Hybrid Digital Twin

By DIATEAM
A CY4GATE Group Company

WHAT IS THE HYBRID DIGITAL TWIN?

Performance improvement through simulation & virtualization

The Hybrid Digital Twin is a **virtual environment** that enables organizations to reproduce cyber offensive and defensive networks for simulated cyber attacks, system and network development, testing and benchmarking.

Through the use of the Hybrid Digital Twin, it is possible to **virtually reproduce a system or a process,** in order to gain insights in and improve its performance, by analysing data, identifying vulnerabilities and developing solutions to increase the resilience and efficiency of the system or process. Thanks to a traffic generator for training, testing and prototyping of IT/OT infrastructures, the Hybrid Digital Twin enables state-of-the-art simulation and virtualization.

The solution is designed to provide operational teams with a user-friendly and powerful platform to train and improve skills such as pentesting, network protection, system hardening, TTPs and incident response.

TEST AND VALIDATE

The Cyber Digital Twin you were looking for

Our solution offers a wide range of use cases and advantages:

1 **Virtualization, emulation and simulation** of IT/IoT and OT/ICS infrastructures

2 **Test and validation** – Virtual environment with hardware and software in the loop to test networks, OT infrastructures and cyber defense tool

3 **Hybrid Digital Twin innovative features allow deployment testing**, benchmarking, analysis; prototyping, designing, pentesting; patch management and security assessment

HOW IS OUR HYBRID DIGITAL TWIN DIFFERENT?

Our unique features

- A unique hybrid solution that **interconnects virtual infrastructure and real equipment** – this is possible thanks to a native feature which allows to plug external physical components and to set up mirror bridges in virtualised infrastructures
- **Possibility of flexible integration** of third-party services and solutions or engineering of unsupervised automation processes
- **User-oriented design and validation modu-**

les can support Test & Validation departments to build effective contents

- **Graphical User Interface** – The GUI allows to create, modify, undo, redo, deploy, save and restore cybersecurity infrastructures and scenarios for **easy, intuitive and safe handling**

- Flexibility and speed of creation of **custom-made scenarios**, tailored on the client's specific needs

THE IMPORTANCE OF BEING FLEXIBLE
A bespoke solution designed for you

Our Hybrid Digital Twin is an omni-comprehensive solution that can be tailored according to the specific needs of our clients: CY4GATE Group offers professional services to develop specific items and scenarios for a superior level of customization.

Hybrid Digital Twin's use cases cover multiple domains, such as energy, maritime, health or aeronaval sectors.

OT

IT

HYBRID DIGITAL TWIN

CYBER LABS/DIGITAL TWIN
Test and validate

TESTING

PROTOTYPING

VALIDATION

ABOUT DIATEAM

Established in 2002 and part of CY4GATE Group since 2023, DIATEAM is a partner of choice for large corporations, government defense agencies, academia and industry, thanks to its offering of European and globally recognized cyber security solutions.
DIATEAM is a key player in the market for cyber training and cyber infrastructure prototyping solutions and, created on the needs of the French Ministry for Armed Forces, it is one of the European pioneers in the development of Cyber Ranges, obtaining the "France Cybersecurity" certification mark.

ABOUT CY4GATE

CY4GATE Group was founded in 2014 and its aim is to design, develop and produce technologies and products, systems and services, with the goal of meeting the cyber security needs of companies.

CY4GATE S.p.A. is a unique Italian industrial project with a wide portfolio of innovative cyber security and cyber intelligence products that adapt to the most stringent requirements and needs.

Simulate & replicate any information system: create your own topologies, scenarios, content for feeding defensive and offensive exercises
Request a Demo

WWW.CY4GATE.COM