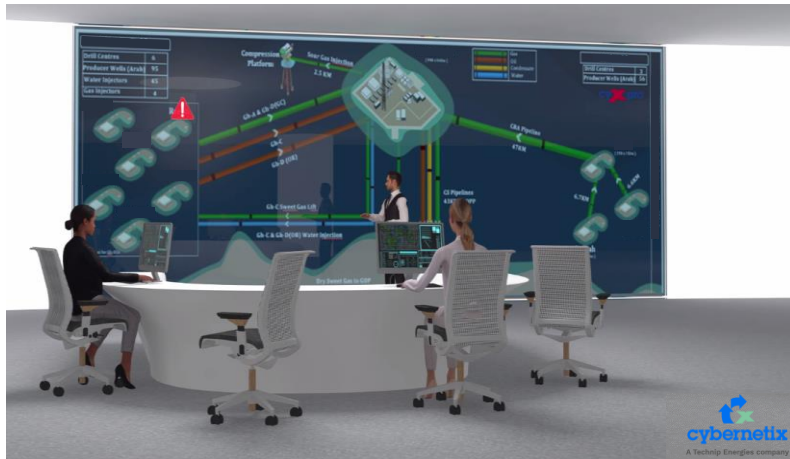


Cyxense® Commander

A Robotic Fleet Supervision and Management Software



Description

Cyxense® Commander is a robotic supervision system used to execute tele-operated, remotely controlled or, autonomous inspection, maintenance or repair tasks on low-manned or unmanned installations.

The software is a Cybernetix proprietary development designed to control and simultaneously operate a heterogeneous fleet of robotic devices (in house or 3rd party) such as drones, ground crawlers and underwater drones.

Cyxense® Commander can be connected to Client Control System to automate reporting as well as data and alarm management.

Functions

- Robotics Mission Design & Planning
- Mission Simulation
- ROI and OPEX Saving Estimates
- Fleet Supervision
- Autonomous Navigation
- Dexterous Manipulation Supervision
- Long distance operations
- Interface with ICSS & CMMS: data management, alarm management, reporting, automated interactions

Value for clients

Cyxense® Commander allows a single operator to manage simultaneously a heterogenous fleet of robots to execute a wide range of inspection, intervention, maintenance, repair and operational support missions. The deployment unlocks production gains, OPEX savings, mitigation of HSE risks and reduction of GHG emissions.

Assessing Benefits prior to Deployment

The simulation tool allows to validate the feasibility of missions and provides an estimation of gains generated by robotics.

Operational Excellence

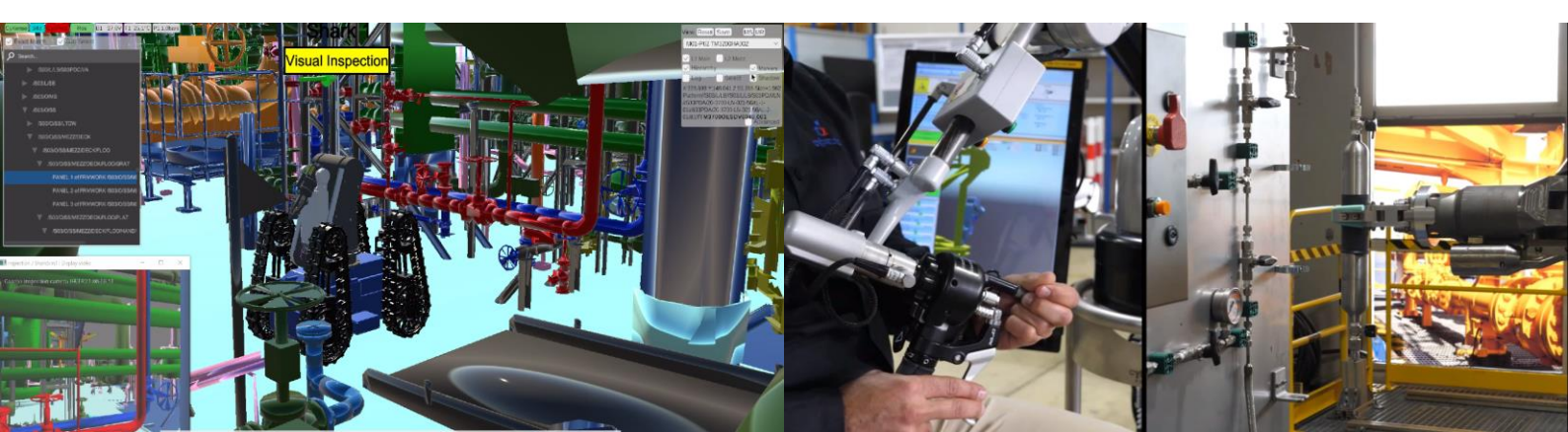
Cyxense® Commander enables significant reduction in manhours and HSE exposure and triggers quality improvement. On unstaffed/low-staffed assets, it is a significant contributor to reduction in maintenance campaigns, occurrence of unplanned visits and to secure No Touch Time of assets

Evolutive Solution

Cyxense® Commander can be connected to robotic devices to adapt change in operations. It can be interfaced with client supervision system to achieve efficiency gains, from basic data sharing to most complex interactive scenarios such as automated inspections or interventions. It is also designed to follow operator adoption, training and will allow it to automate more and more tasks as it gains confidence.

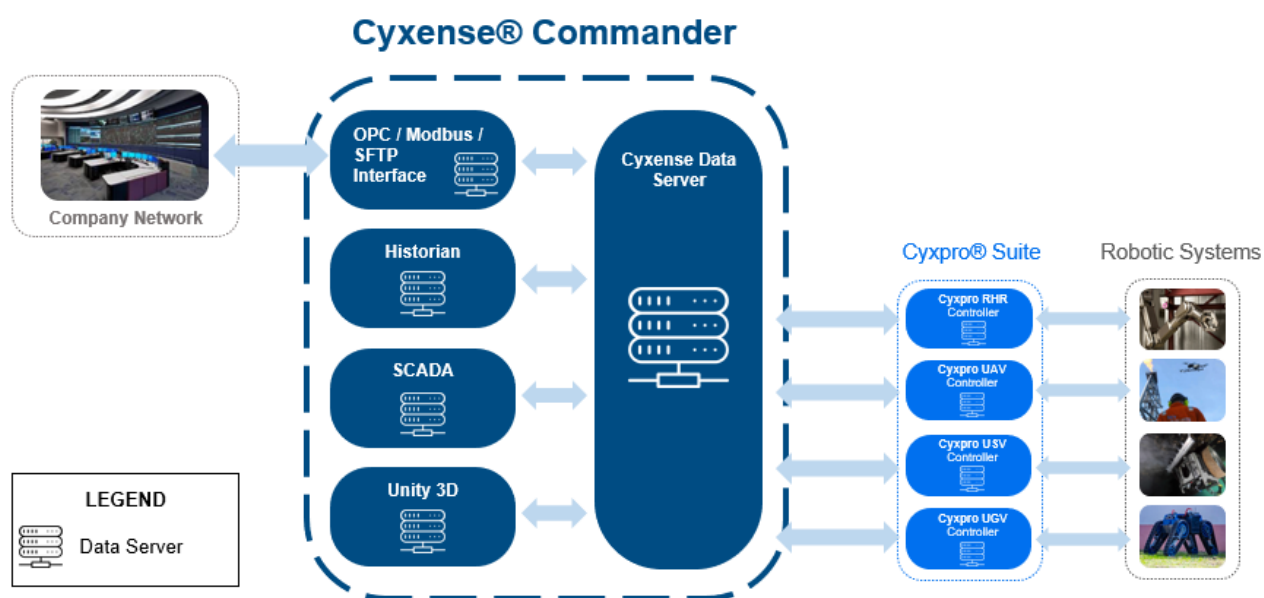
Typical Deployment

- Oil & Gas Assets (Onshore & Offshore)
- Construction yards
- Nuclear Plants
- Dark assets (No/limited digitalization)



« A single software managing a fleet of robots to execute a wide range of Inspection, Maintenance and Operational Support missions »

Standard Architecture



Robotics Missions Simulations

Cyxense® Commander allows the simulation of Robotics Scenario from 3D Models leveraging a state-of-the-art physical engine. This function permits to confirm the feasibility of missions through accessibility checks. Cyxense® Commander is also doted of a real-time chronometer to measure and improve efficiency of inspection and maintenance tasks.

Dexterous Manipulations Supervision

Cyxense® Commander supervises dexterous manipulations via a dedicated controller to manipulate equipment such as valves, electrical cabinet or perform delicate tasks such as liquid sampling activities. Dexterous manipulation can be executed in autonomous or teleoperated mode with an intuitive HMI and contextual view managed by Cyxense® Commander.

Robots connected to Cyxense Commander

- UGV : (i.e. : Inspection Robot, Intervention, ATEX, Tests Robot..)
- Drone
- Underwater Robots (on going)