

JANUARY 2021 – ISSUE 7

Newsletter

Progress

CTTP models/programmes creation: Update and finalization of the CTTP Model Editor and structure of CTTP Training Programmes. Modified hardware components. New REST APIs. New Training Parameter / Educational Model. Presentation of the Assurance Tool. New Training Programmes.

Emulation tool: Design and development of advancements and new features expected in the second phase. Integration and testing of the multi-session support, for deploying the same scenario more than once at the same time. Use of the Message Broker for initializing of the emulation environment and releasing of Guacamole credentials to access the Vms. Integration of a new Guacamole ad-hoc client to strengthen the connection security. Implementation of the final version of the tool modules. Design and development of the Evaluation agent, to monitor trainees' activities inside the VM and return the results as actual traces to the Training Tool through the Message broker. New VMs for the full CTTP Programmes.

Training and Visualization tools: Improvement of the Training Tool (efficient integration and communication with all the other tools). Split functionality of the Visualization and the Simulation tools. New simulation scenarios (red/blue team). Finalization of the Visualization Tool. Documentation of the final version of the Gamification Tool. Finalization of PROTECT and AWARENESS QUEST serious games. Design and development of the CTTP models and Programmes evaluation mechanisms. Implementation of training adaptation mechanisms with Machine Learning procedures. Further development of Message-Broker-level communications for interconnecting the tools.

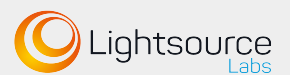
Simulation Environment: Extension of the Simulation Tool and new simulated components. Full integration of the Data Fabrication Platform (DFP). Analysis of input log files to the DFP for creating realistic training scenarios.

Platform Integration and Validation: Revised integration for tools' initialisation sequence and communications through the message broker component. Final version of THREAT-ARREST components and interconnections. Simulation Tool environment initialised as part of the Virtual Lab (VL) emulation initialisation. Integration of the DFP as part of the VL initialisation process. Continued progress of Training Tool integration. Current platform state at a satisfactory level of readiness.

Pilots Implementation and Evaluation: Complete training sessions for all three pilot sectors. Conclusion of the 1st phase of THREAT-ARREST pilots implementation. Refinement of scenarios and CTTP modelling for all pilot domains (2nd phase).

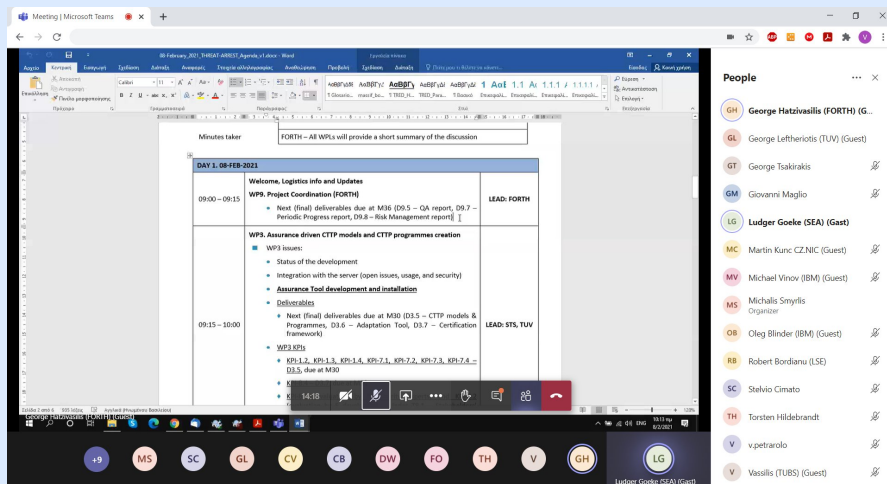
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Plenary meeting

The 8th THREAT-ARREST plenary meeting was successfully held on February 8th 2021 online, because of COVID19 travel restrictions



Publicity

- ✓ [Article](#) and [project video](#) presentation published in Researcher's Night, November 2020, Crete – Greece.
- ✓ [Blog post](#) concerning 'Security in Human vs Cyber ecosystems'.
- ✓ Presentation of the THREAT-ARREST project in the 3rd CYPBER Event 2020
- ✓ Continuous updates of the social media accounts
- ✓ Presentation and demonstration of project results in the event 'CONCORDIA – Open Doors'.
- ✓ Paper and project presentation in NATO's 4th NMIOTC Conference on Cyber Security in Maritime Domain.
- ✓ Preparation of the second special issue of the project on 'Security management of 5G and IoT ecosystems' and the open access journal MDPI Applied Sciences.
- ✓ Article posted in the TUV Nord portal concerning the THREAT-ARREST cyber-ranges approach.
- ✓ Joint workshop with other EU cyber security projects: 'Cyber Ranges and Security Training (CRST)' in 'IEEE International Conference on Cyber Security and Resilience (IEEE CSR)'.
- ✓ Presentation of the THREAT-ARREST cyber-range solution Leonardo Mechanics company, Emirates Nuclear Energy Corporation (ENEC), Emirates Steels and Abu Dhabi National Oil Company (ADNOC).
- ✓ Evaluation of the CTPP editor and the overall THREAT-ARREST platform by external stakeholders.
- ✓ THREAT-ARREST presentation in the "Forum Risk Management – Health Care: Digital Health care and cybersecurity" session

Publications

G. Tsakirakis, "**Security in Human vs Cyber ecosystems**" ITML Blog post, November 2020

G. Hatzivasilis, "**Training and Security in the Cyber-Space**" at Researcher's Night 2020, Heraklion, November 2020

M. Hamad, Z. A. H. Hammadeh, S. Saidi, V. Prevelakis, **"Temporal-based intrusion detection for IoV"** at Information Technology Journal, De Gruyter Oldenbourg, vol. 62, issue 5-6, pp. 227-239, December 2020

G. Hatzivasilis, K. Fysarakis, S. Ioannidis, I. Hatzakis, G. Vardakis, N. Papadakis, G. Spanoudakis, "**SPD-Safe: Secure administration of railway intelligent transportation systems**" at Electronics – Special Issue on Advances in Public Transport Platform for the Development of Sustainability Cities, MDPI Open Access Journal, vol. 10, issue 1, article 92, pp. 1-26, January 2021

Mohammad Hamad, Emanuel Regnath, Jan Lauinger, Vassilis Prevelakis, Sebastian Steinhorst, **"SPPS: Secure Policy-based Publish/Subscribe System for V2C Communication"** at the Conference on Design, Automation and Test in Europe (DATE 2021), February 2021

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