





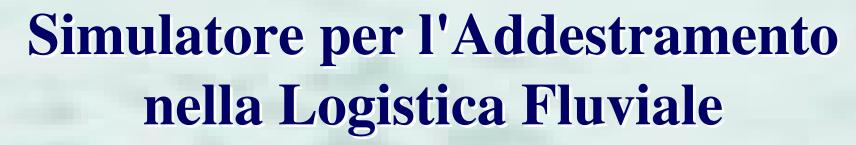


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Research Activities

- Development of Logistics
 Training Equipment based
 on Simulation
- HLA integration for Cooperative Competitive Training
- VV&A Procedures for Training Simulator within Logistics Operator



















HLA Federation per Training nella Logistica

La ricerca mira a sperimentare diverse applicazioni per l'impiego della Simulazione Real-Time Distribuita, basata sullo Standard HLA, nel settore della Logistica con particolare attenzione a:

- Definizione delle Procedure Operative
- Formazione degli Operatori
- Sicurezza nell'Handling ed Efficienza

Operativa

















Sea and River Port, Intermodal Terminal

Cocodris Simulatioin Engine enable to reproduce port handling devices, vehicles and









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Real-Time Distributed Simulation

- RESET project is focusing on the development of Real-Time Distributed Simulator that enable the following activities:
 - Multiple Training Session
 - Cooperation among Trainees
 - Competition among Trainees



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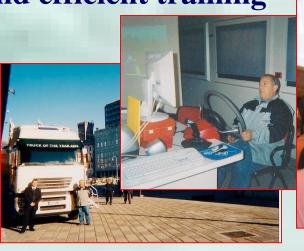






Simulation Dynamic Interactions

Cocodris Simulator allows to combine different real and virtual interfaces for improving flexibility and efficient training





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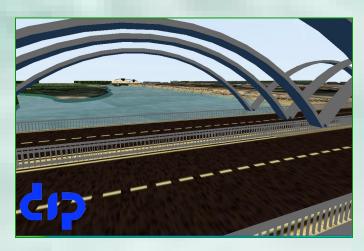






Weather Conditions

Cocodris provides very different weather conditions, including ground characteristics for testing driving ability with fog, snow, rain etc.













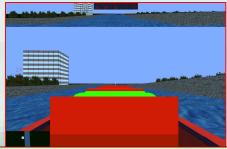


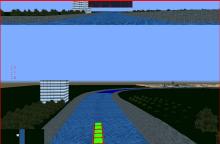














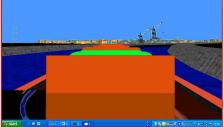






Cocodris allowed to test preliminary developments of river boat virtual environments for simulation of logistics operations









Cocodris Scenario allowed to test Open Issues in each single Customization of the river











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RIVER BOATS: Reset Tailoring









Data Collection





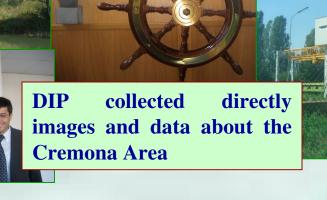






























Training Scenario



An Area of 400km² of Po area including Cremona Port have been introduced in Terrain Database for creating the Scenario

















Port Overview



The Cremona Port has been modeled for providing an effective training framework









River Boats

River Tugs and Barges have been modeled based on the data provided by Cremona Port Authority and Public Domain Information





























Bridge Viewpoint



















Critical Situations

































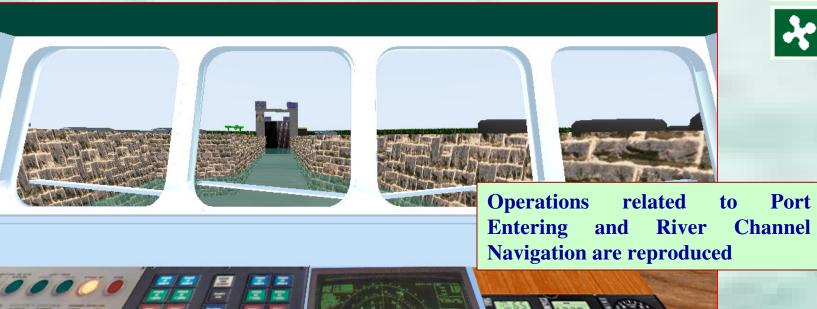






Port











Technical WebService



















Conclusions







- RESET is an interesting customization of Cocodris Simulation and the application of HLA technology allows today to use this approach in the important sectors of River Navigation
- The Distributed Simulation is still today a very innovative development, allowing to promote simulation in an interactive cooperative environment based on HLA (High Level Architecture) at very low cost
- HLA Simulation is a standard for all the Simulation Projects in USA Military area since 1996 (DIP/DIPTEM is among the first active and most skilled teams worlwide); therefore this approach is still very challenging and few centers/developers are qualified to operate in this area.

















References

Development of Innovative Projects Consortium



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