

Config Challenge

24/03/2020

Emergency Water Cut Off

User Story:

Currently, in my building, we operate several basement level server rooms, as well as the main plant room. Last year we had a leak in the building which caused significant downtime and disruption to the business. I would like to minimise the possibility of this in the future by having an early warning of any leak or potential leak. As well as the building's water supply shutting off automatically if no one can deal with the leak.

Details:

In high-risk areas of the building such as the bathrooms we need to have leak detectors installed. In the plant room and server room we should have leak detection tape around the perimeter of equipment.

If either of these activate an alarm chain should start calling the following people in order until one person answers.

1. Facilities Manager
2. IT Manager
3. Managing Director

If no one answers on the first call then a solenoid valve on the main water inlet should close to prevent further water entering the building, and the building should then trigger an alarm for a water leak.

A little extra challenge:

There is also a water meter installed onto the main water inlet that pulses for every 10 litres of water used. On average, an employee will use 50 litres of water per day in the office and the building has 30 employees, who work Monday to Friday 8 am until 5 pm.

There should also be an alert sent to the facilities manager if the water use exceeds our expected values as this would indicate a slow leak in the building that could cause damage over time.