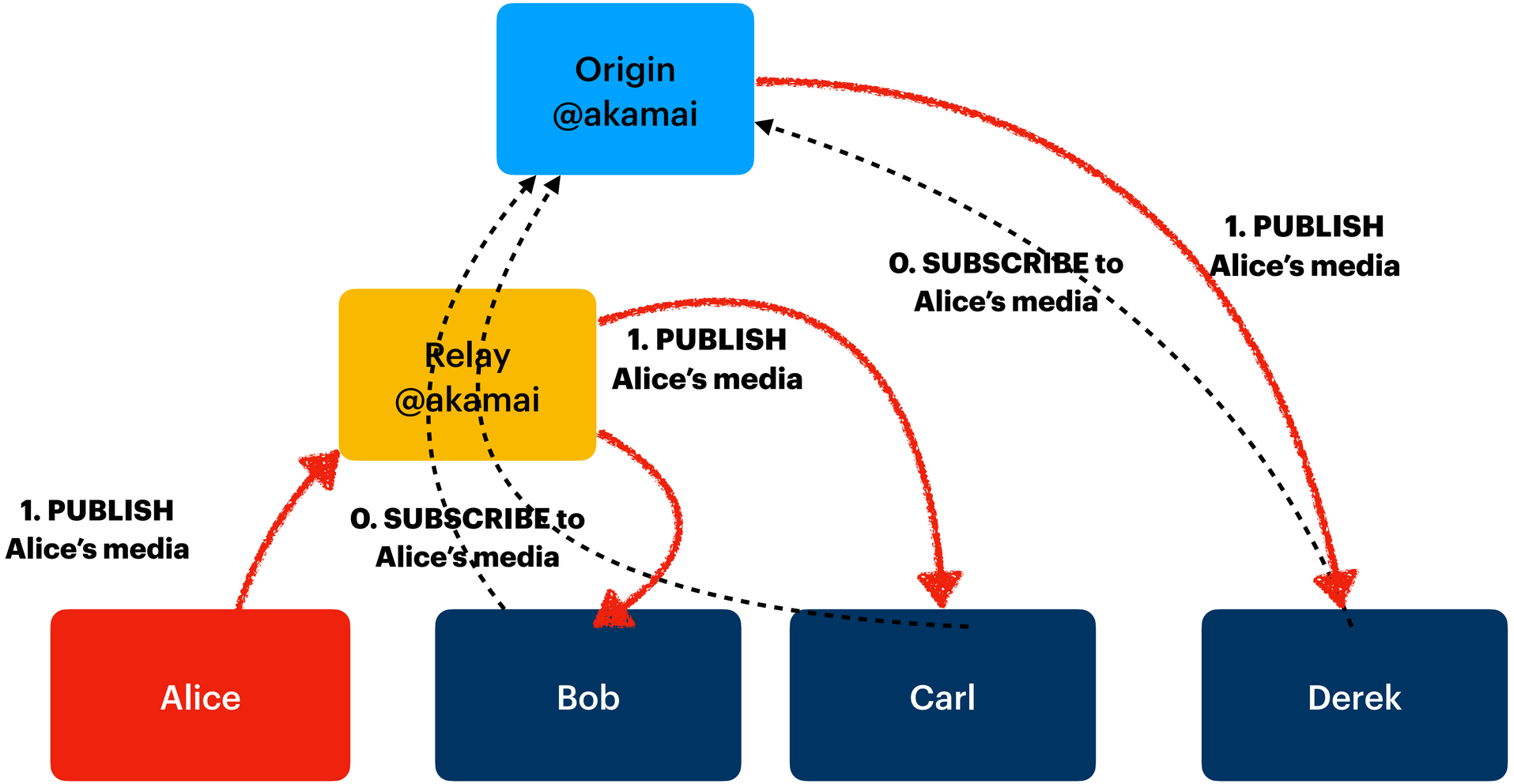
Demo Setup

- Publishers and Subscribers connect to Relays
- Relays connect to the Origin Server (Tree Topology)
- Publishers and Subscribers uses QUIC Datagram and QUIC Unidirectional Streams (for WARP)
- Picoquic QUIC Stack and QUICR Prototype https://github.com/Quicr/quicrq)
- Subscribers perform join via quick sync to the “most recent group”
- OPUS 48KHZ , 24kbps audio
- H264 720p Video with IDR interval of 2 seconds

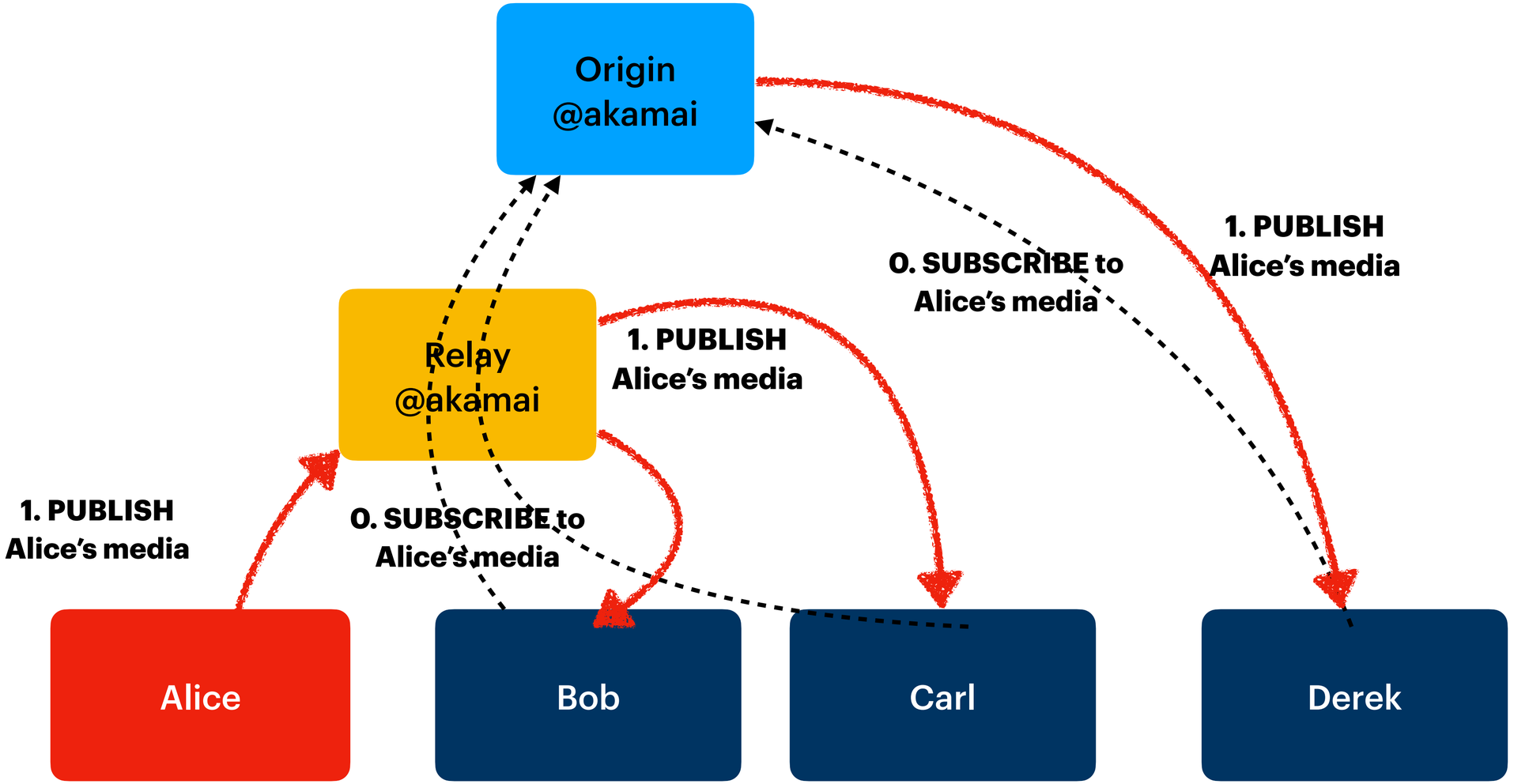
Demo - Two Way Interactive Media



Demo - 1 Publisher, N Subscribers - WARP Mode



Demo - 1 Publisher, N Subscribers - Datagram mode



Demo - 1 Publisher, N Subscribers - EU/US (if time permits)