

應用案例

# 污水下水道資料整合雲平台案例



## 背景說明

全台目前污水下水道用戶接管數達330萬戶、普及率突破37%，公共污水處理廠共70座。最新核定污水下水道計畫目標是115年普及率達46%，累積接管戶數達407萬戶，完成污水處理廠線上監測系統並介接至雲端管理，以及生產更多再生水供高科技業及工業使用。

## 挑戰

根據內政部營建署水資源回收中心工程儀控系統規範，污水環安資料需透過OPC UA上傳至「營建署污水下水道資料整合雲平台」，並符合營建署訂立的OPC UA格式。

## 解決方案

- 中央監控系統工作站電腦: NexBox-Q170-2U
- 圖控系統平台: JMobile
- OPC UA Server :NexUA

圖控系統平台JMobile支援標準 OPC UA Client 通訊協議，可透過 Modbus將PLC、HMI, 的點位值取出以監測數據(如各主要設備運轉、電力資訊、水量水質監控量測數據及其他相關感測資料)。

OPC UA Server - NexUA，可自訂成符合營建署規範之資料格式、擷取頻率、檔案命名與存檔位置，自動定時產出及儲存傳輸檔案，並安裝營建署發佈的自動傳輸程式，將數據傳送至「營建署污水下水道資料整合雲平台」接收儲存。

中央監控系統工作站NexBox-Q170-2U具有OPC UA Server功能，可自訂圖控系統監控的記載數據結構(如各主要設備運轉、電力資訊、水量水質監控量測數據及其他相關感測資料)給內部或外部OPC UA Client遠端連接與取值。

## 成果及效益

圖控系統平台JMobile支援標準 OPC UA Client 通訊協議，NexUA為可自訂資料結構OPCUA serve符合營建署規範，將污水環安資料透過OPC UA上傳至「營建署污水下水道資料整合雲平台」統一化管理，以整合污泥處理、鼓風機、生物處理、加藥處理等資訊，進行數據收集、統計、分析及大數據智慧運算，生產更多再生水供高科技業及工業使用，亦達到自動化警示、節能、設備長壽命化等目標

## 解決方案系統架構







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