

*F. Mustafa*

VR training systems for emergency response

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# OUR EXPERTISE

20 years experience providing simulation software for  
incident command training



# CORE BUSINESSES



**PRODUCTS &  
SOLUTIONS**  
EVE VR PLATFORM

EVE 3D software

Software modules

3D Map modules

3D Object modules



**ENGINEERING**  
AD-HOC DEVELOPMENT

Consulting services

Custom software

Custom 3D map

Custom 3D object



**TRAINING &  
SUPPORT**  
ON-DEMAND SERVICES

Custom training

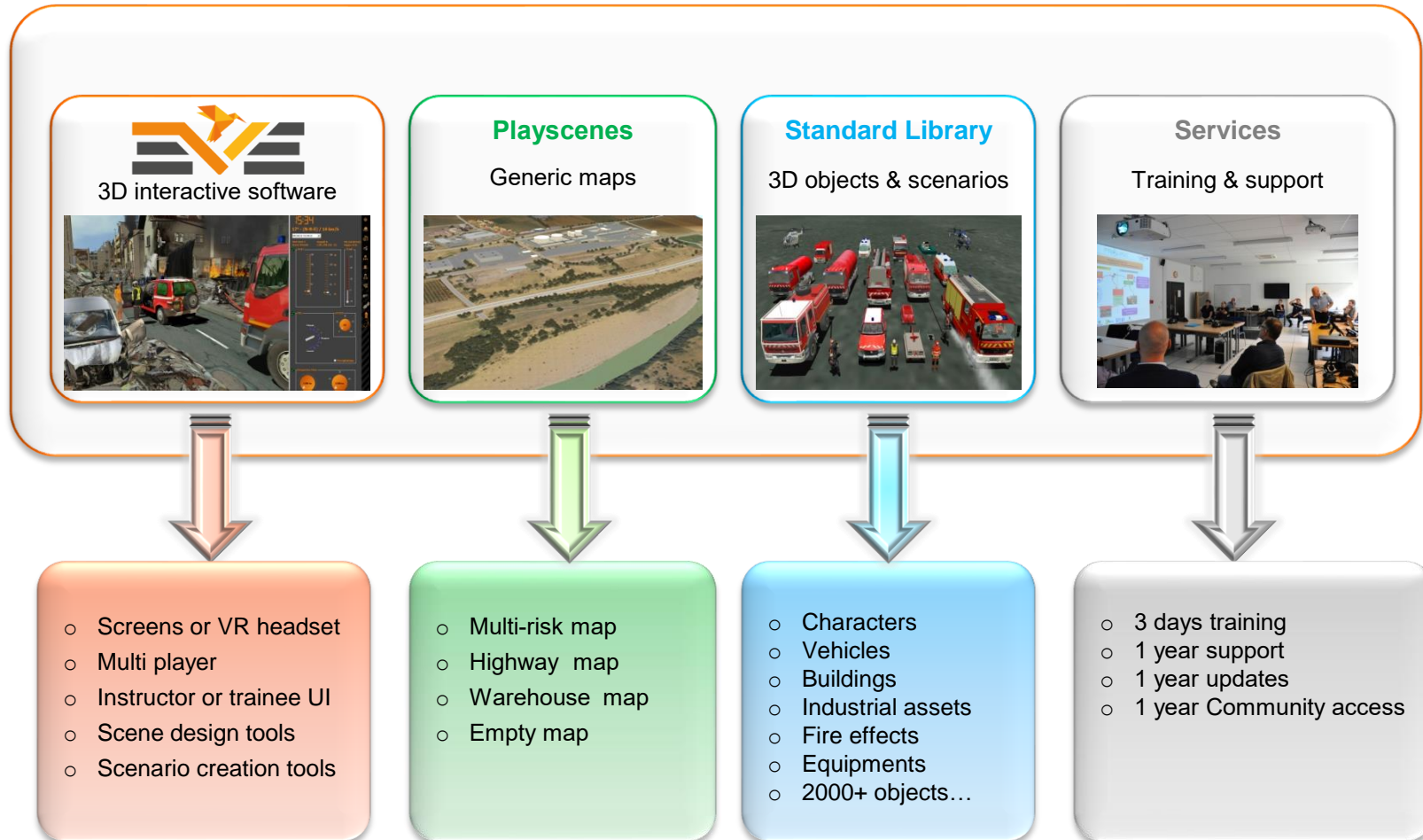
Trainers' training

Support

EVECommunity™

# CRISE Products & Solutions

## Base Solution



# CRISE Products & Solutions

**EVE™ base solution** is a ready-to-use collaborative simulation platform designed to train emergency teams in virtual operational environments

## Import

Import your own data (GIS, CAD, medias and 3D content)



## Train

Control exercises, Debriefings, monitor trainees



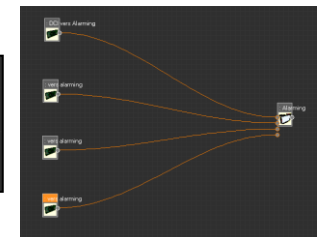
## Compose

Create your maps, Compose your scenes, scenarios, lessons learned



## Animate

Animate by scripting, logics, physical simulation, A.I., interaction



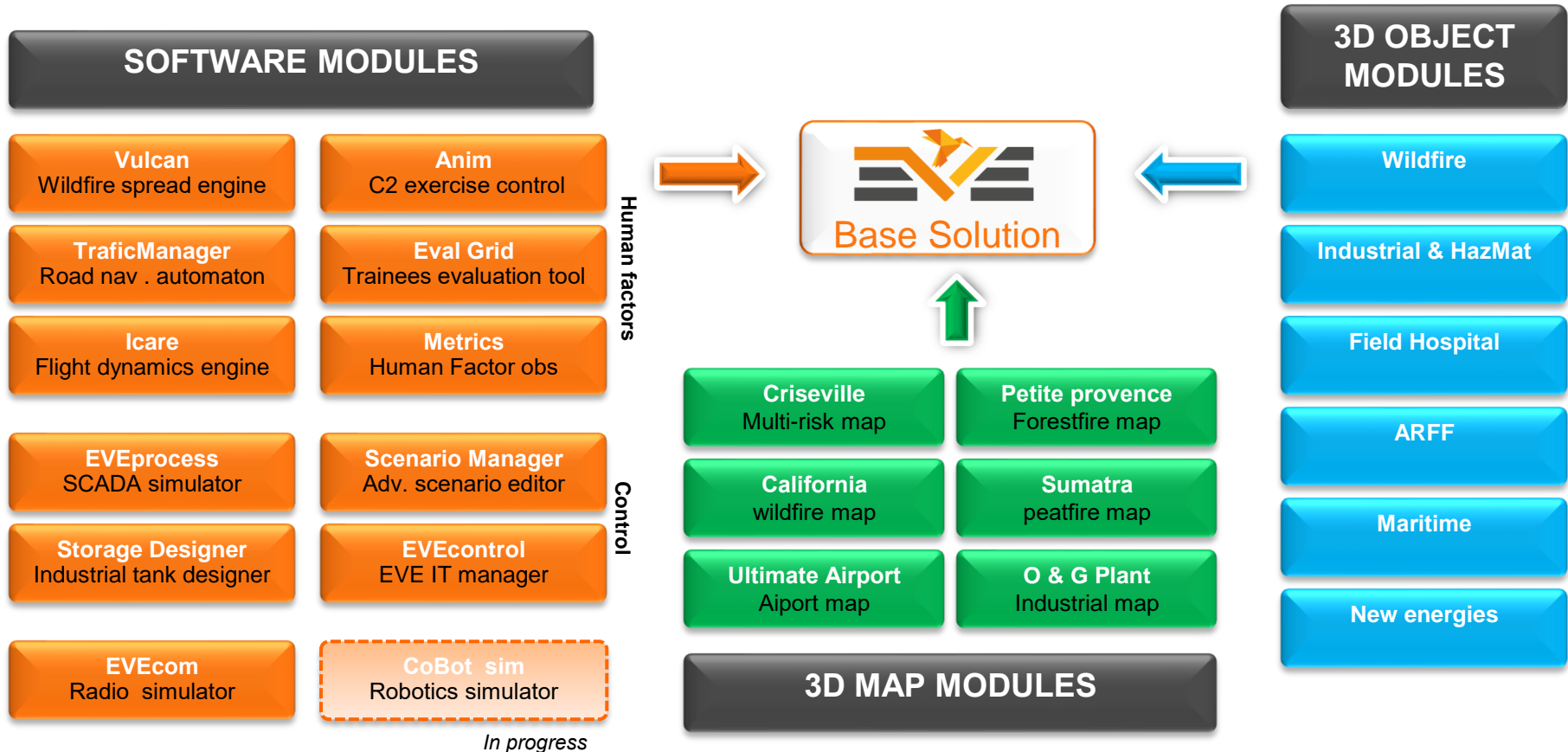


# CRISE Products & Solutions



## Modules for customized solutions

We will **build training solutions** to fit your needs, organization and educational scope **composing** optional modules



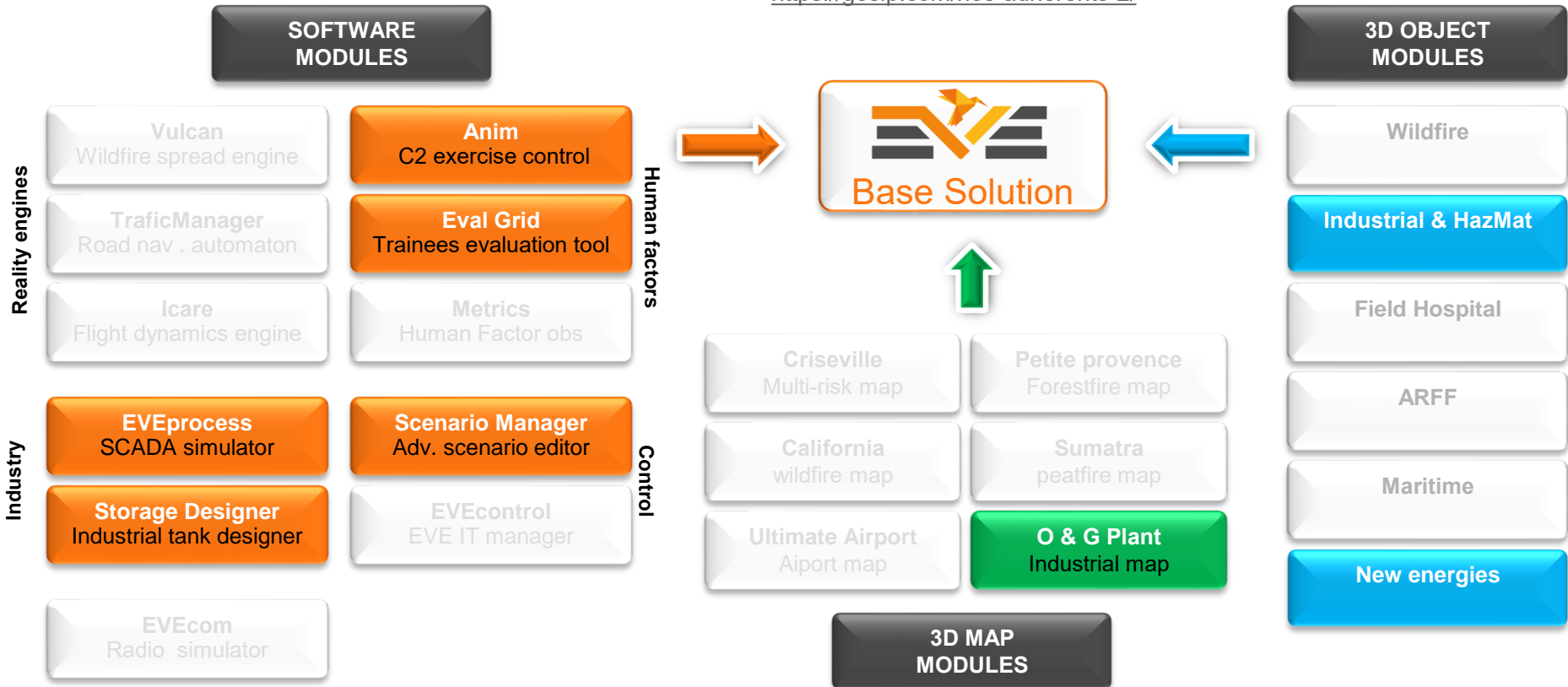
# CRISE Products & Solutions



## Example of a customized Oil & Gas training solution



GESIP is the training center for Oil & Gas Majors. Uses EVE© since 2010. <https://gesip.com/nos-adherents-2/>



# CRISE Products & Solutions



## Example of a Bushfire training solution

<https://www.valabre.com>



Valabre is the training center that qualifies all fire officers for wildfire commandment in France.

From fire engine leaders to ERO managers, all training and qualification is done on our simulators.



### SOFTWARE MODULES

**Vulcan**  
Wildfire spread engine

**TraficManager**  
Road nav . automaton

**Icare**  
Flight dynamics engine

**EVEprocess**  
SCADA simulator

**Storage Designer**  
Industrial tank designer

**EVEcom**  
Radio simulator

**Anim**  
C2 exercise control

**Eval Grid**  
Trainees evaluation tool

**Metrics**  
Human Factor obs

**Scenario Manager**  
Adv. scenario editor

**EVEcontrol**  
EVE IT manager

Reality engines

Industry

Human factors

Control



**Base Solution**



**Criseville**  
Multi-risk map

**California**  
wildfire map

**Ultimate Airport**  
Aiport map

**Petite provence**  
Forestfire map

**Sumatra**  
peatfire map

**O & G Plant**  
Industrial map

### 3D MAP MODULES

### 3D OBJECT MODULES

**Wildfire**

**Industrial & HazMat**

**Field Hospital**

**ARFF**

**Maritime**

**New energies**



# CRISE Products & Solutions

## ■ Bushfire solution: How it works



Strike team leader / Crew commander



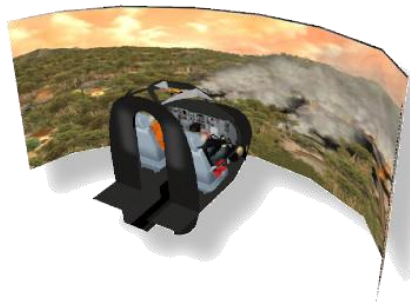
On scene commander



Instructor



Debriefing



Air tanker



Incident command team



Helicopter ....

# CRISE Products & Solutions

## ■ Bushfire solution: software modules

### Vulcan

#### Wildfire spread engine

- Robust physical based simulation incl. local winds, slope, vegetation
- Real-time metric fire propagation and suppression
- Very extended areas (>50 000 ha)
- Real-time air & ground actions: water extinguishing, counter firing, logging, retardant drop, etc.

### TrafficManager

#### Road nav . automaton

- GIS-based detail road network and water resources
- Easy-to-use road navigation of single or group of vehicles
- Automatic routing of convoys
- Manual 4x4 off-road driving
- Trainees' control of fire suppression actions
- Automatic water consumption management

### Icare

#### Flight dynamics engine

- Flight dynamics for drones, helicopters and planes
- Realistic instruments & gauges
- Water or retardant bombing, scooping or refilling
- Solo or formation flying mode





# CRISE Products & Solutions

## ■ Bushfire solution: maps modules



Geo-specific maps built from Digital Elevation Model, GIS data and aerial imagery to obtain 3D high end realistic map

- Roads, highway, railway, tracks
- Buildings, infrastructures, power lines, hydrants...
- High resolution vegetation and fuel maps
- Typical Housing Styles
- Points of interest



# CRISE Products & Solutions

## ■ Bushfire solution: 3D objects modules

### Wildfire library

- **Crews resources** : FF & Hotshots avatars, with associated fire suppression equipments
- **Ground resources**: driveable Vehicles, Bulldozers, Fire Engines, robots
- **Airborne resources**: Planes, Helicopters, Drones, airfield support Infrastructures
- **Water resources** : cisterns, pools, hydrants, etc.

### Your resources on demand





# CRISE Products & Solutions

## ■ Bushfire solution: EVE ExCon features



### Easy to use supervise :

- Powerful UI to manage hundreds of vehicles
- Automated Planes / helicopters drops missions
- Automated vehicles/convoys missions

### Powerfull exercise Control :

- Multi ExCon facilitators capability
- Switch 3D view from map to aerial
- Easy control of automated fire spread engine





# CRISE Engineering

## Software development

- New features
- Specific EVE© modules
- Integration with third party software



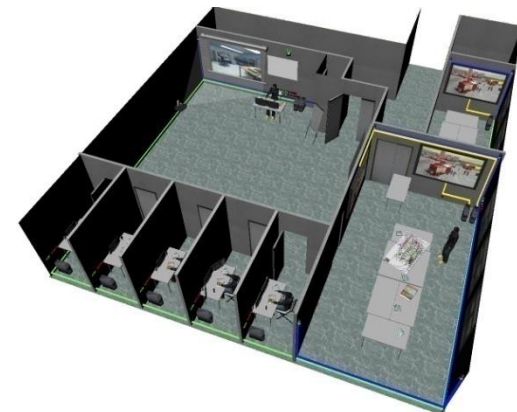
## Content creation

- Customized 3D maps
- Smart 3D objects
- Advanced operational scenario



## Consulting

- Training center design
- Project support
- Pedagogic advice



# CRISE Training & Support



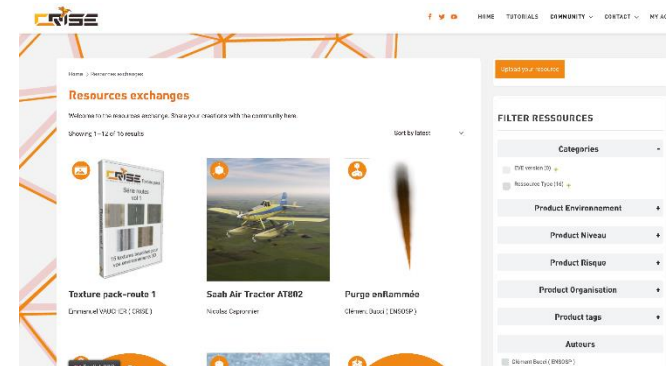
## On demand training

- On site or remote on-the-shelf VR exercises under your pedagogic supervision
- Support for international exercises and research activities



## Client support

- Software update
- Hotline
- EVE Community™: EVE user community exchange website



## Train the trainers

- Exercise Control facilitator
- Scenario designer
- Environment designer



# Why working with us ?

When working with CRISE, you experience a collaborative approach that puts you at the center of the product development process. Here's how we ensure your success.

## 01 Understanding Your Needs



We take the time to deeply understand your specific requirements and challenges, working closely with you to identify the optimal solution.

## 02 Co-Design and Development



Together, we design and build a training system tailored to your unique needs. Our expert team collaborates with you to create a solution that aligns perfectly with your goals.

## 03 Training and Support

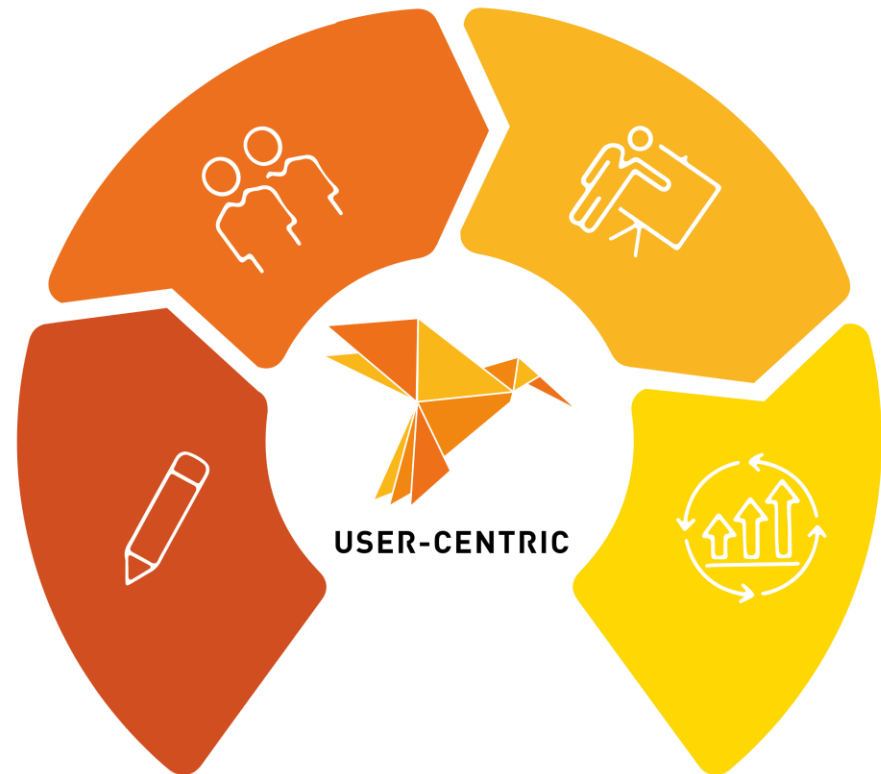


Empower your team with comprehensive training to unlock the full potential of our solution and ensure a smooth transition.

## 04 Continuous Adaptation



We understand that your needs may evolve over time. CRISE is committed to continuously enhancing the product to address any changes and keep it aligned with your evolving requirements.



**Acquire a robust product built in customer-centric collaboration that prioritizes your success at every step.**

# Use case examples

## Classroom training use case

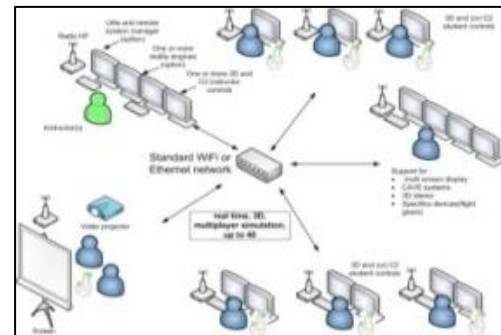
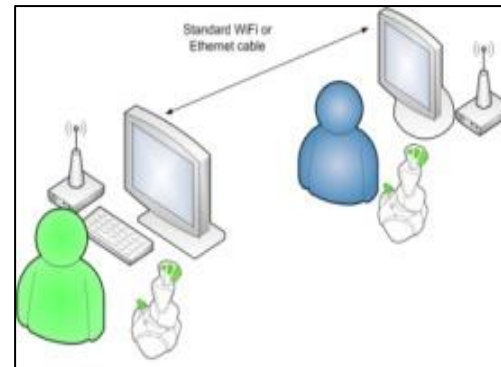
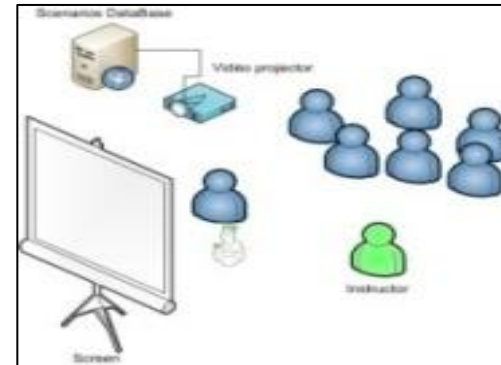
- Hydrogen European training program
- Wildfire international doctrinal exchange

## Solo training use case

- On-scene decision-making
- Air-ground coordination
- Ground operations

## Team training use case

- Crew commander
- Incident command IC/ICP
- Multi agency team training
- Emerg. Resp. Org. Lessons learned



local or remote trainings

# Classroom use cases examples

## Hydrogen European training program

International education program

- Introduce to H<sub>2</sub> risks
- Production, transportation, automotive
- Fuel cells
- ROE, SOPs definition and practice



**EVE**  
Base Solution

Anim  
C2 exercise control

New energies

## Wildfire international doctrinal exchanges

Working and exchanging together



**EVE**  
Base Solution

Vulcan  
Wildfire spread engine

California  
wildfire map

Petite provence  
Forestfire map

Wildfire Library



# Solo training use cases examples

## On-scene decision-making

For any kind of risk

- Situational awareness
- Information gathering
- Assessment and reporting
- Elaborate response



**EVE**

Base Solution

## Air-ground coordination

For major events

- Plane guidance
- Aerial supervision
- Air Tactical Group Supervisor
- Can simply evolve to air/air coordination training



**EVE**

Base Solution

**Icare**

Flight dynamics engine

**Vulcan**

Wildfire spread engine

**Petite provence**

Forestfire map

**Wildfire Library**

## Airfield ground operations

For bushfire & others

- Air tanker refill
- Ground equipment service
- Incident management
- Situation assessment



**EVE**

Base Solution

ARFF Library

## Procedure training

- SOP rehearsal
- ROE practice
- Risk awareness



**EVE**

Base Solution

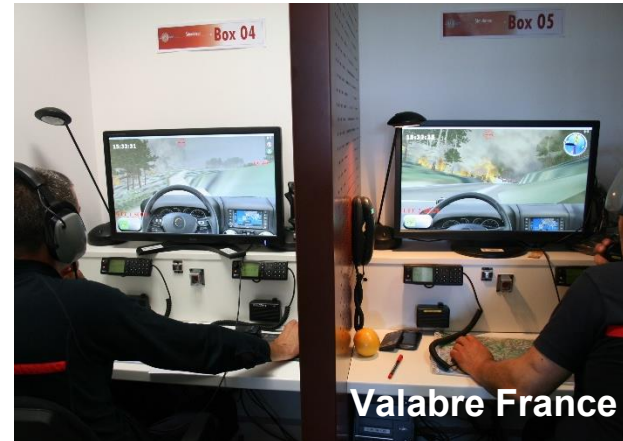
O&G Plant  
Industrial map

Industrial library

# Team training use case

## Crew commander

- Radio communication
- Situational awareness
- SOPs, ROE Practices
- Team management
- Etc.



**EVE**

Base Solution

**TraficManager**

Road nav . automaton

**Vulcan**

Wildfire spread engine

**Petite provence**

Forestfire map

**Wildfire Library**

## Incident command

- Stress management
- Effective leadership
- Risk assesment
- Mitigation strategies
- Operations planning
- Etc.



**EVE**

Base Solution

**TraficManager**

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Forestfire map

**Wildfire Library**

# Team training use case

## Multi agency

- Improved Communication
- Enhanced Collaboration
- Increased Efficiency
- Enhanced Safety
- Etc.



**EVE**

Base Solution

**Anim**

C2 exercise control

**Abu Dhabi**

Custom Airport map

ARFF Library

## ERO Lessons Learned

- Improved Safety
- Enhanced Communication
- Greater Effectiveness
- Faster Response
- Etc.



**EVE**

Base Solution



# Users worldwide







Pacific Northwest  
NATIONAL LABORATORY



# Trusted by



SDIS 73



CENTRO  
CIENCIAVIVA  
DA FLORESTA  
PROENÇA-A-NOVA



ÉCOLE D'APPLICATION DE SÉCURITÉ CIVILE



## INERIS



SDIS 29



Service Départemental d'Incendie et de Secours du Gard



Agence nationale pour la gestion des déchets radioactifs

# Keep in touch



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