Multicast Panel
Streaming Media West 2015
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Multicast-ABR Panelists

**Moderator: Matt White**, Principal Architect - CableLabs

**Coby Young**, Senior Director - Comcast VIPER

**Parissa Pandkhou**, Director, Technology - Verizon

**David Grubb**, CTO, Cloud Solutions – ARRIS

**Raj Nair**, VP, Technology – Ericsson
Unicast vs. Multicast

- A single 6 Mbps HD program streamed to 2 households with 2 STBs over DOCSIS network

<table>
<thead>
<tr>
<th></th>
<th>Unicast</th>
<th>Multicast</th>
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<tbody>
<tr>
<td>24 Mbps</td>
<td>6 Mbps</td>
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<td>12 Mbps</td>
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<td>6 Mbps</td>
<td>Aggregate (Over Access Network)</td>
<td>6 Mbps Aggregate (Over Access Network)</td>
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Unicast

- 4 Streams

Multicast

- 1 Stream
How does Multicast ABR work?

- Simplified Operation in Home with Gateway
Multicast Adaptive Bitrate Architecture
- Dedicated channel for each content
- Unlimited viewers
- Excellent customer experience
- eMBMS is the LTE technology for broadcast

**LTE Broadcast High-Level Architecture**
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