BroaMan

CAESARS CONFERENCE FORUM
Las Vegas, USA

When Caesars Entertainment, who operate the world-renowned Caesars Palace in Las Vegas, planned their next expansion phase - CAESARS FORUM, a new state-of-the-art conference center - they needed a first-class technical infrastructure for site wide multi-signal transmission over this large facility, and opted for BroaMan.

Locally based design and engineering specialists, National Technology Associates (NTA) have a long track record working with the Caesars Entertainment family, including LINQ promenade, the High Roller, and many restaurants and venues. Thus they were again contracted, and as their project manager Shane Snell recognized the building was way too big to run traditional SDI cabling, he instead turned to a BroaMan fiber solution.
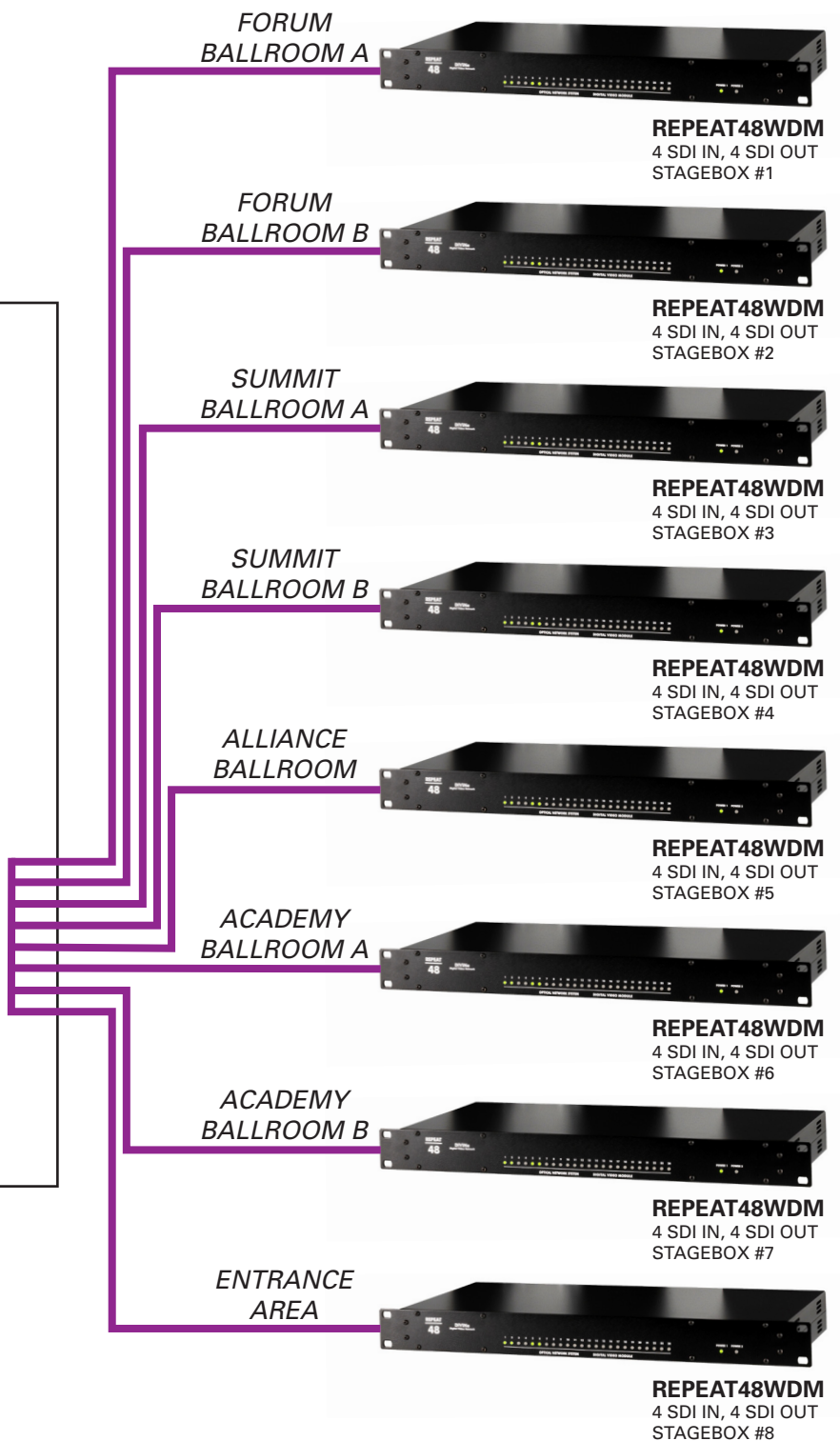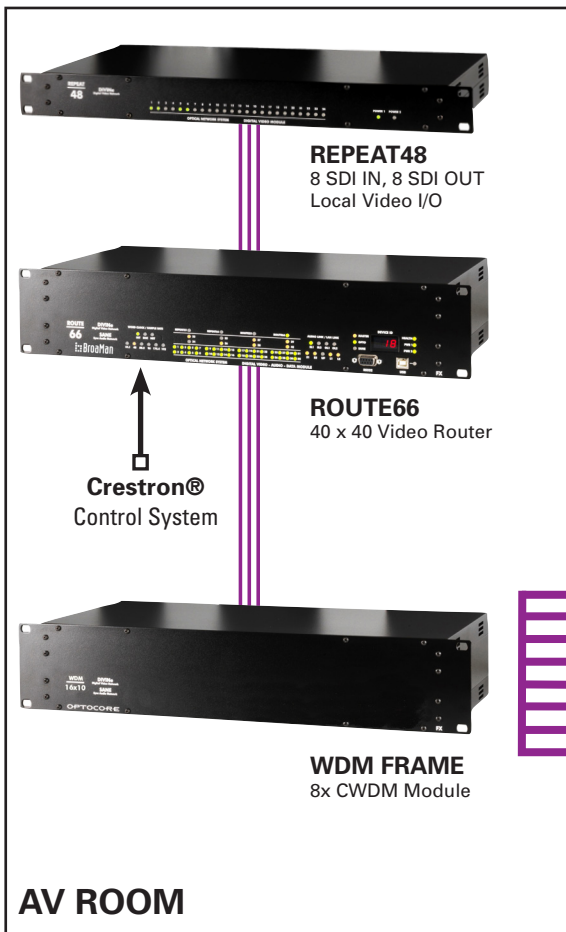
SYSTEM REQUIREMENTS

- Stagebox fiber-based system
- Transport of multiple 3G-SDI video
- Comprehensive single-channel status monitoring via front panel
- Open protocol for integration with 3rd party control system
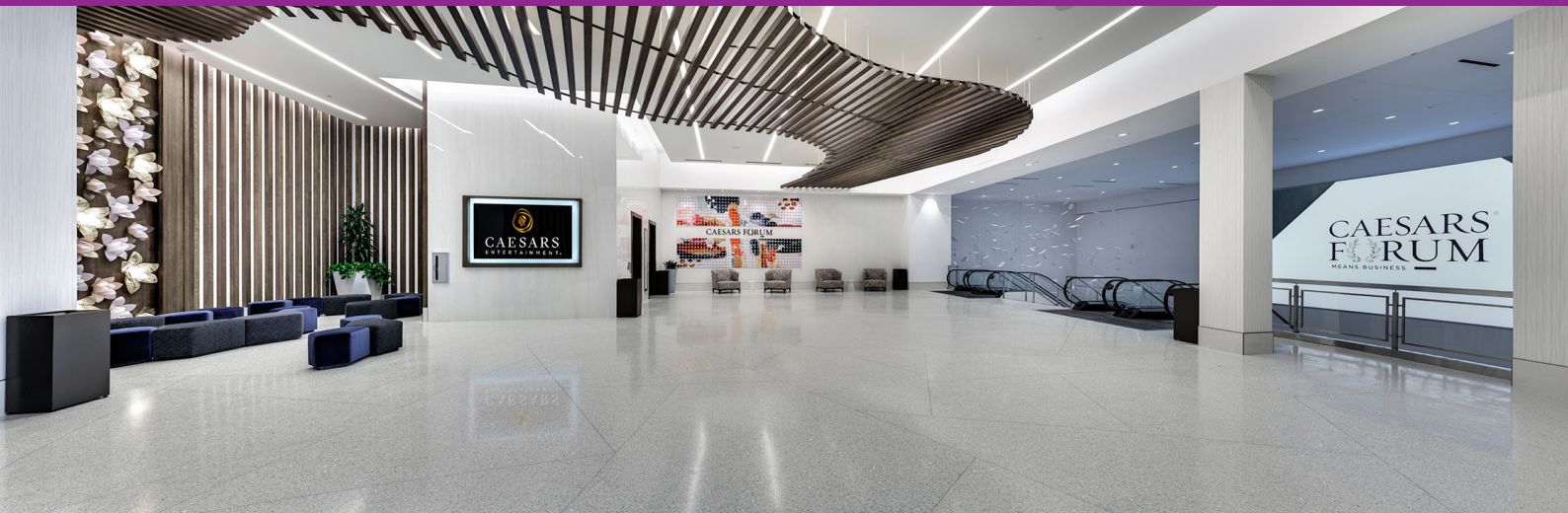- Savings on power consumption

"Most of the other SDI over Fiber solutions had felt like a glob of pieces and parts. On the other hand the BroaMan set-up was nice in that it felt like a built-to-fit solution. Instead of having point to point converters and an extra matrix, with all the additional little bits and pieces, we ended up with exactly what we needed as a system, rather than a series of parts. Also, the modular design of the nodes made it easy to get the number of ins and outs we were looking for."

Shane Snell, Project Manager

VIDEO DISTRIBUTION SYSTEM

BroaMan

REPEAT48
8 SDI IN, 8 SDI OUT
Local Video I/O

ROUTE66
40 x 40 Video Router

Crestron®
Control System

WDM FRAME
8x CWDM Module

AV ROOM

FORUM BALLROOM A

REPEAT48WDM
4 SDI IN, 4 SDI OUT
STAGEBOX #1

FORUM BALLROOM B

REPEAT48WDM
4 SDI IN, 4 SDI OUT
STAGEBOX #2

SUMMIT BALLROOM A

REPEAT48WDM
4 SDI IN, 4 SDI OUT
STAGEBOX #3

SUMMIT BALLROOM B

REPEAT48WDM
4 SDI IN, 4 SDI OUT
STAGEBOX #4

ALLIANCE BALLROOM

REPEAT48WDM
4 SDI IN, 4 SDI OUT
STAGEBOX #5

ACADEMY BALLROOM A

REPEAT48WDM
4 SDI IN, 4 SDI OUT
STAGEBOX #6

ACADEMY BALLROOM B

REPEAT48WDM
4 SDI IN, 4 SDI OUT
STAGEBOX #7

ENTRANCE AREA

REPEAT48WDM
4 SDI IN, 4 SDI OUT
STAGEBOX #8

Singlemode Duplex Fiber Connection

SOLUTION

BroaMan offers customised fiber solutions as well as standard devices for every application that requires IP/SDI/HD/3G video transport or routing, no matter what the scale or complexity. In the BroaMan environment, all open standards can be integrated - digital video, audio and data - on the same low latency fiber infrastructure.

A BroaMan 40 x 40 Route66 video router sits at the hub of the fiber network design, with 32 3G-SDI I/Os freely routed to eight Repeat48 WDM in different locations throughout the facility. There are also eight local fiber I/Os on the Route66, which a Repeat48 interface in the hub room converts to SDI. An external WDM frame, connected to the Route66 multiplexes 32 x 32 channels in the central location, combining together the desired video channels and sends the Muxed streams down a singlemode duplex fiber connection to each remote Repeat48 WDM. Between each of the Repeat48 WDMs and the Route66 there

are also two generic fiber tunnels that can be used to tunnel an optical data.Repeat48WDM on the truck and the similar device on the stagebox connect via two DUO singlemode fibers.

KEY ADVANTAGES

- All video signals from stagebox multiplexed into one duplex fiber cable with distance up to 10km
- Small form factor, low power consumption, no fan in the stagebox devices.
- 40 x 40 Non-blocking Video Matrix
- Integrated Crestron control for video matrix

SYSTEM COMPONENTS

BROAMAN Device	Localization	Functions
Route66	AV ROOM	40 x 40 Video Router
Repeat48	AV ROOM	**8** x 3G-SDI IN, **8** x 3G-SDI OUT - Local Video I/O
WDM FRAME	AV ROOM	**8** x 12 Channel CWDM Module for Multi/Demulti-plexing remote video channels
Repeat48WDM	FORUM BALLROOM **A**	**4** x 3G-SDI IN, **4** x 3G-SDI OUT, **4** x Fiber Aux Ports (1310nm and 1510nm)
Repeat48WDM	FORUM BALLROOM **B**	**4** x 3G-SDI IN, **4** x 3G-SDI OUT, **4** x Fiber Aux Ports (1310nm and 1510nm)
Repeat48WDM	SUMMIT BALLROOM **A**	**4** x 3G-SDI IN, **4** x 3G-SDI OUT, **4** x Fiber Aux Ports (1310nm and 1510nm)
Repeat48WDM	SUMMIT BALLROOM **B**	**4** x 3G-SDI IN, **4** x 3G-SDI OUT, **4** x Fiber Aux Ports (1310nm and 1510nm)
Repeat48WDM	ALLIANCE BALLROOM	**4** x 3G-SDI IN, **4** x 3G-SDI OUT, **4** x Fiber Aux Ports (1310nm and 1510nm)
Repeat48WDM	ACADEMY BALLROOM **A**	**4** x 3G-SDI IN, **4** x 3G-SDI OUT, **4** x Fiber Aux Ports (1310nm and 1510nm)
Repeat48WDM	ACADEMY BALLROOM **B**	**4** x 3G-SDI IN, **4** x 3G-SDI OUT, **4** x Fiber Aux Ports (1310nm and 1510nm)
Repeat48WDM	ENTRANCE AREA	**4** x 3G-SDI IN, **4** x 3G-SDI OUT, **4** x Fiber Aux Ports (1310nm and 1510nm)