Politechnika Świętokrzyska

Technologie IoT rozproszone sieci sensoryczne

| Grupa dziekańska: | Data wykoania: | Autorzy: |
|-------------------|----------------|--------------------------------|
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1) Wykonane zadania:

Topologia:



Zadanie:

Part 1: Explore the Connected Factory

Step 1: Review the Glazing Company Overview page.

- a. Click any PC in the Warehouse and open the Web Browser from the Desktop tab.
- b. Type webserver into the URL box and press Go.
- c. Review the company description information.
- d. Once the information has been reviewed, close the PC.

Otrzymamy widok:



Glaze Company

Glazing Company makes ceramic coatings for space capsules autoclaves, and ships. The processes in the factory are monitored via cameras, sensors, and people on the assembly lines. The Factory also has a store for the public to observe the process and buy samples of ceramics that have been in outer space and other exotic areas.

Modern technology using the latest clays and glazes need to be monitored as they enter the autoclave. The ceramic is then cleaved and wrapped to be stored for shipping around the world.

Some aerospace customers will deliver their plans to the office where bids and processes are discussed. The webserver is also the email server www.glaze.com.

Raw materials of ceramic glazes generally include silica, which will be the main glass former. Various metal oxides, such as sodium, potassium and calcium, act as a flux to lower the melting temperature. Alumina, often derived from clay, stiffens the molten glaze to prevent it from running off the piece. Colorants, such as iron oxide, copper carbonate or cobalt carbonate, and sometimes opacifiers such as tin oxide or zirconium oxide, are used to modify the visual appearance of the fired glaze. Glaze for lead-glazed earthenware is transparent and glossy after firing.

Glaze may be applied by dry-dusting a dry mixture over the surface of the clay body or by inserting salt or soda into the kiln at high temperatures to create an atmosphere rich in sodium vapor that interacts with the aluminium and silica oxides in the body to form and deposit glass, producing what is known as salt glaze pottery. Most commonly, glazes in aqueous suspension of various powdered minerals and metal oxides are applied by dipping pieces directly into the glaze. Other techniques include pouring the glaze over the piece, spraying it onto the piece with an airbrush or similar tool, or applying it directly with a brush or other tool.

Następnie:

Step 2: Run the Classic Car

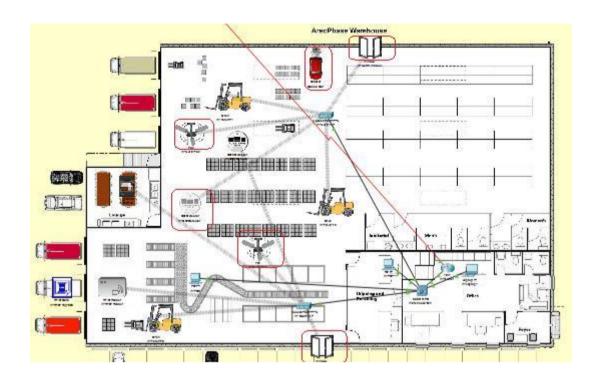
The owner keeps a classic car (the old car in PT) in the warehouse that needs to be run occasionally.

a. Start the engine by holding the Alt key and clicking the classic car.

How does the warehouse react to having the car running inside of it?

Stop the engine.

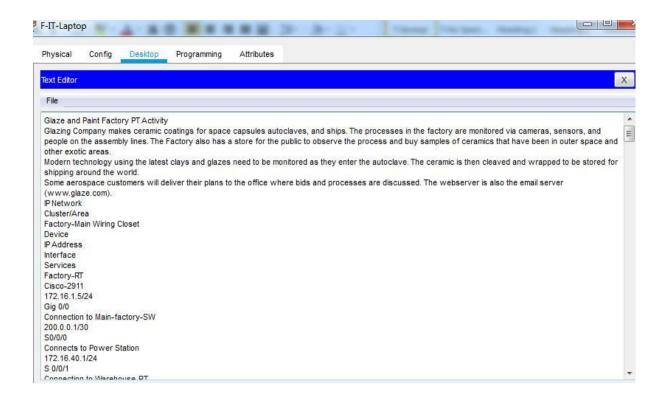
Detektor CO działa na takiej zasadzie, że gdy poziom tlenku węgla wzrośnie powyżej ustalonej wartości, kontroler otworzy wszystkie okna, drzwi, włączy wentylatory na maksymalny poziom. Tlenek węgla wzrasta po odpaleniu auta w zamkniętym pomieszczeniu.



Step 4: Use browser to monitor factory sensor settings.

- a. Open the web browser on the F-IT-Laptop using the Desktop tab.
- b. Type factory in the URL box and press Go.
- c. Use the following table to log into the each area to control the sensors located there.

| Area | Username | Password |
|---------------|----------|----------|
| Assembly | Assembly | Assembly |
| Preparation | Prep | Prep |
| Power Station | PS | PS |



Dzięki *F-IT-Laptop* możemy poznać całą konfigurację sieci, wraz z wszystkimi adresami IP oraz portami.