TAG Bridge

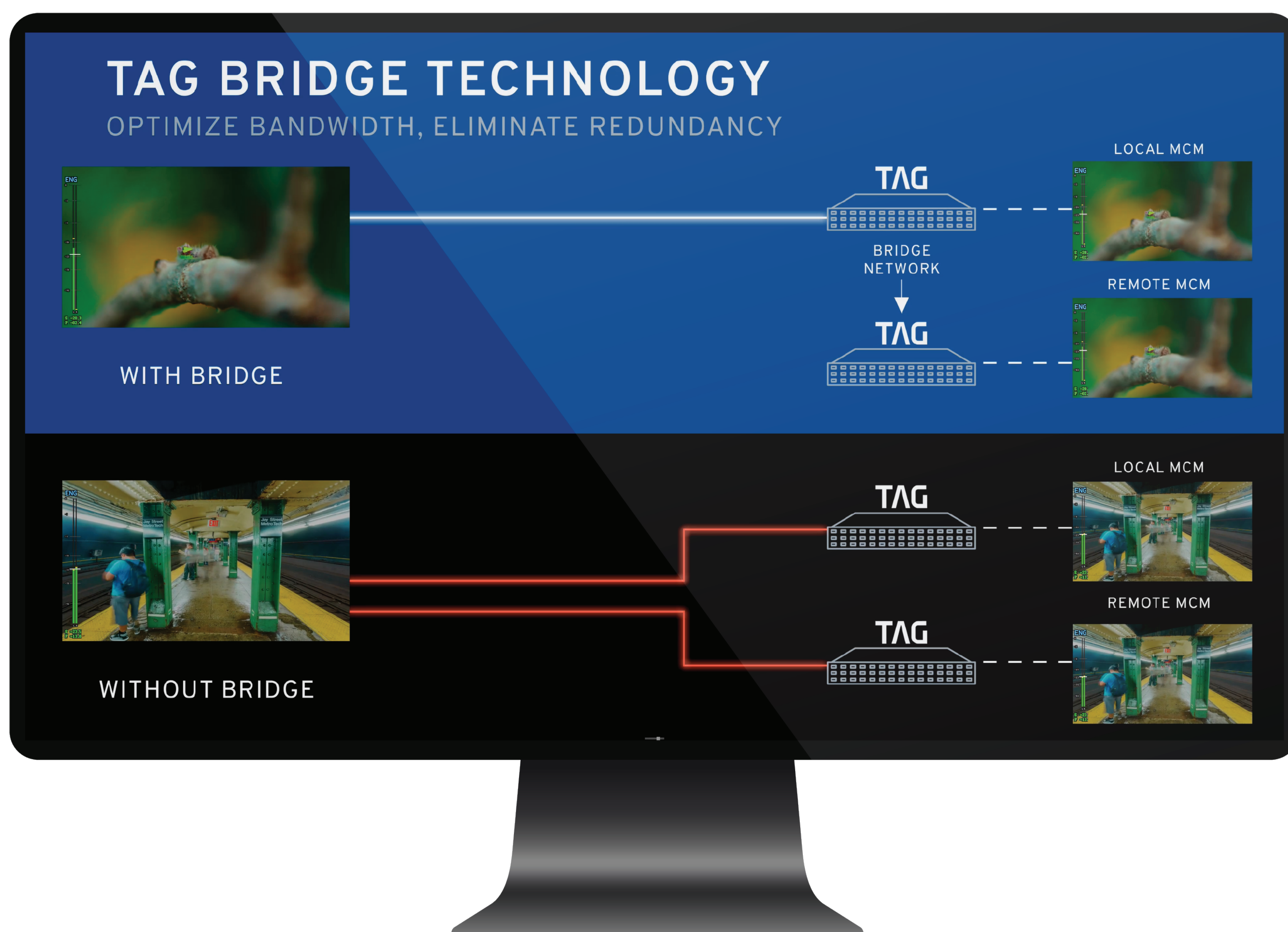## View sources anywhere, anytime, without exhausting network and computing resources

Overview

Super-charged IP Highway: TAG Bridge enables the automatic creation of signal proxies, from any source type and delivers display-optimized visually lossless resolutions (up to full UHD) based on tile size and layout on monitoring walls, enabling cost-optimized delivery to multiple destinations anywhere in the world.
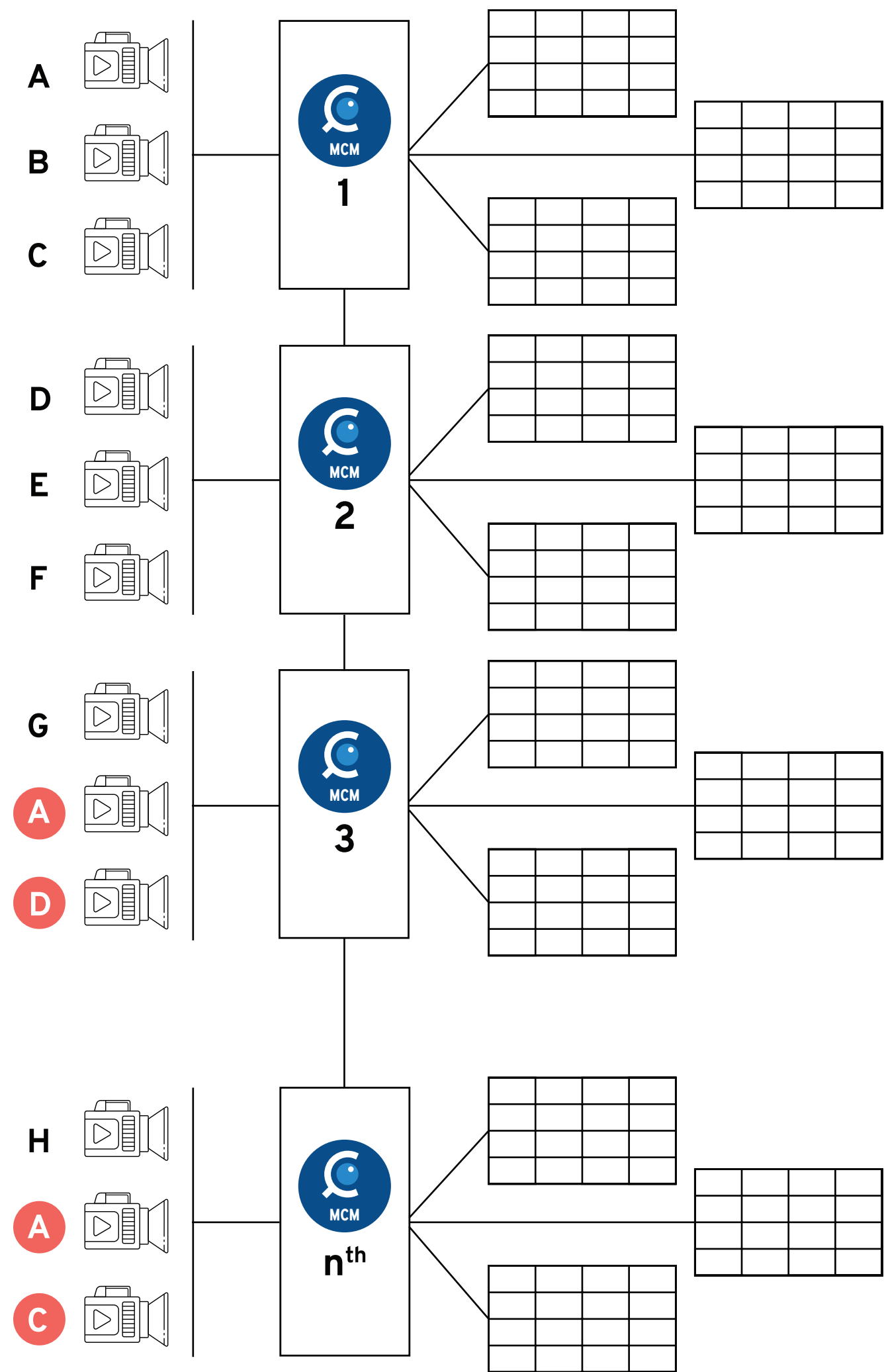
This technology removes the complexity of routing the same stream to diverse locations by using an ultra-efficient architecture enabling an operator to receive a source once — including video, audio and metadata, and display it on any MCM anywhere, regardless of input source, size or format.

TAG Media Control System (MCS) simply orchestrates and controls these signals, while one or more instances of the TAG Multichannel Management (MCMs) handle all routing of Bridge streams eliminating any possible additional latency in the workflow.

Minimize Compute & Network Resources: Once the stream is ingested by one MCM, the TAG Bridge automatically optimizes the sizing, format and delivery protocol to fit any configuration of multiple recipients. Compute resources are significantly reduced, and a minimum amount of network bandwidth is consumed, freeing up capacity and reducing costs.
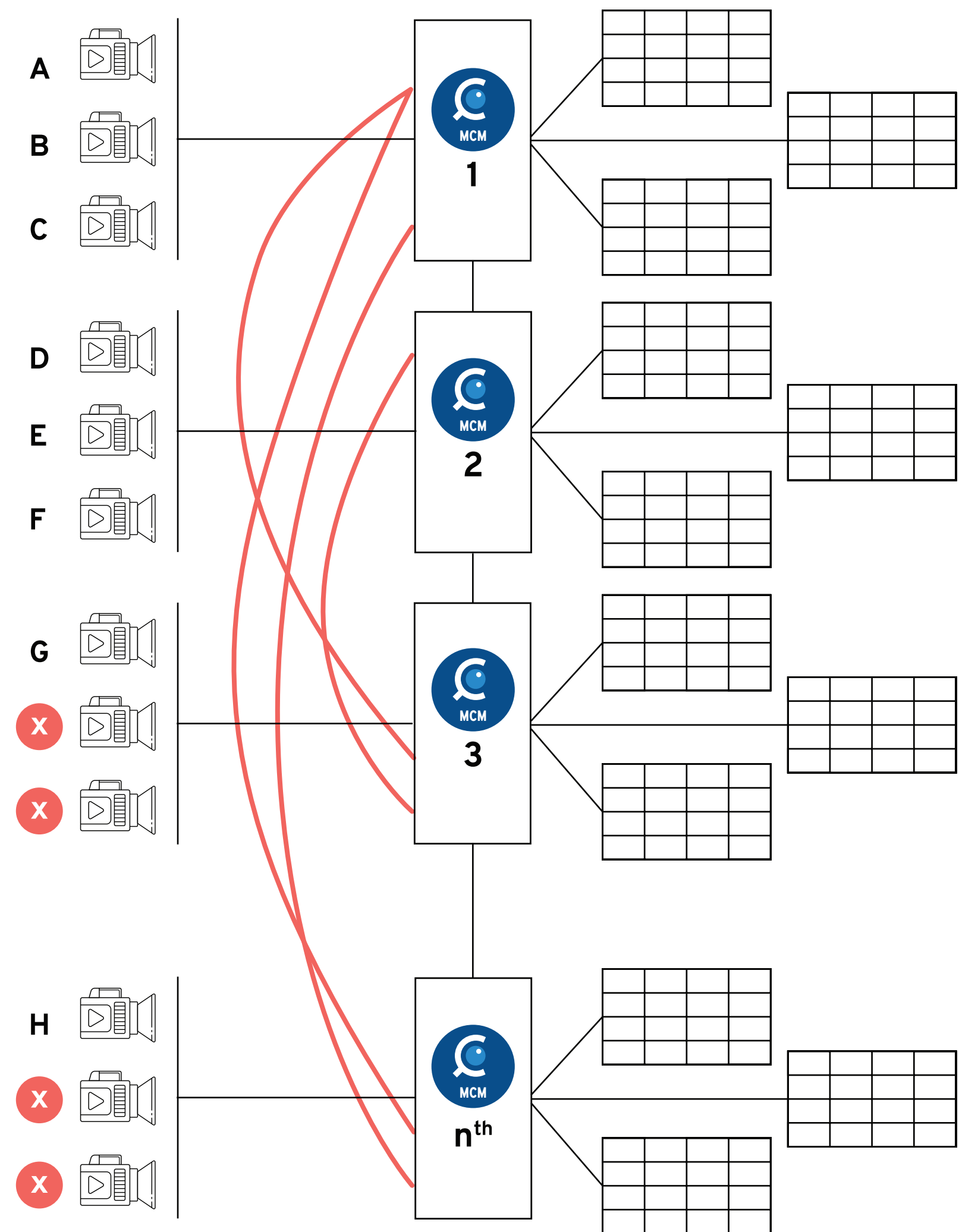
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Before Bridge

A, B, C → MCM 1

D, E, F → MCM 2

G, A, D → MCM 3

H, A, C → MCM nth

X Duplicate Sources

After Bridge

A, B, C → MCM 1
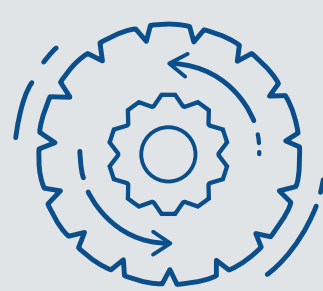
D, E, F → MCM 2

G, X, X → MCM 3

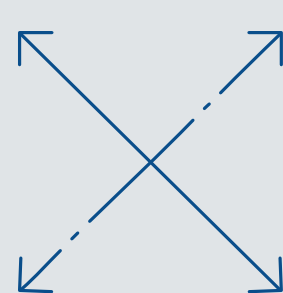H, X, X → MCM nth

X Available Inputs — TAG Bridge

Bridge frees up available inputs by eliminating the need to ingest the source in each machine/location; lowering costs and reducing bandwidth/ compute resources.

Featured Highlights

Simplified orchestration

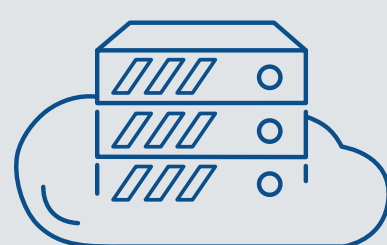By enabling separation of input and output processes and instances.

Dynamic scaling

Provides low-latency display-optimized picture scaling and compression to minimize bandwidth utilization.

Optimization

Enables optimized instance sizing and flexible architecture by decoding and monitoring at the source; regardless of number of mosaics being displayed.

Enablement

Ground, Cloud, Hybrid & Multi-Cloud workflows.

Mosaic Display Outputs
(Cloud/Ground)

MCM Outputs

Multi-Channel Monitoring 4

Multi-Channel Monitoring 5

Generate Mosaic Output

Receive Tile

DeMUX & Decode

Multi-Channel Monitoring 6

On-Prem/Cloud

Multi-Channel Monitoring n^th

2 Mix & Match sources, tiles, formats, and locations into one or more output mosaics

Send to Output MCM

TAG Bridge

Exploded View: under the MCM hood

Proxies generated from UHD and all other Sources

1 A full, uncompressed signal is scaled to match the destination size

Receivers

MCM

Multi-Channel Monitoring 1

Multi-Channel Monitoring 2

(light compression)

Encode: slice-based JPEG

Wrap into Bridge transport

Scale to Tile size

Yes

No

Full Mode?

Process: Alarm Events, Fingerprints, and other

Multi-Channel Monitoring 3

On-Prem/Cloud

Multi-Channel Monitoring n^th

Uncompressed

Compressed

Multiple CAM/Stream sources
Multiple location
Multiple formats/streams
(Cloud/Ground)