Grass Valley®

CASE STUDY

G20 Summit, New Delhi: "One Earth · One Family · One Future" Theme Brought to Millions by Grass Valley's AMPP SaaS and Hardware Solutions

When world leaders met in New Delhi, India for the critical G20 Summit on September 9–10, 2023, news viewers worldwide witnessed live and recorded statements, events and ceremonies from an advanced full-featured, International Media Centre (IMC) created for the event, based on Grass Valley's transformative Media Universe.

To make sure that everything occurring at the summit's multiple New Delhi locations — the Bharat Mandapam International Exhibition-Convention Centre, the Raj Ghat memorial complex and the Palam Airport and Hindon Airbase — would be captured and seamlessly integrated into a comprehensive state-of-the-art broadcast infrastructure, the government of India chose Grass Valley® to scale up the IMC.

In addition to relying on the expertise of Grass Valley's experienced support staff, the IMC included Grass Valley cameras, switchers, elastic recorders, media asset management and other digital video products, all connected and controlled using Grass Valley's Agile Media Processing Platform (AMPP®).

As a cloud-based SaaS platform, AMPP integrates hardware, software and services from Grass Valley and other industry leaders into a seamless, scalable, cloud- and/or premises-based production infrastructure. AMPP allowed the IMC to achieve its purpose as the centralized, coordinated hub for the vast media-related requirements of such a high-profile event. And since AMPP is a SaaS product, this means that additional capacity could be spun up within minutes if needed. Plus, the costs associated with the custom, high-end video network were eliminated when the G20 Summit concluded. AMPP Edge, which uses on-premises I/O and compute resources to achieve the lowest possible latency, was also incorporated into the IMC.

From Ingest to Distribution

To capture the event and support the associated reporting needs of the world's news media, 99 Grass Valley cameras were deployed: 29 LDX® 135 cameras with NativeIP, SMPTE ST 2110 output streams directly from the camera at the Bharat Mandapam; and 70 LDX 92 and LDX 98 cameras, with expandable options up to 4K at Raj Ghat, Palam Airport and Hindon Airbase.

To ensure that feeds from all locations were ingested smoothly, Grass Valley's Elastic Recorder X captures any format to any available storage, which provided real-time access to content for global broadcasters. The IMC used GV AMS Pro Storage to ensure the vast amounts of footage generated during the summit were stored securely and could be accessed swiftly.

For the ingest of XDCAM files from cameras outside the AMPP network, Grass Valley's Mync software was used. Mync streamlines the process of capturing, cataloging, and converting ingested video files, making them ready for post-production or immediate broadcast alongside the IMC's networked feeds.

With so many different news organizations requiring immediate access to the G20 video assets, Grass Valley's Framelight™ X Asset Management was deployed in the IMC along with 10 client workstations. All recorded video was accessible, editable and shareable in real time. Proxy versions were also pushed to Amazon S3, making them available online regardless of the location of the broadcaster.

While international broadcasters with AMPP accounts could access all recorded video assets to create their own reporting, there was also an official high-definition feed produced by the G20 using 10 Grass Valley K-Frame™ XP switchers. One 4 M/E K-Frame switcher was at Bharat Mandapam and nine 3 M/E K-Frame switchers were distributed at the other venues.

At the G20 Summit, AMPP was also integrated with instances of Adobe Premiere for real-time edits and broadcast-quality refinements. The integration with Adobe Premiere ensured that the content was not just captured but polished to meet the highest broadcast standards.

Because the IMC relied on AMPP's elastic compute capabilities and unparalleled adaptability, Grass Valley's Playout X delivered the G20's transmission flawlessly, taking in stride any sudden viewership spikes during the summit.

Since the ability to transition easily between High Dynamic Range and Standard Dynamic Range was key to signal processing within the IMC, Grass Valley's KudosPro™ UHD1200 12G UHD Video and Audio Processor was pivotal to ensuring that every broadcaster offered viewers the best visual and auditory experience irrespective of the location.

Also part of the GV Media Universe supplied to the IMC for the G20 were Grass Valley Densité® modular signal processors and Sirius routers. The adaptability, scalability and high-density signal processing of the Densité platform ensured seamless transitions and consistent signal quality, making them indispensable for the summit's varied requirements. And because of the complexity of routing numerous feeds across multiple venues, the robust design and reliability of the Sirius routers played a crucial role in the flawless live broadcasting from diverse G20 event locations.

Finally, because technical issues or failures were out of the question, the IMC deployed on-premises backup hardware in addition to the failover redundancy features built into AMPP.

The complexity and importance of presenting the G20 Summit, New Delhi, to the world without technical issues was a broadcasting challenge of enormous scale and significance. With over 105 major pieces of equipment from Grass Valley strategically deployed across venues, the challenges were met and the IMC delivered as designed because of the strength and reliability of the GV Media Universe at its core.

Production & Coverage, Telecast and Distribution of G20 Summit, New Delhi