



CRUISER 3.0

## Overview

Cruiser is a software platform that provides a solid framework to create interactive visuals.

It consists of several components and mainly:

1. Client player
2. Data Designer
3. Content Distribution
4. Analytics and application insights
5. Server

## Server

The server components are developed with .Net Core technology and are compatible with both Windows and Linux platforms.

They are fully compatible with both AWS and Azure services and support the continuous deployment and integration through Docker containers with the support of Kubernetes.

The server allows the management of:

- Players and group of players
- Modules and applications configuration and deployment
- Monitoring
- Licensing and group permissions

## Content Distribution

Cruiser is compatible with cloud services and local NAS stations and provides a sophisticated layer that distributes the right content to the right player of group of players according to the user experience assigned.

All sensitive information are encrypted by default while content is usually stored in plain. Additional encryption techniques are available. Checksum and MD5 validation algorithms are used to ensure consistency of the files.

## Analytics and insights

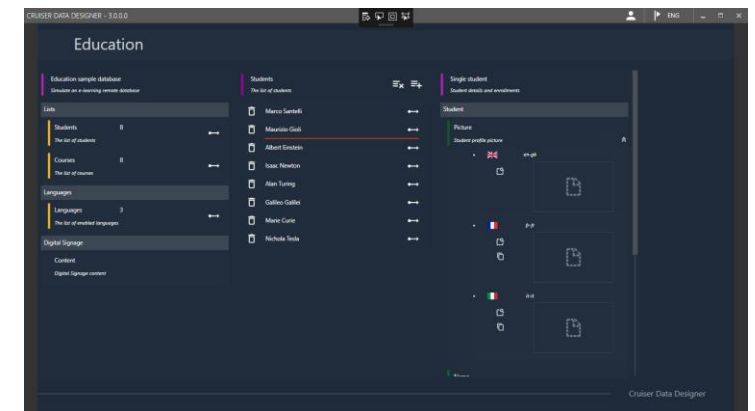
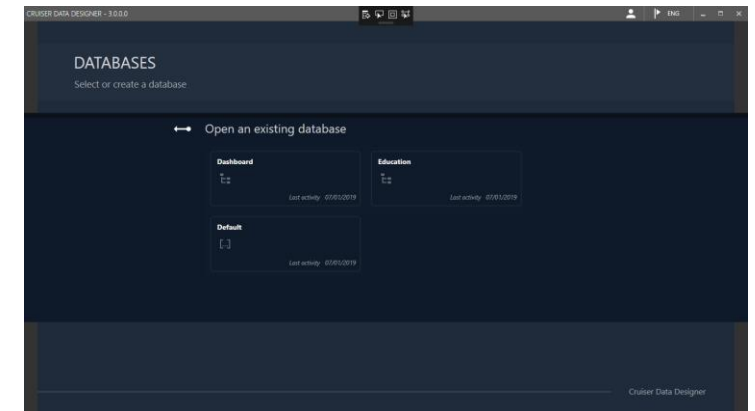
Cruiser player can generate any type of statistic record, from content playback and duration to event-driven activities.

The platform does not have any Business Intelligence capability that is usually delegated to third party services. Analytics can be stored locally or on the Cloud and can be integrated with No SQL DB, Data Factories, Data Stream Analytics, Data Lake Analytics and Event Hubs.



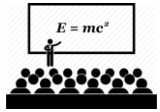
## Data Designer

The Data Designer allows IT managers to define the data structure of the content and operators to perform data entry activities prior the distribution of the content.



# Uses

## Monitoring, Sharing and Collaboration



Lecture Room



Training



Control Room



Meeting Room

## Feedback and Statistics



Polls & Surveys



Insights



PC



## Sales & Marketing Tools, External Communication



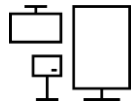
Presentation



Kiosk



Exhibition



Digital Signage

## Client Player

The Client Player is a sophisticated tool that combines several components to deliver bespoke user experiences.

The software architecture is modular and includes:

1. Modules or applications – used to deliver a bespoke user experience
2. Settings – used to configure a player or group of players and include all the parameters to configure the resolution, the capabilities and access to resources (content, server, database, analytics)
3. Skins – used to provide a compelling user graphic interface and combines both visual elements and data visualizations through the use of data binding techniques
4. Data – local database that can be encrypted, updated regularly, used to configure the content to play in each visual element
5. Localizations – used to provide a decoupled framework for texts and generally all type of content that needs to be rendered with a specific culture (language)
6. Components – include a large set of modular elements that can be invoked by the current skin to perform specific operations, such as for example:
  - Communication with external hardware (sensors, camera, RFID readers, etc)
  - Update of data, content and localizations, through webservice for example

- Collaboration tools to initiate streaming services to all connected devices
- Third party software and hardware integration
- Third party service libraries such as for example Slack, Twilio, Microsoft Dynamics

For a full list of available components, please contact our support team.

## Digital Signage

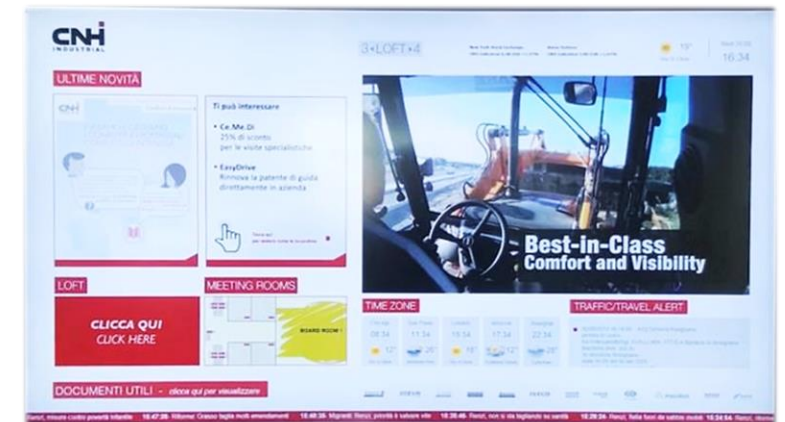
The digital signage is a module of Cruiser and can be integrated into any user experience. It supports 24/7 content playback and can respond to touch or hardware events (such as proximity sensor triggers) to provide interactive presentations when needed.

The content of the Digital Signage can be configured through Cruiser Data Designer which provides a simplified back office tool to upload content to the server and schedule updates.

Due to its modularity any third party services can be integrated through the development of bespoke plugins. For example it is possible to synchronise the content of a visual element with Instagram pictures or YouTube playlists.

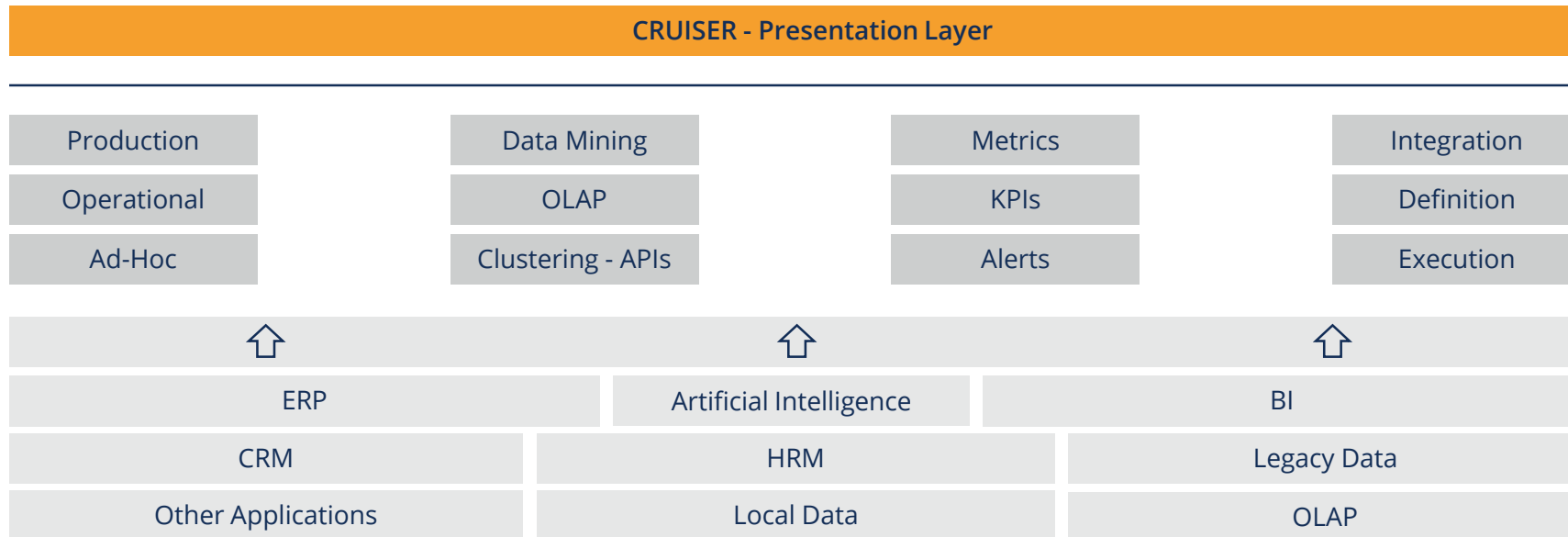
The following visual elements are integrated into the Digital Signage:

- Image slideshow
- Video playback
- Video streaming playback
- Static texts
- XML Feed
- Rolling texts
- Crawler texts
- Weather information
- Web content
- Flash (although not recommended)



Example of Digital Signage

# The stack



# Interoperability

(with external components and devices)



IOT Devices

MQTT  
XMPP  
CoAP  
Web Protocols



Sensors

Proximity  
Distance  
External devices



Touch

Touch monitor  
Resolution agnostic  
Landscape & Portrait



Camera

Stream  
acquisition



Readers

RFID RW  
Barcode  
NFC



Mobile

Streaming  
Content sharing  
2-Way comm.



Messaging

Notifications  
Alerts  
E-mail, SMS

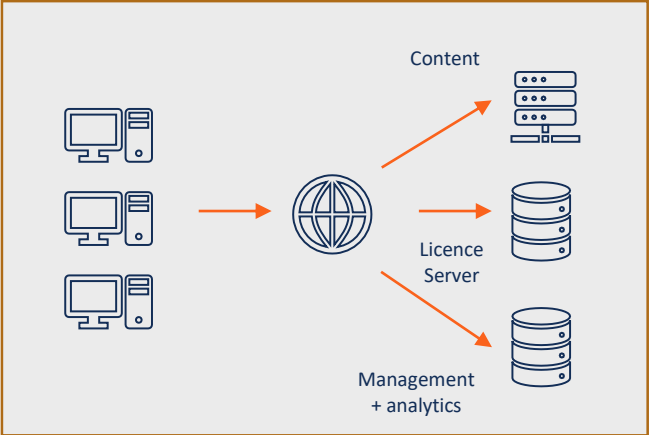


APIs

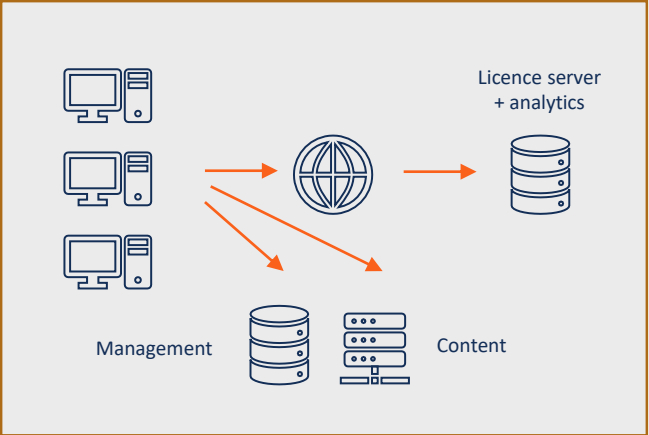
Json, XML API  
friendly for data  
acquisition,  
REST

# Architectures

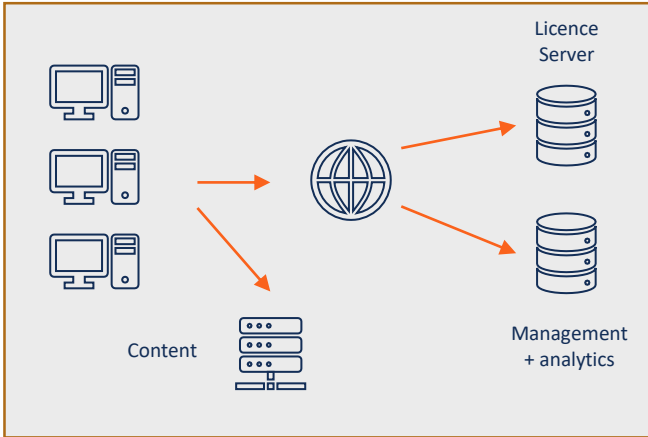
Most common - Standard



With local content distribution and server



With local content distribution



## Supported Operating Systems

Server:

Windows containers  
Linux containers

Player:

Windows 7, 8, 10  
.Net Framework ver. 4.6

## Hardware requirements

The minimum hardware requirements for the Player are:

- i5 Processor
- 4GB Ram (8 GB recommended)
- 250 GB SSD Storage
- Intel Graphics Card, NVIDIA recommended 2GB Ram
- Wi-Fi or Ethernet connection

## Media Formats

Cruiser supports the following media formats.

Images:

- JPG
- PNG
- BMP

Video:

- WMV
- MP4

Flash:

Flash is compatible although not recommended as it may slow down the whole system. Also other visuals cannot be overlapped when Flash is used, naturally limiting the graphic interface.

## Data Formats

Cruisers supports a large variety of data formats. Although, to be compliant with standards and prevent large consumption of resources it is recommended to use either XML or JSON file formats

## Media Players and Interoperability

Due to the intrinsic nature of being an extensible platform, it is possible to use third players to improve the capability of supported media formats.

Cruiser already provides an external component that allows the Client to fully support VLC media player.

Please follow the link below to check the supported formats, including video streaming:  
<https://www.videolan.org/vlc/features.html>

Furthermore a DirectX video player and EVR components are available in case other specific video formats are required.

## Extensibility

Cruiser can be easily extended through its SDK (Software Development Kit). It allows the creation of complex Modules and components to allow the interoperability with third party software and systems and enrich the user experience with advanced functionalities. The SDK is developed with .Net Framework and it is only compatible with Windows Operating systems, although a plan to extend to Linux and Mobile platform has been approved and its development is under way.





# Case Studies

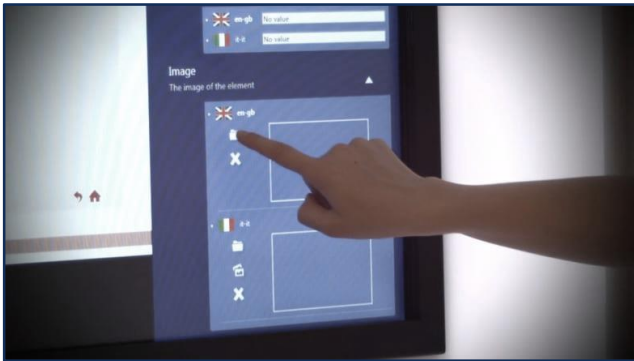
## Case Studies



IBM Innovation Centre

A sales tool for 800 executives that:

- Bring to life concepts and ideas
- Engage and collaborate with team members and customers
- Stream to mobile and share content



CNH Industrial

An integrated corporate communication platform that:

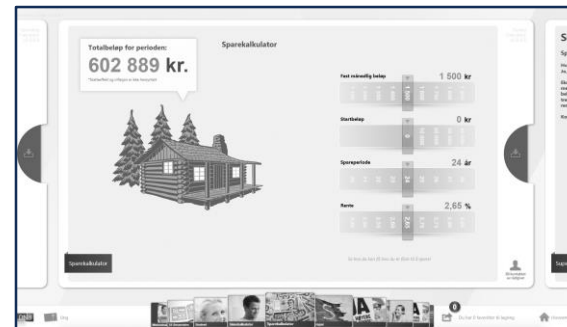
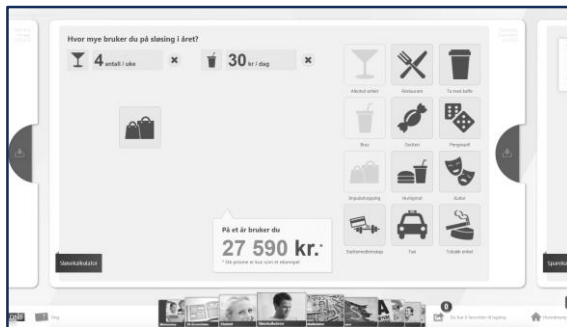
- Allow department to visualise content and data under one interface
- Establish a communication channel with employees, partners and teams to inform, train, improve trust and deliver positive views of the company

# DNB Case Study



A joint initiative between a Bank and a Real Estate search service to provide a gateway for employees, trainees, consultants and clients.

A common platform with role-based access to content and features, managed by the headquarter offices and distributed to branches, partners' meeting rooms and retail offices.



- Carousel Dashboard
- Corporate Presentations
- Property Browser
- Personal Allowance, Loan and Mortgage calculators
- Training and collaboration tools

# IBM

<https://vimeo.com/137499490>



IBM Innovation Centre

A sales tool for executives that:

- Bring to life concepts and ideas
- Engage and collaborate with team members and customers
- Stream to mobile and share content
- Access point to all company news, marketing and ICT presentations

## NUMBERS

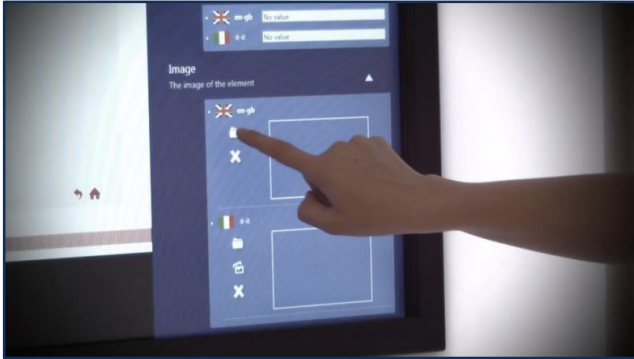
- At the core of IBM Innovation Centre in Dublin
- 2 months of development
- 2 days of deployment
- 2 large lecterns and 16 HD monitors (2 video walls)
- 15GB of content uploaded in the first few hours
- Only 8 hours of support delivered in 4 years

## KPIs

- 800 sales executives using the tool daily
- 200% customers engagement
- 20 mins. average time saving per presentation (effectiveness, centralised content)
- 150% productivity increase
- Low cost maintenance

# Case New Holland & Industrial

<https://vimeo.com/137499379>



CNH Industrial

A marketing and communication solution for:

- Video content multi-language library
- Internal digital signage solution
- Engagement tool for customers with simulations, product overviews and insights, games and interactive visuals
- Weekly and monthly news and interviews

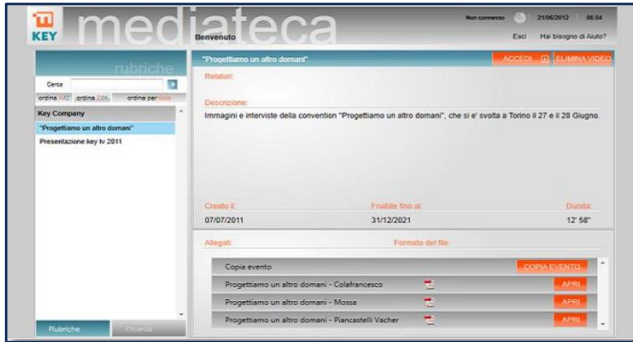
## NUMBERS

- 17 customer centres worldwide
- 4 main events every year
- 12 interactive modules to target different audiences
- 8 months of development
- 1 on-premises data centre

## KPIs

- 850.000 served visitors at one single event
- 4.8 out of 5.0 customer satisfaction (Gov. post-event survey)
- 3 dedicated marketing resources freed by automation
- 90% reduction of time to deliver data/visual information
- Global reach to 65K employees

# Fideuram Bank



Fideuram Media Library

An information and communication tool for personnel:

- Weekly video news with experts
- Quarter regional and national contexts
- Training and continuous learning platform
- Internal TV channel and live events
- Market trends and daily insights

## NUMBERS

- 250 offices interconnected through VPN
- 6 years of service
- 2 broadcasting studios
- 500 videos produced in the first year

## KPIs

- 2500 active users every month
- 100% increase in productivity
- 200% increase in engagement
- Problem solving tool through video sharing

Thanks