

# Training Day 1 Report:

5 June 2024

Doordarshan Bhawan is a significant facility equipped with advanced broadcasting technology and staffed by numerous engineers.

## Main Working of DD News Channel

The primary focus of the training was the backend operations of the DD News channel. This includes the collection, processing, and broadcasting of news content. Here are the key components and their roles:

### 1. Ingest Room:

- **Data Collection:** The ingest room collects data from various sources such as journalist reports, YouTube, social media, and raw footage.
- **Technology Used:** The room utilizes Quantel and Grass Valley GV servers to manage incoming data.
- **ENPS:** Collected data is sent to servers and their MOS data is sent to the Electronic News Production System (ENPS).
- **Data Types:** Various types of data, including scripts for news readers (anchors), graphics, and audio files, are processed here.
- **Monitoring Systems:** The ingest room contains a wholer where the entire output is shown. Additionally, there are multiple MSR (Master Switch Room) screens labeled 1, 2, 3,...and VTR (Video Tape Recorder) screens labeled 1, 2.... These screens are crucial for monitoring and controlling the broadcast output.
- **GV Stratus :** The system in the ingest room also contains GV Stratus, a media workflow application developed by Grass Valley. GV Stratus streamlines media production workflows by integrating various tasks such as ingest, editing, logging, storage management, and playout into a single, unified platform.

## 2. ENPS (Electronic News Production System):

- **Central Role:** ENPS serves as the main server, handling synchronization of various feeds and data during broadcasting.
- **Functionality:** It manages and integrates all elements required for broadcasting, such as scripts, graphics, and audio, ensuring they are available during live broadcasts.

## 3. Systems in Ingest Room:

**Switches and Routing:** The ingest room features various switches that control feed lines, main RTR output, and destination settings. These switches ensure that the correct data flows into the Servers and ultimately to the broadcast.

**SVR (Server) :** Similar to RTR, the SVR system in the ingest room includes PCs that manage additional routing and data processing tasks. These systems support various backend operations necessary for smooth broadcasting.

## 4. MSR VTR (Master Switch Room Video Tape Recorder) output screen at ingest room:

- **Master Switch Room:** This central control room manages and switches various video and audio feeds necessary for broadcasting. It oversees the routing of all video signals to ensure that the correct content is being broadcast at any given time.
- **Video Tape Recorder:** In a modern context, VTR refers to digital systems managing recorded content, playing back pre-recorded segments during a broadcast.

## 5. RTR (Router):

- **Router System:** The RTR system is part of the ingest room responsible for routing various signals (video, audio, data) to their appropriate destinations. It ensures that the right feeds are directed to the correct locations, servers, or other processing systems, Only Media Object Server (MOS) data is sent to the ENPS.
- **Switches:** The RTR system includes various switches that manage the distribution, ensuring proper flow and integration within the broadcasting infrastructure.

## Internet Connectivity

The entire Doordarshan Bhawan office is equipped with an internet connection configured through proxy settings. Specific IP addresses and port numbers are used to manage and control internet access throughout the facility.

## **Key Takeaways**

- Integration of Technology: The seamless integration of Quantel, Grass Valley GV servers, ENPS, and RTR highlights the advanced technological framework of Doordarshan News.
  - Data Management: Efficient data management in the ingest room ensures that all necessary content is prepared and available for live broadcasts.
  - Broadcast Control: The switches and routing mechanisms in the ingest room, including the MSR VTR and RTR, SVR systems, play a crucial role in maintaining the quality and reliability of the broadcast .
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