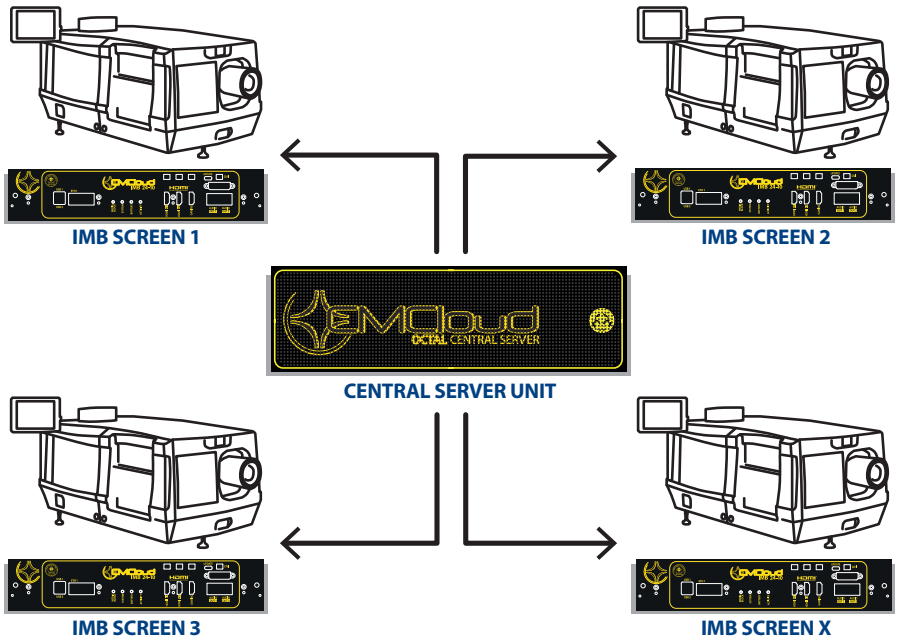
BEYOND EVERY CLOUD, THE SUNSHINE

INNOVATION

CMCLOUD, combining **innovative technologies** with a totally new approach, will allow cinema exhibitors to reduce purchasing costs, to efficiently manage and optimize digital cinema systems, from small theaters to multiplexes.

By exploiting **Cloud Computing** and **Data Centers** features, **CMCloud** introduces itself as the only digital server for centralized cinema management which can improve efficiency and reliability and increase flexibility of your cinema. It is not necessary to place a server close to the projector in the screening booth, but you need only one of it to manage all screens in the theatre.

The movie, stored and encrypted on the central server, is processed and the data **are streamed over a LAN network** in real time **to the Integrated Media Block (IMB)** which is inserted into Series II cinema projector.



REDUCTION OF COSTS

It's cheaper than any other server on the market. You will just need to purchase one rack for all your screening rooms, **reducing energy use by up to 80%** in the case of multiplexes.

Thanks to the use of high shared disks capacity, even **libraries** - which are commonly used in current cinema systems - **will be unnecessary**.

The hardware configurations are scalable for all types of movie theatres, from small theaters to multiplexes and the **Theatre Management System** (**TMS**) **is included** in the initial cost.

MANAGEMENT SIMPLIFICATION

The integrated **TMS** software, with an **user friendly interface**, will allow to manage several advanced features: the **full manageability of the system by remote** introduces the concept of **un-attended projection booth** and, looking forward, it suggests the idea of **a new generation of boothless theatres**.

In case of component fault, you are in condition to swap it with a new one, just exploiting the **"hot swap" technology** during the normal function of the other equipment. **CMCloud technology will automatically find the new hardware and reprogram it**, so that it can restart working normally. Moreover, the location of the **Central Server far from the dirty and hazards of the booth environment** contributes significantly to the high level of reliability the system can guarantee.

Using **CMcloud** you will **transfer a movie** from one screen to another **in less than 10 minutes or in a few seconds** using the **Dynamic Movies Sheduling**.

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TECHNICAL SPECIFICATIONS

The **CMCloud** technology is based on **professional hardware components which are used in main Data Centers** and are designed **to operate continuously for 24 hours a day**, for years, while the equipment could be **constantly monitored by the Cinemeccanica operation center**.

The **SINGLE**, **QUAD** and **OCTAL** Central Server solution **can be combined** in order to match the requirements of performance, reliability and redundancy of the system.

Each of them includes respectively 1, 4 or 8 server modules.

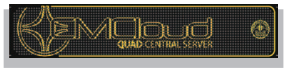
Central Server **SINGLE** Screen

3 HDD Raid5 – 2TB net - Expandable up 6TB net

2 x 1 Giga Ethernet ports

2 x 10 Giga Ethernet ports or Fiber Optic Ethernet card (option)

Direct ingest via USB 2.0, LAN or CRU (option)



Central Server **QUAD** Screen

4 independent Modules

Extra modules can be added at any time after installation

One controller for all modules networked

3 x 3,5" Hot swap HDD (Raid 5) 2TB net – Expandable up to 6TB (3 x HDD 3TB each).

2 x 1.0 Gigabit Ethernet ports

2 x 10 Giga Ethernet ports or Fiber Optic Ethernet card (option)

Direct ingest via USB 2.0, LAN or CRU (option)

Central Server **OCTAL** Screen

8 independent Modules

Extra modules can be added at any time after installation

One controller for all modules networked

2 x 3,5" Hot swap HDD (Raid 1) 1TB net – Expandable up to 3TB (2 x HDD 3TB each).

2 x 1.0 Gigabit Ethernet ports

2 x 10 Giga Ethernet ports or Fiber Optic Ethernet card (option)

Direct ingest via USB 2.0, LAN or CRU (option)

IMB 24-10

Ethernet connection for the content streaming

JPEG2000 and MPEG-2 decoding

8 Audio Pairs (through 2 x RJ45 connectors) - 7 GPO - 4 GPI

Output resolution up to 4K in 2D and 2K in 3D

High Frame Rate supported

Fully managed by the CMCloud TMS

Videoscaler board (VSC) as option including: 3 x HDMI 1.3a inputs with HDCP support, 1 x DVI-I input, Upscaling up to 4K

M.A.I.-4K

Videoscaler up to 4K output resolution

MPEG-4.10 (H.264), SMPTE 421M (VC-1), AVS, WMV9, MPEG-4.2, and MPEG-2 decoding

Two independent scaling data-path with optional PIP capabilities

Integration with IMB 24-10 functionalities and full remote network based management for TMS integration

8 HDMI 1.4a (with 3D Support)

Analog Inputs Component/RGBs

Full Color Correction control

Full Gamma Correction Control on 16 zones

Gigabit Ethernet connection to centralized Storage for alternative contents access + 1 Ethernet for remote management

AUTOMATION BOX (option)

14 Digital inputs

10 Digital outputs (expandable as option)

LAN controlled

Fully Managed by CMCloud solution

RS-232 IN/OUT (option)

2 analog outputs (option)

OPTIONS

With the **FAST NETWORK** option it is possible to add a 10GB Ethernet and **increase up to 5 times the speed of the content transfer** between modules;

With the **ULTRA FAST NETWORK**, based on fiber network cards, **the transfer speed is more than 10 times faster** and it will take **a few minutes**;

With the **PREMIUM NETWORK** you will **transfer a movie from one screen to another in a few seconds** using the **Dynamic Movies Sheduling**.

Each single Server Module may be configured with the **HIGH CAPACITY** option: that means the capacity of the modules rises **from the standard 2TB up to 6TB*** (*depending by models).

CMCloud is **completely open to integrate all third-party components** so that, in the near future, the movie theatres will be **an ideal place to socialize** and get a full interactive experience experience.

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