

# INTELLIVIEW 3D™ Engine

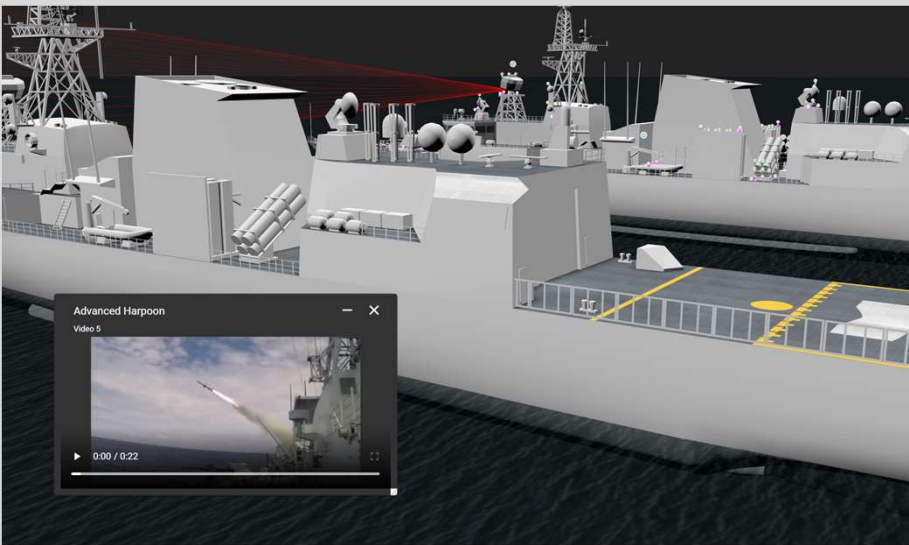
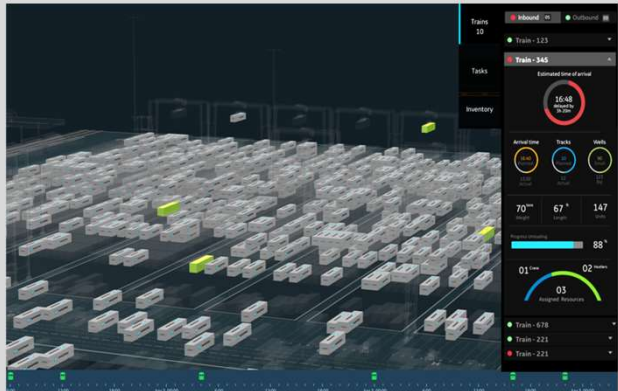
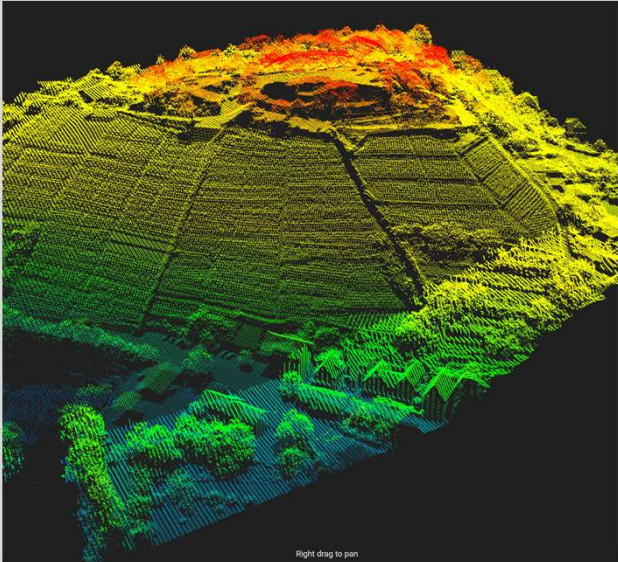
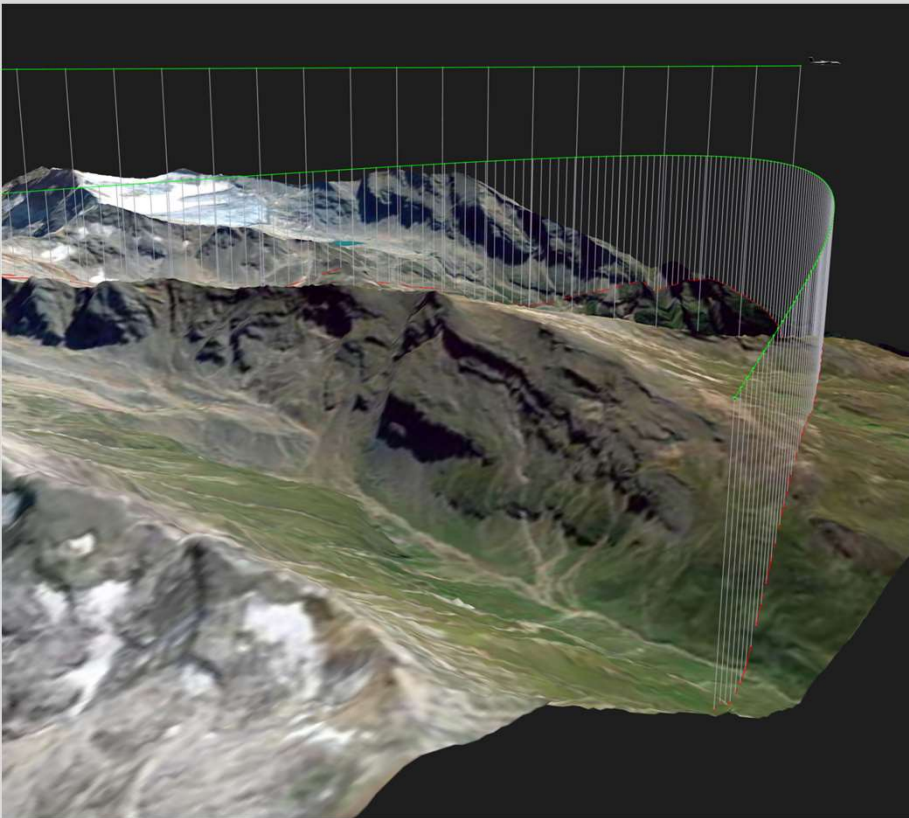
Digital Twins  
Command, control, intelligence  
Training

High-performance game engine core  
3D web applications  
Real-time  
Interactive  
Animation  
Any browser, OS, device  
NO software or extensions to install

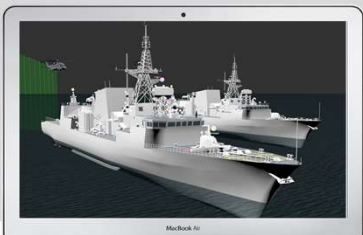


Services  
Solution engineering  
3D UX design and development  
Implementation  
Support

[chris.erickson@datifex.com](mailto:chris.erickson@datifex.com)  
[www.datifex.com](http://www.datifex.com)



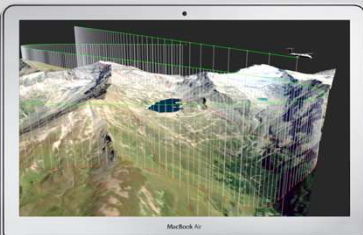
INTELLIVIEW 3D™ Engine  
Real-time interactive 3D web applications



DIGITALTWIN 3D

Digital twins  
Digital prototypes

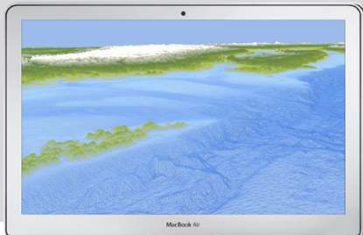
*Real-time subsystem interaction*  
*Drag and drop disassembly*



C2Iview 3D

Command, control, intelligence  
Remote management

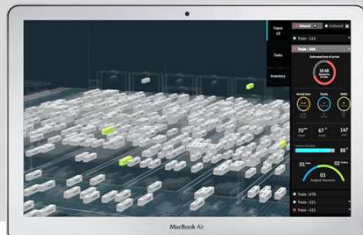
*Playback and training*  
*Real-time data-driven assets*



OCEANview 3D

Coastal situational awareness  
Subsurface situational awareness

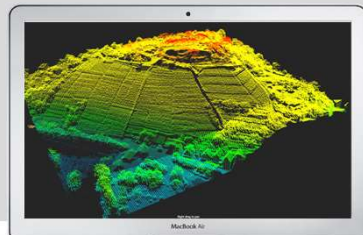
*Visual environmental conditions*  
*Real-time data-driven assets*



TERMINALview 3D

Transportation terminals C2I  
Intermodal logistics C2I

*Distributed operations*  
*Real-time data-driven controls*



LIDARview 3D

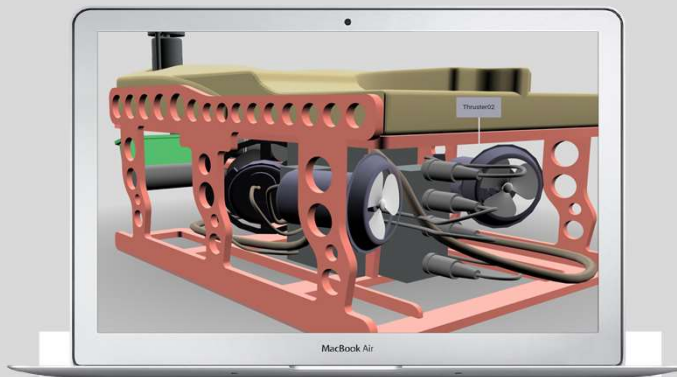
Interactive LiDAR  
Immersive point clouds

*Integration of data sources*  
*Real-time animation*



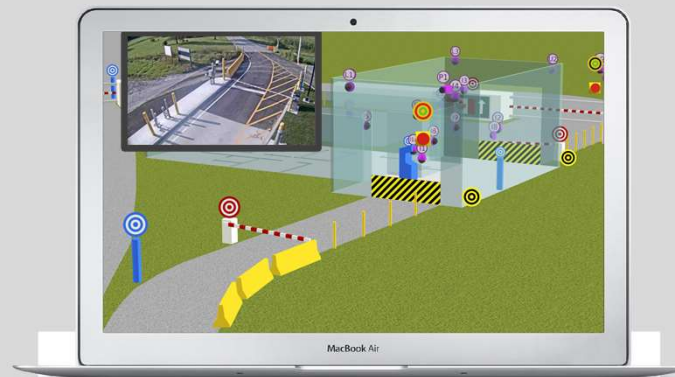
## INTELLIVIEW 3D™ Engine

### Real-time interactive 3D web applications



#### Why?

- Natural experience
- “Single pane of glass”
- Broader group of users
- Collaboration
- Reduced time from insight to action
- Safety
- Communication
- Training



#### Requirements

- Chrome, Safari, Edge, Firefox
- Win10, MacOS, iOS, Android, Linux
- NO executables
- NO extensions
- Laptops
- Tablets
- Phones
- ANY digital model



#### Technical

- High-performance game engine core
- Real-time interactive web apps
- 10,000+ interactive objects
- Unlimited users
- Data-driven
- Scalable
- External controls
- JavaScript Libraries

## INTELLIVIEW 3D™ Engine

Real-time interactive 3D web applications



Canada Border  
Services Agency    Agence des services  
frontaliers du Canada

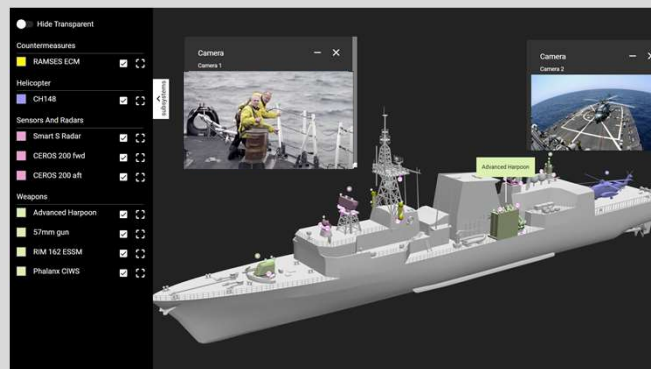


National Research  
Council Canada    Conseil national de  
recherches Canada



National  
Defence    Défense  
nationale





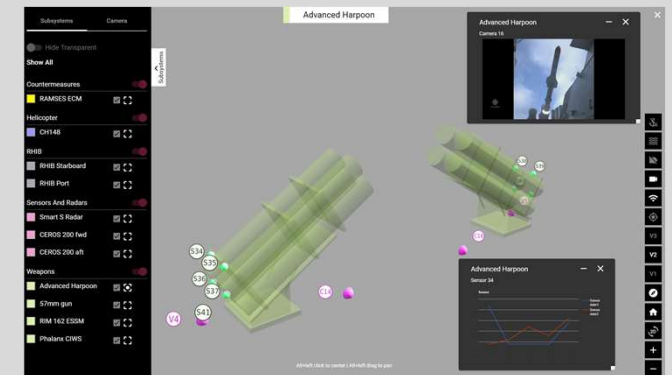
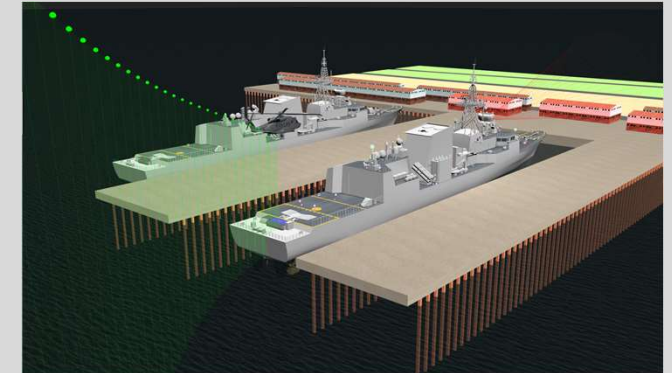
Begin with AutoCAD, 3ds Max, Blender, .obj digital models.

Watch real-time video sources by clicking on cameras on the ship.

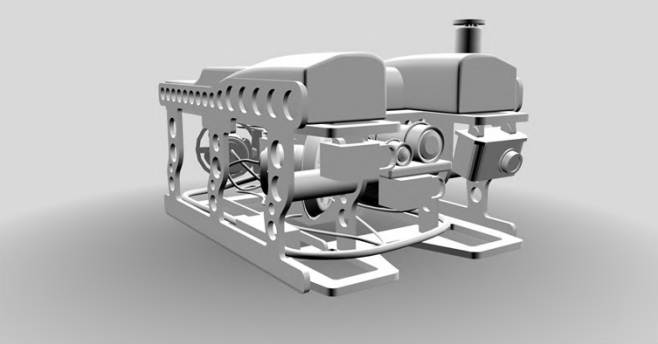
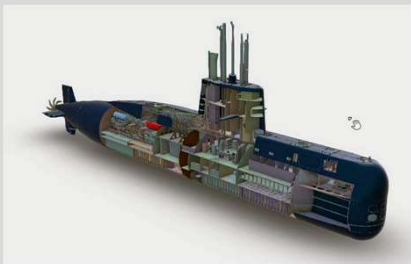
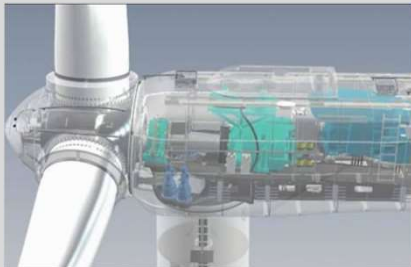
Investigate subsystem detail and sensors.

Watch the operation of radar, helicopter, RHIB and other subsystems using stored or real-time data.

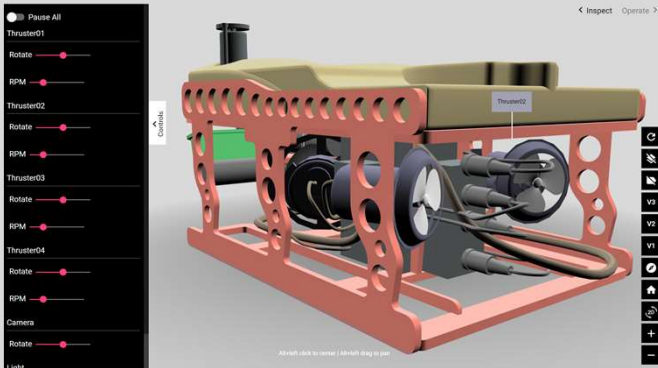
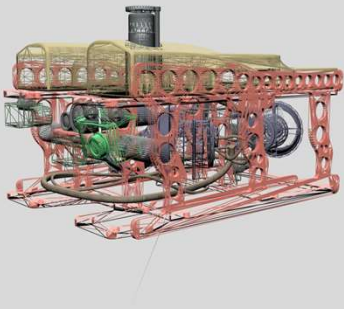
Use game engine to detect RADHAZ.



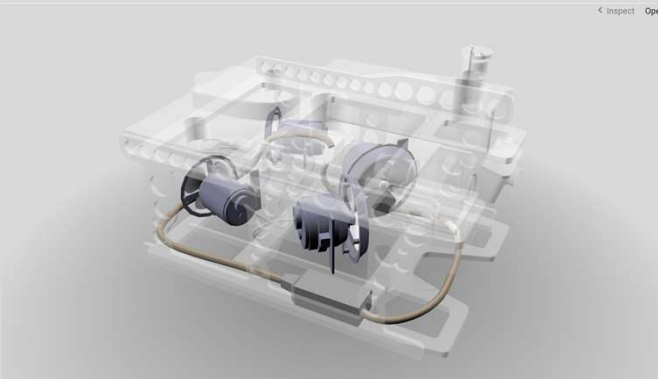
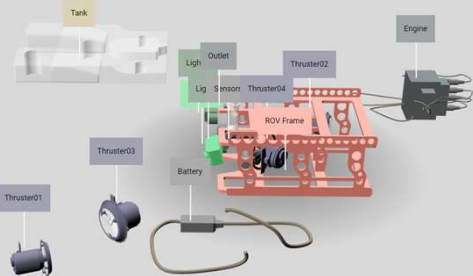




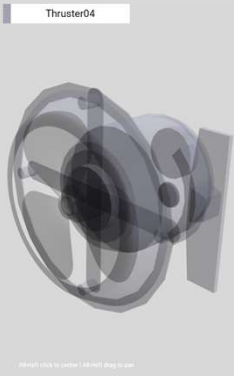
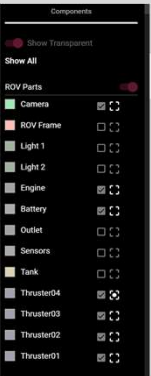
Convert static  
AutoCAD, 3ds Max, Blender, .obj  
digital models into interactive and  
animated digital prototypes.

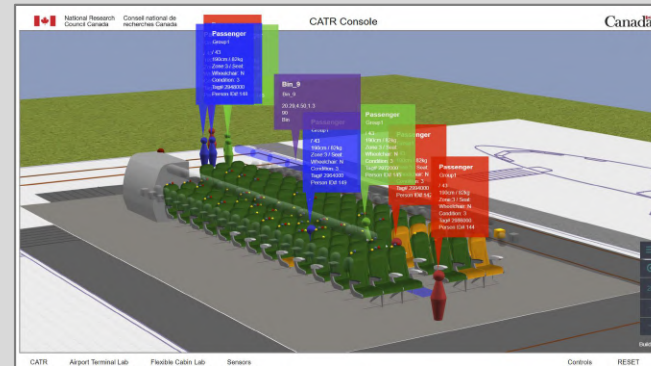


Use controls to operate and  
test the prototype and its  
components.



Drag components  
to deconstruct prototype





Track passengers and crew in real-time and turn on tags to show passenger meta-data.

Associate aircraft cabin sensors to digital objects to watch real-time activity, and for playback.

Everyone with access to the network can view and interact with the aircraft and its sensors.

Communicate research and results to management and customers by playing back recorded data at any time and from any computer with a modern browser.





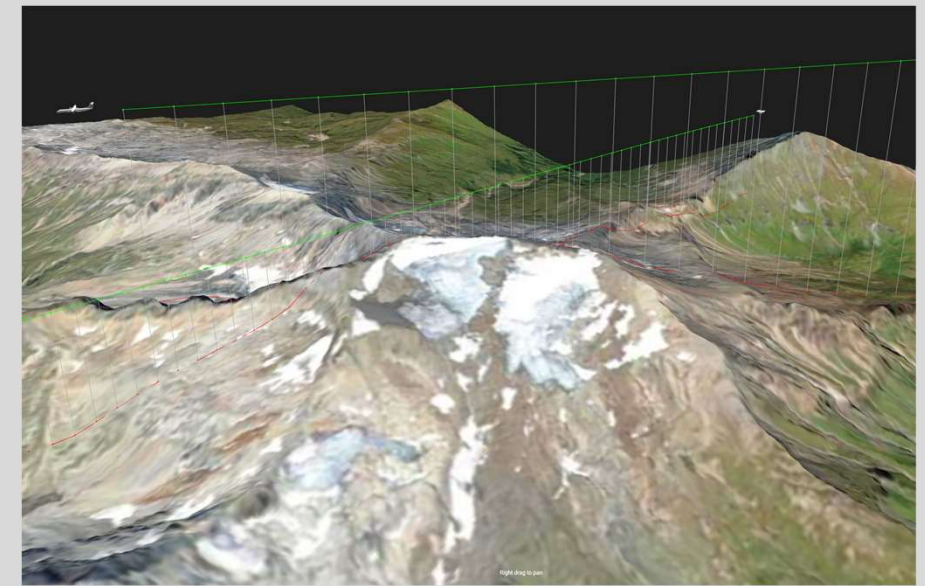
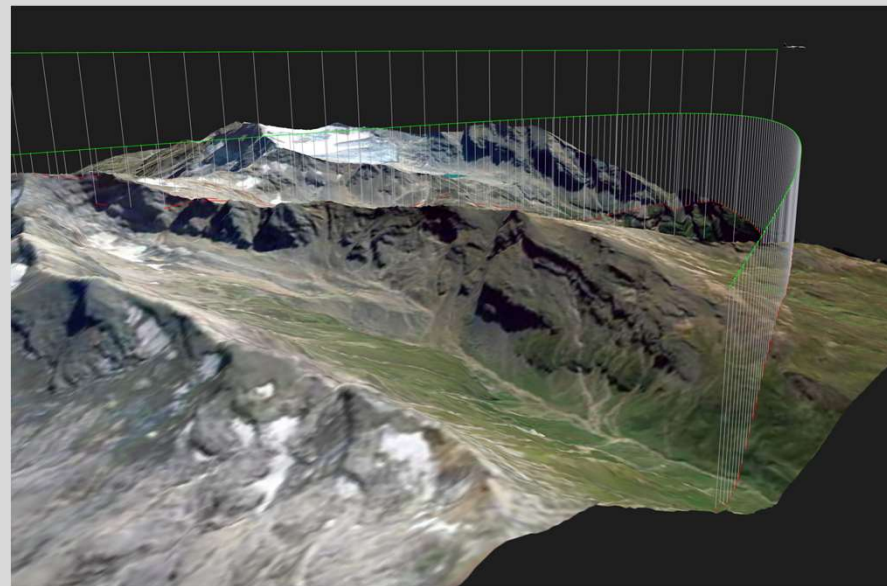
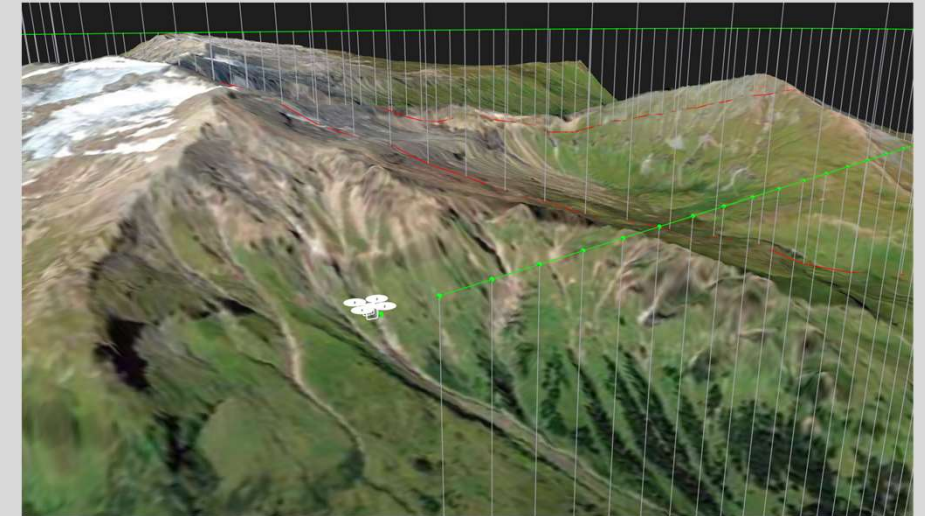
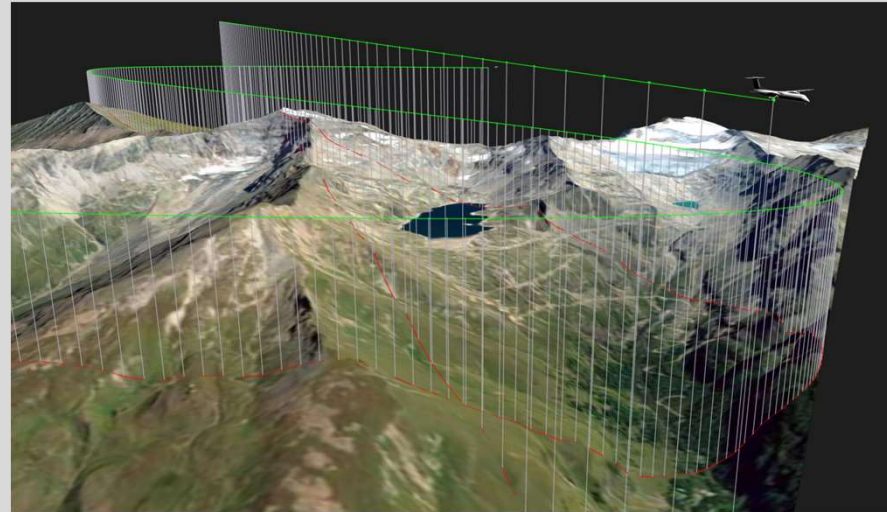
Unmanned aerial vehicles



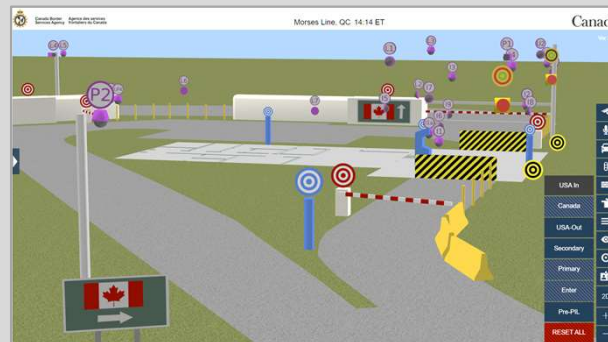
Swarm drones



Missile defense systems







Control gates, doors, lights  
and licence plate readers.

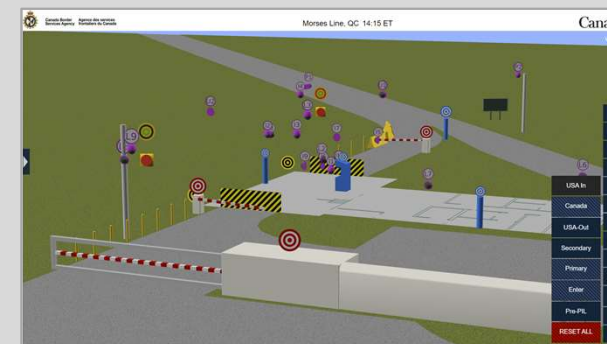
View real-time video feeds  
by selecting a camera.

Integrate with backend  
systems.



Playback stored data for  
training and forensics.

Collaborate with  
supervisors and other staff  
simultaneously connected  
to border facility.



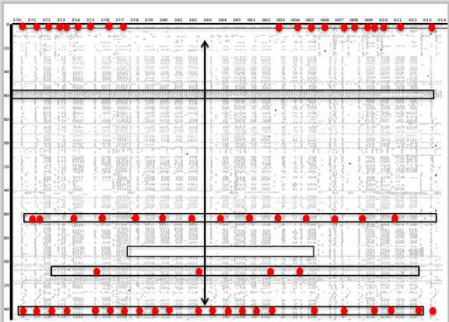
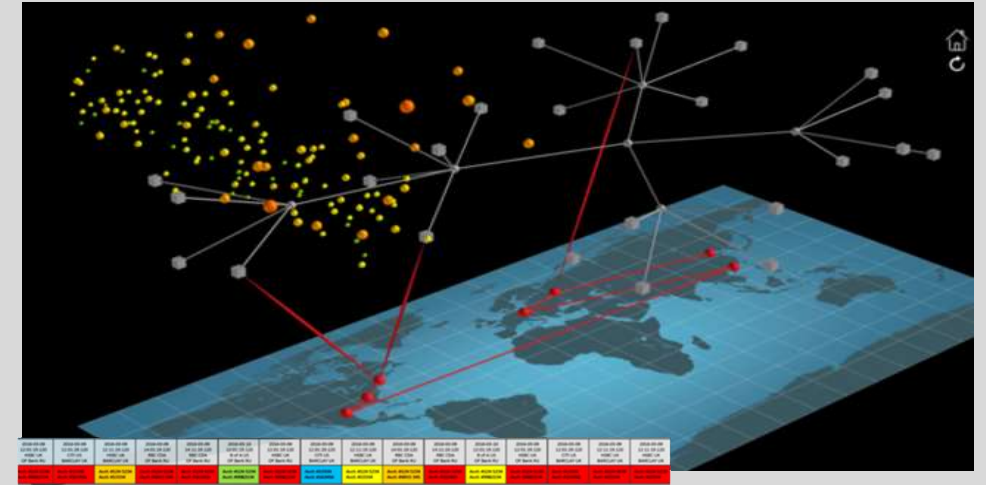




Combine legacy systems into a single pane of glass.



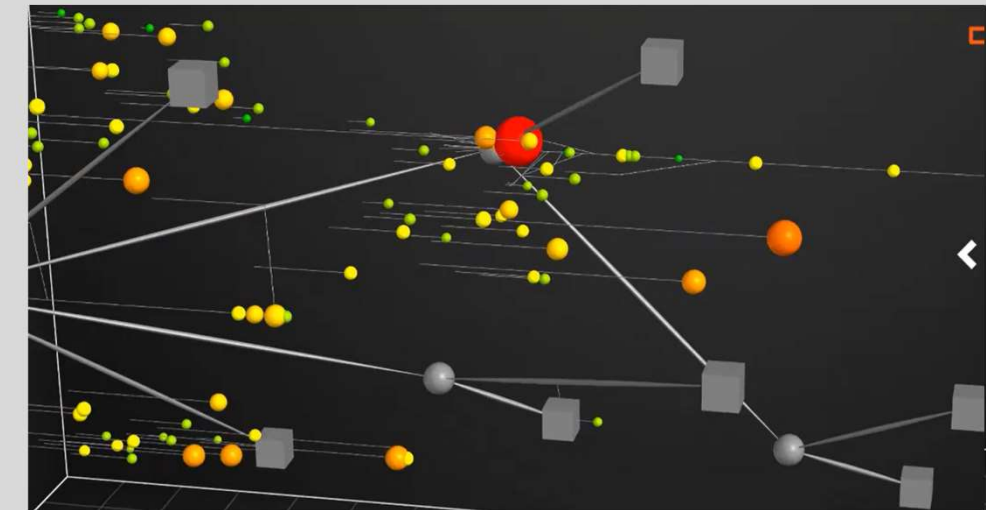
Watch real-time progression of viruses through public and private networks.



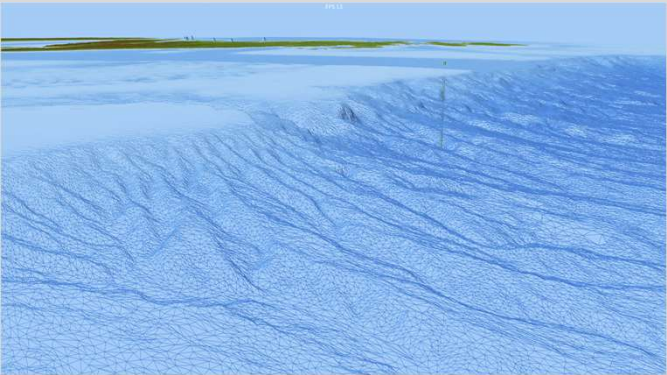
Click on objects to see meta data, and to take control of routers and switches.



Playback recorded data for forensics and training.



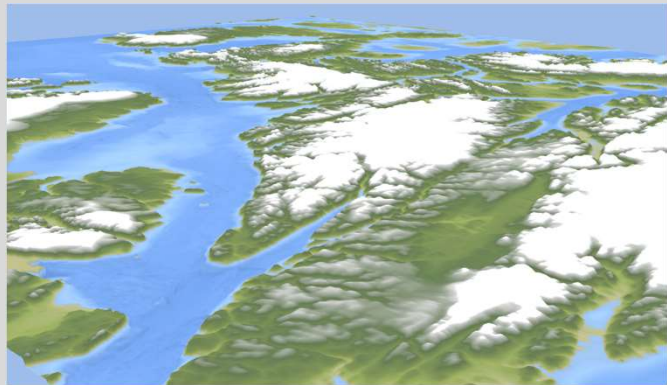




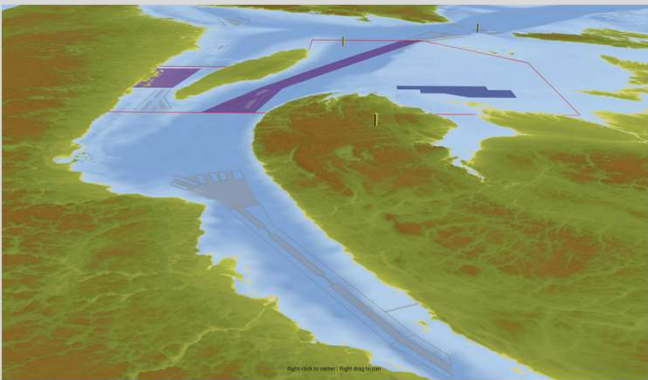
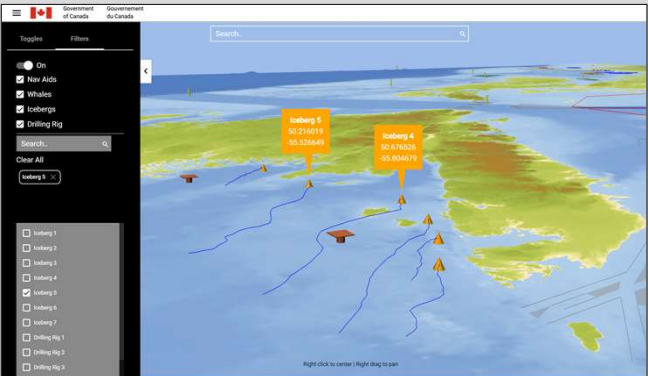
Investigate ocean topology generated with opensource mesh data.



Track whales and submersible routes in real-time.  
Watch animation of iceberg movement.



Superimpose shipping lane, protected areas, dedicated fishing locations and navigation aids.



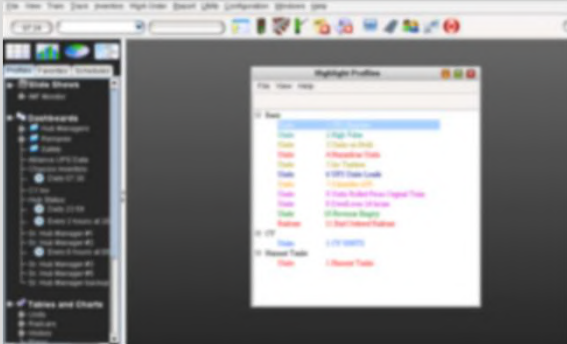




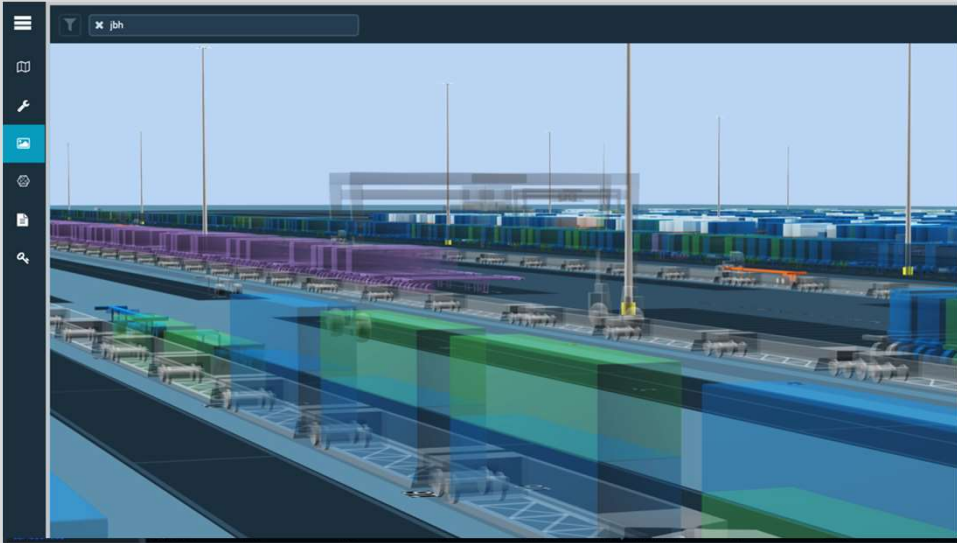
Excel source for yard definition

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Existing real-time and static data sources



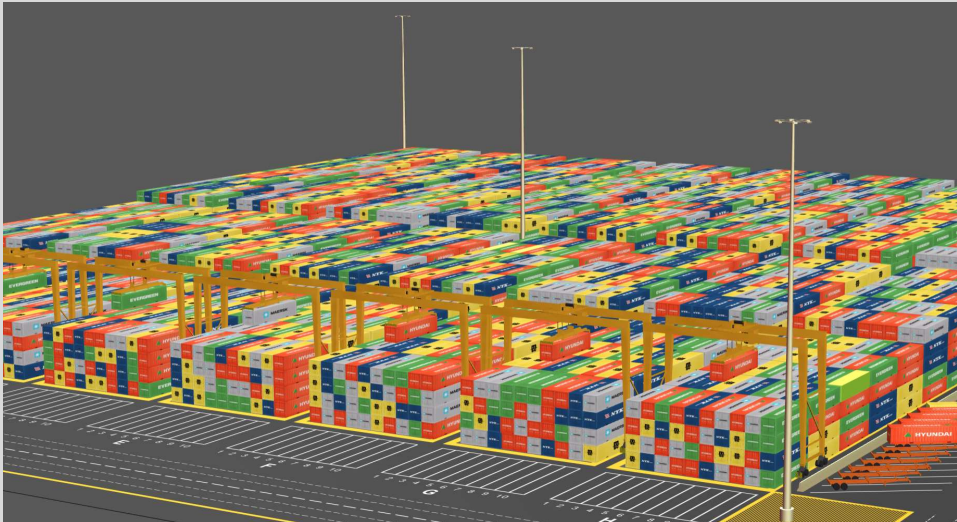
AI to detect and automatically correct operational errors in real-time



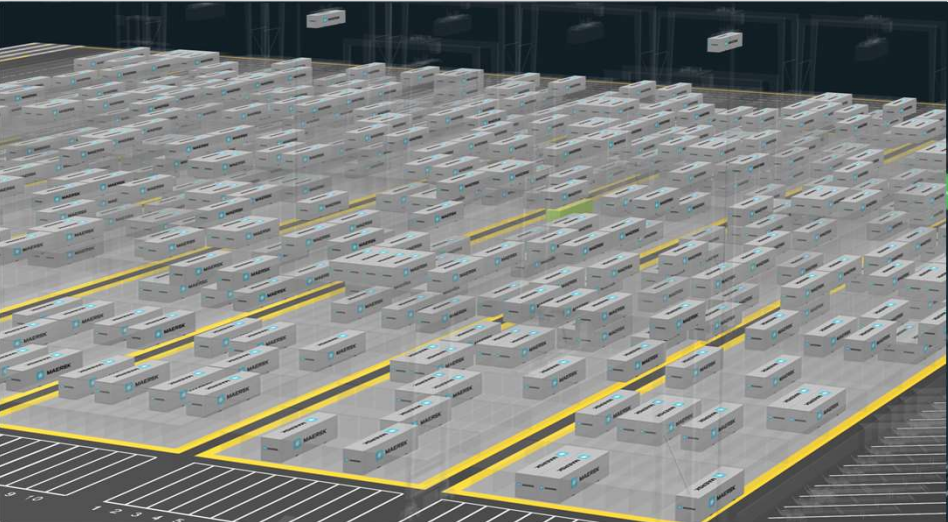
Real-time controls



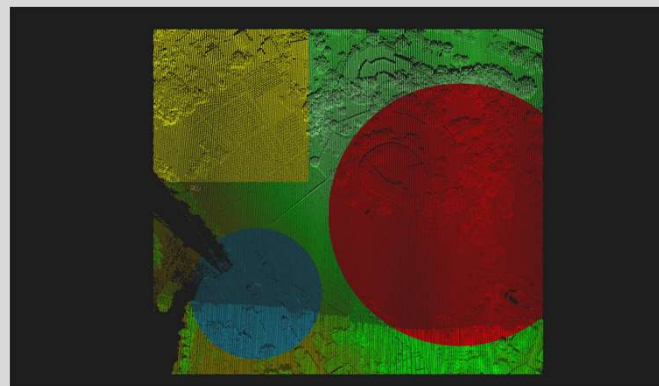
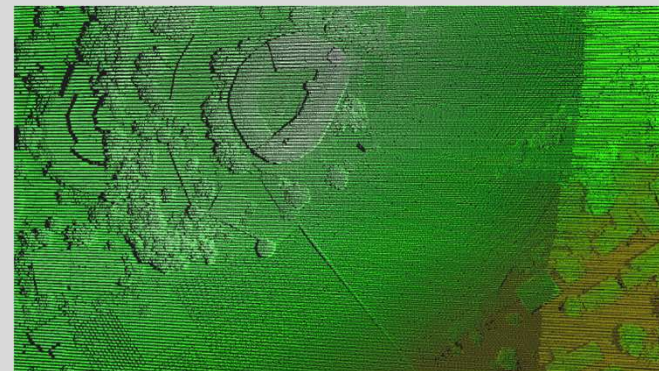
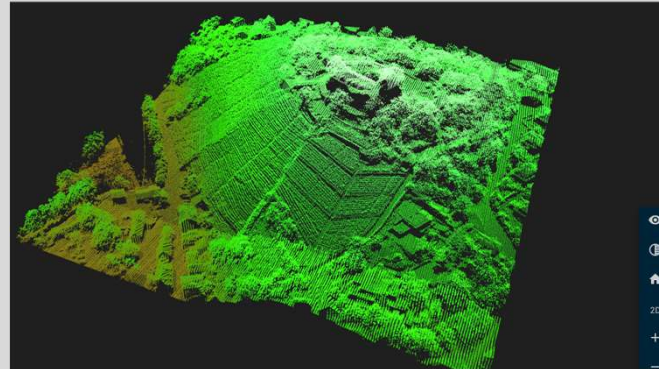
Watch 10's of thousands of containers moving through the port in real-time.



Filter the venue to reveal information that cannot be seen in databases.







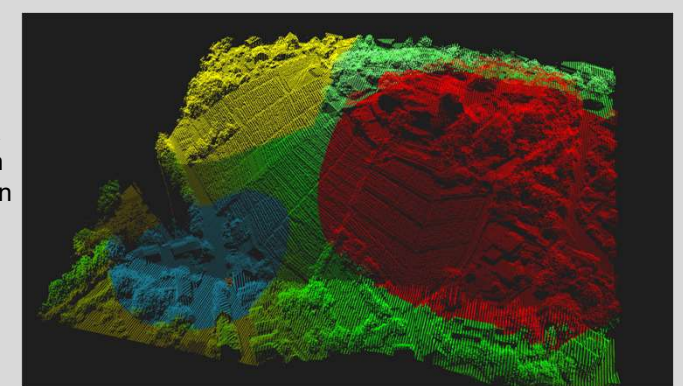
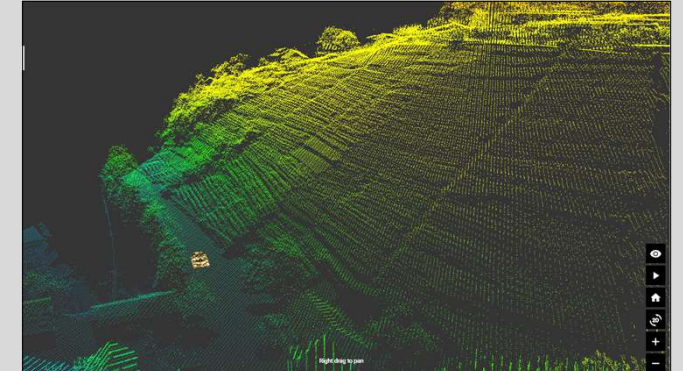
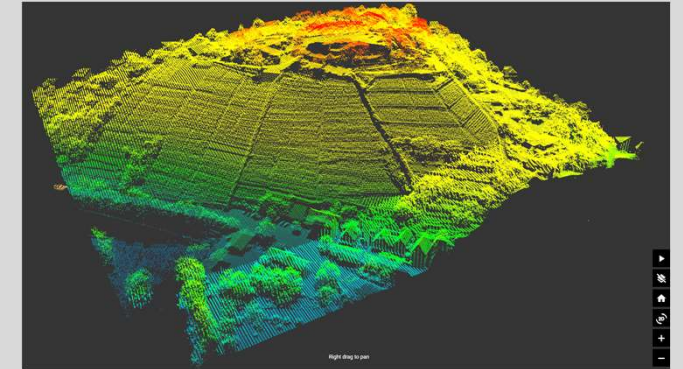
Explore LIDAR and point cloud data sources.

Apply colour to points based on altitude data.

Look at scene from a 2D orthographic view.

Add real-time animated objects (i.e. tank) to static LIDAR environment.

Combine multiple sources of data into a single pane of glass, like an autonomous vehicle's LIDAR vision system and heat map sensors to see what the vehicle perceives in real-time.





## DIGITAL TWIN 3D

## DIGITAL TWIN 3D

## C2iView 3D

