



# I- Cloud 私有工業雲平台



# 什麼是雲



# 什麼是雲

## 美國國家標準與技術研究院（NIST）對雲端運算的定義

網路存取方式多樣化  
Broad Network Access

迅速伸縮自如  
Rapid Elasticity

服務可量測  
Measured Service

隨選所需自助服務  
On-Demand Self-Service

5 種特徵

共用資源池 Resource Pooling

SaaS

Software as a Service  
軟體即服務

PaaS

Platform as a Service  
平臺即服務

IaaS

Infrastructure as a Service  
基礎設施即服務

3 種服務型式

公有雲  
Public Cloud

私有雲  
Private Cloud

混合雲  
Hybrid Cloud

社群雲  
Community Cloud

4 種部署模式

資料來源：Cloud Security Alliance · iThome 整理 · 2011 年 6 月

# 雲佈署分析

## 公用雲

- 彈性伸縮
- 成本低
- 無限量存儲空間
- 按使用量支付

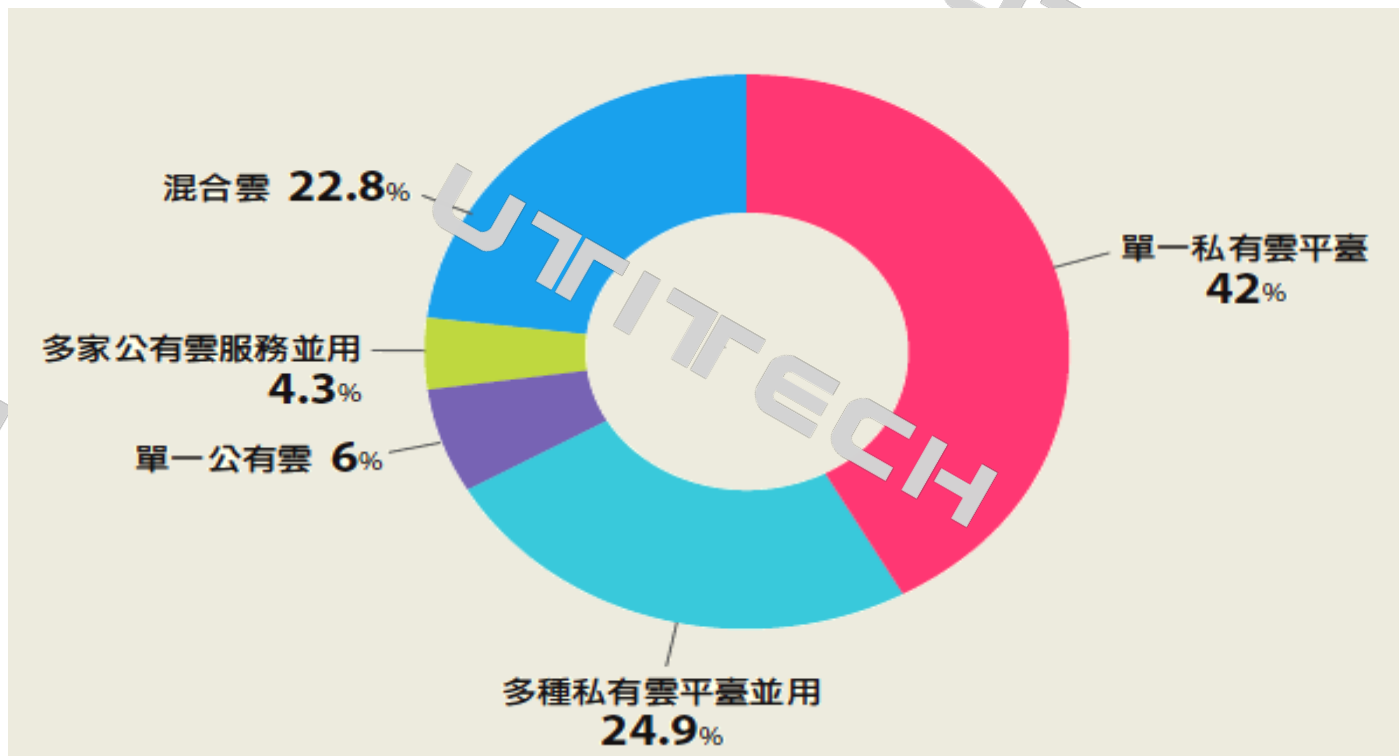
## 混合雲

- 彈性伸縮
- 安全性
- 靈活性
- 成本低
- 無限量存儲空間

## 私有雲

- 專屬性
- 安全性
- 靈活性
- 完全支持自定義

# 雲佈署分析

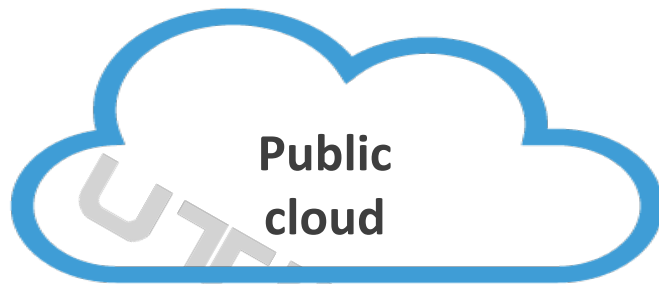


# 如何上雲

Cloud



OPC UA  
Modbus.....



MQTT/Internet  
Protocol



CGW



SIEMENS

OMRON



Edge

Device



UTITECH



# 工業雲服務應用



# AVEVA Cloud

Administration



Industries What We Offer Services



2

7



MY PROJECTS



## My Projects

Wonderware (4)



Last Engagement requested on 8/2/2018

## Wonderware Project

Remove

Product(s)

Description



### System Platform - Distributed Supervisory Platform

By: AVEVA Group plc

Choose Your Edition: Subscription Edition

System Platform is a complete automation solution that can deliver 40% efficiency gains in the face of changing business and market demands by eliminating the need for scripting or customisation and leveraging reusable visualisations.



### Intelligence - Unifying Industrial Information Model

By: AVEVA Group plc

A unifying multi-dimensional information model to aggregate data from multiple sources and provide context for use with reporting/ dashboard tools. Improve plant performance in near real-time by enabling rich analytics in your BI tool on industrial data

Feedback





# AVEVA Cloud

AVEVA CONNECT™

Complete Lifecycle Solutions for Assets and Operations

## Engineer



Improve project lifecycle efficiency

DESIGN & CONSTRUCT >

SIMULATION PLATFORM >

PROCESS ENGINEERING >

DYNAMIC SIMULATION >

OPERATOR TRAINING >

## Operate and Optimise



Empower decisions with living information

INSIGHT >

PROCESS OPTIMISATION >

EMERGENCY TRAINING >

## Asset Performance



Increase asset reliability and longevity

PREDICTIVE ASSET ANALYTICS >

Browse our portfolio of industrial software solutions

WHAT'S NEW? >



## Developer

Collaborative development in the cloud

INTEGRATION STUDIO >



## Learning

Your gateway to:

Engineering knowledge

EXPERIENCE >



Product knowledge

TRAINING >



## Support

Technical information, product forums and updates

SUPPORT >

# 設備安裝、施工進度視覺化



可视化报表 Equipment Status

添加报表 全部移除

| 搜索名称                | 透明度  | 颜色     |
|---------------------|------|--------|
| Installed Equipment | 100% | Green  |
| Delivered Equipment | 0%   | Orange |
| Ordered Equipment   | 0%   | Yellow |

隔离搜索结果

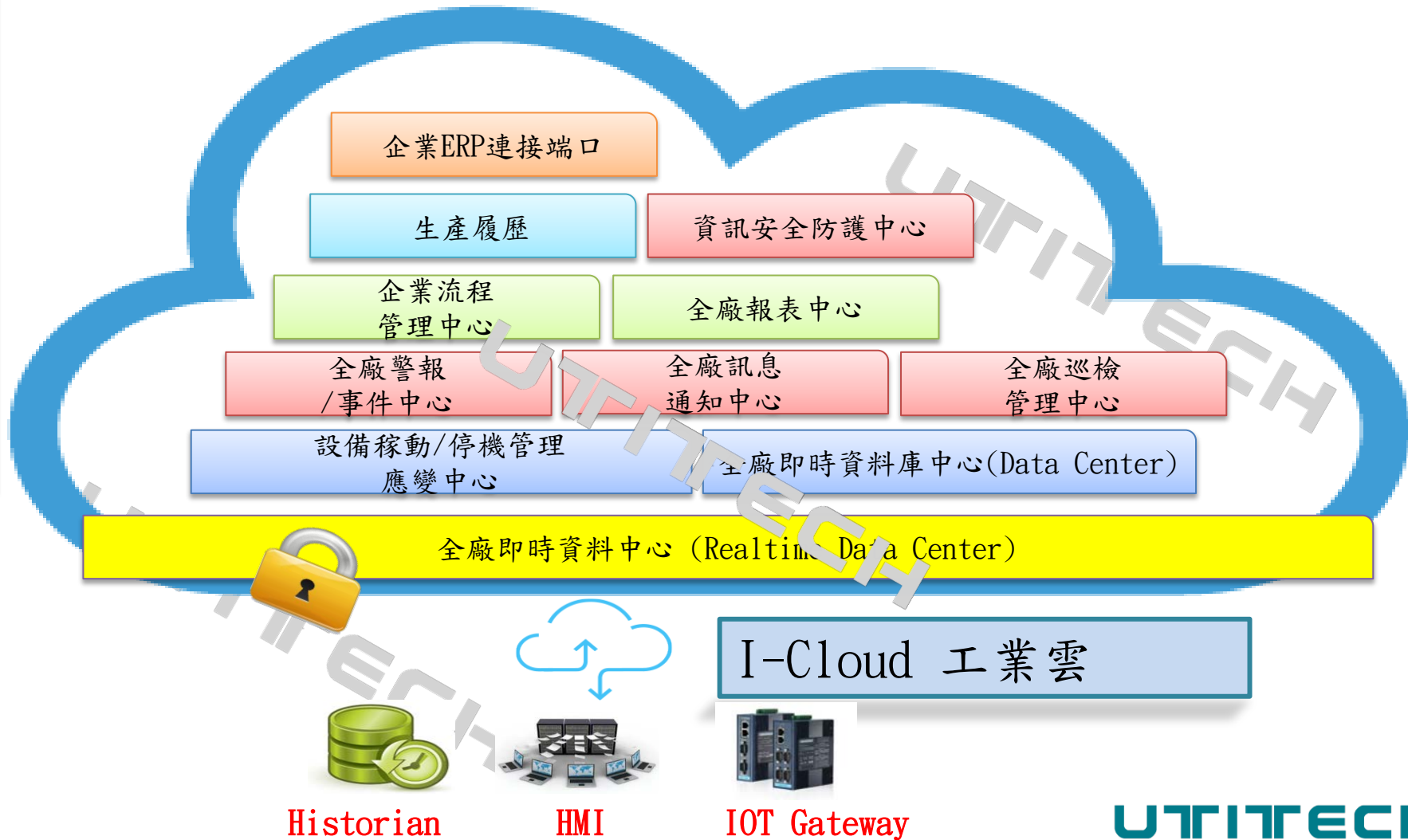
应用 取消

# 模擬與人員培訓



# Go mobile with the **AVEVA Insight** mobile app





# 工業雲平台特色及效益

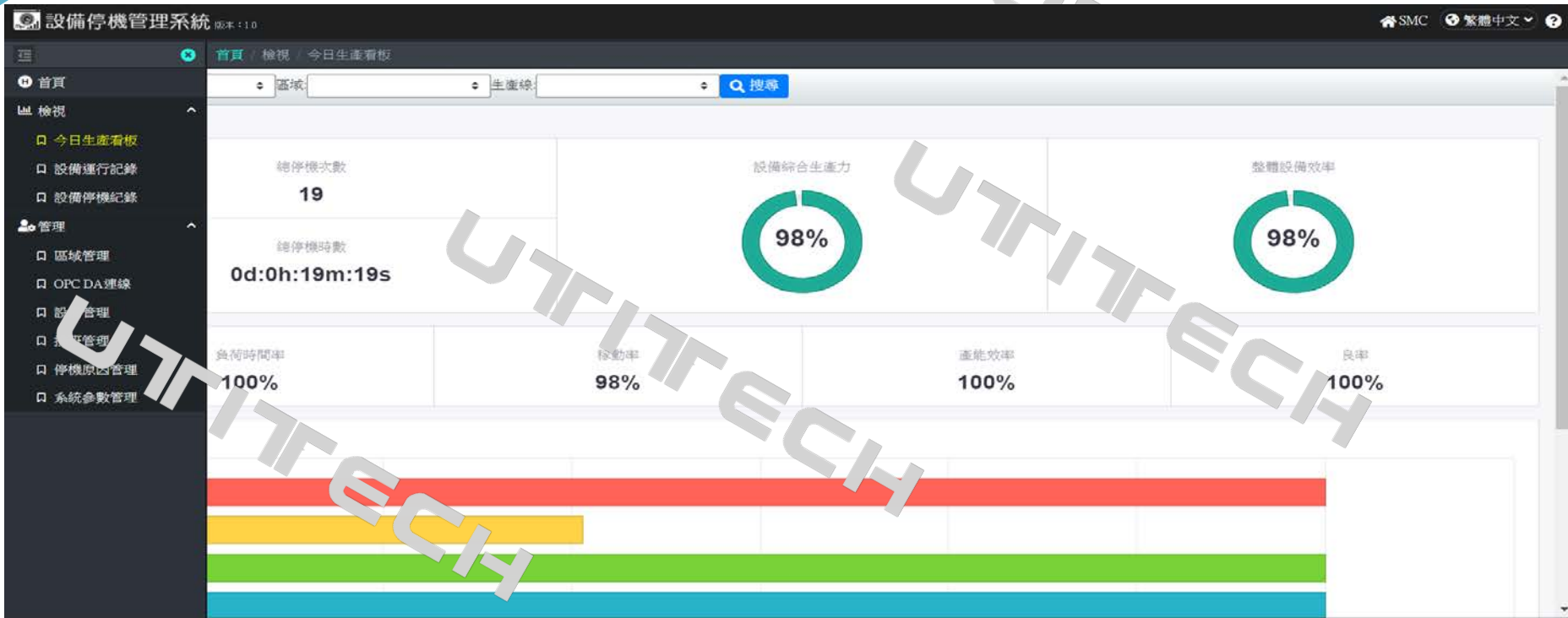
- ※增強系統的可靠度
- ※工廠資訊垂直與平行整合
- ※透明化工廠，掌握關鍵情報
- ※整體的分析與決策
- ※立即反應最佳調度
- ※技術經驗的傳承

 **科勝科技**  
UTITECH TECHNOLOGY CO.,LTD.



**THANK YOU !**  
Smart Technologies Driving Tomorrow's Production.

# Availability Performance Quality 設備停機管理系統





# Alarm Event Center

## 全廠警報事件中心



### 警報統計

- 警報次數
- 平均時間
- 最大/最小時間
- 累計時間

警報事件中心 版本: 1.0

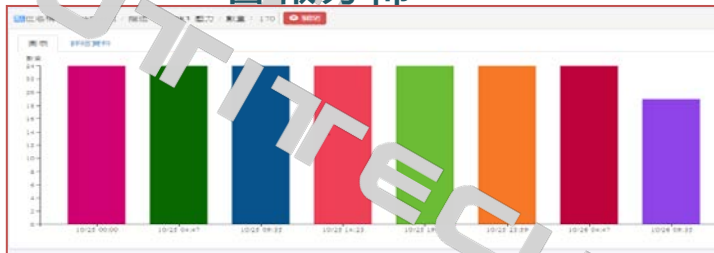
首頁 / 分析 / 警報時間統計

日期: 2016-10-25 ~ 2016-10-26

持續時間 > 10s

| 序號 | 標名 | 圖示 | 區域      | 點名稱        | 描述       | 警報次數 | 總時間      | 平均時間     | 最小時間     | 最大時間     |
|----|----|----|---------|------------|----------|------|----------|----------|----------|----------|
| 1  | MM | MM | SSystem | TankPress1 | Tank1 壓力 | 170  | 08:30:00 | 00:03:00 | 00:02:59 | 00:03:01 |
| 2  | MM | MM | SSystem | TankPress2 | Tank2 壓力 | 84   | 08:24:00 | 00:06:00 | 00:05:59 | 00:06:01 |
| 3  | MM | MM | SSystem | TankLevel1 | Tank1 液位 | 24   | 04:00:00 | 00:10:00 | 00:01:00 | 00:19:00 |
| 4  | MM | MM | SSystem | TankLevel2 | Tank2 液位 | 11   | 03:22:00 | 00:18:21 | 00:02:00 | 00:38:00 |
| 5  | MM | MM | SSystem | TankPress1 | Tank1 壓力 | 13   | 00:51:00 | 00:03:00 | 00:03:00 | 00:03:00 |
| 6  | MM | MM | SSystem | TankPress2 | Tank2 壓力 | 8    | 00:48:00 | 00:06:00 | 00:06:00 | 00:06:00 |
| 7  | MM | MM | SSystem | TankLevel1 | Tank1 液位 | 1    | 00:19:00 | 00:19:00 | 00:19:00 | 00:19:00 |

### 警報分佈

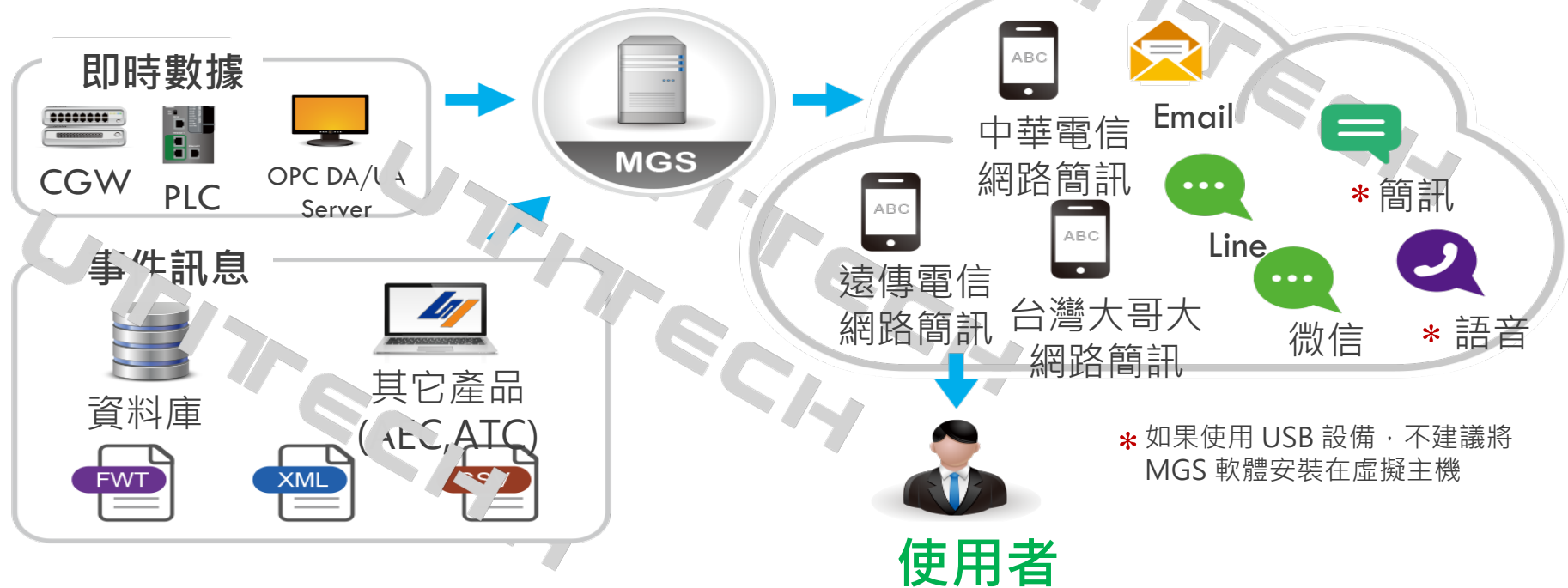


### 警報記錄

點名稱: TankPress1 描述: Tank1 壓力 數量: 1 0 0000

| 時間                  | 標名 | 圖示 | 區域      | 點名稱        | 描述       | 數量 | 事件 | 警報等級 | 狀態    | 操作時間      | 操作人員      |
|---------------------|----|----|---------|------------|----------|----|----|------|-------|-----------|-----------|
| 2016-10-25 10:22:00 | MM | MM | SSystem | TankPress1 | Tank1 壓力 | 12 | 12 | Low  | ONACK | RD-DEMO1  | RD-DEMO1  |
| 2016-10-25 10:22:00 | MM | MM | SSystem | TankPress1 | Tank1 壓力 | 12 | 12 | Low  | ONACK | RD-DEMO2  | RD-DEMO2  |
| 2016-10-25 10:22:00 | MM | MM | SSystem | TankPress1 | Tank1 壓力 | 12 | 12 | Low  | ONACK | RD-DEMO3  | RD-DEMO3  |
| 2016-10-25 10:22:00 | MM | MM | SSystem | TankPress1 | Tank1 壓力 | 12 | 12 | Low  | ONACK | RD-DEMO4  | RD-DEMO4  |
| 2016-10-25 10:22:00 | MM | MM | SSystem | TankPress1 | Tank1 壓力 | 12 | 12 | Low  | ONACK | RD-DEMO5  | RD-DEMO5  |
| 2016-10-25 10:22:00 | MM | MM | SSystem | TankPress1 | Tank1 壓力 | 12 | 12 | Low  | ONACK | RD-DEMO6  | RD-DEMO6  |
| 2016-10-25 10:22:00 | MM | MM | SSystem | TankPress1 | Tank1 壓力 | 12 | 12 | Low  | ONACK | RD-DEMO7  | RD-DEMO7  |
| 2016-10-25 10:22:00 | MM | MM | SSystem | TankPress1 | Tank1 壓力 | 12 | 12 | Low  | ONACK | RD-DEMO8  | RD-DEMO8  |
| 2016-10-25 10:22:00 | MM | MM | SSystem | TankPress1 | Tank1 壓力 | 12 | 12 | Low  | ONACK | RD-DEMO9  | RD-DEMO9  |
| 2016-10-25 10:22:00 | MM | MM | SSystem | TankPress1 | Tank1 壓力 | 12 | 12 | Low  | ONACK | RD-DEMO10 | RD-DEMO10 |

# Message Gateway System 訊息通知中心



# Report Generator System

## 報表管理中心



RGS 報表設計及管理中心

首頁

搜尋：

|                      | 歷史報表 | 訂閱 | 報表種類 | 名稱 |
|----------------------|------|----|------|----|
| MIS                  |      |    |      |    |
| Business Unit        |      |    |      |    |
| 600                  |      |    |      |    |
| 630                  |      |    |      |    |
| 700                  |      |    |      |    |
| 740                  |      |    |      |    |
| 770                  |      |    |      |    |
| 500                  |      |    |      |    |
| 570                  |      |    |      |    |
| 540                  |      |    |      |    |
| 530                  |      |    |      |    |
| Technical Unit       |      |    |      |    |
| Technical Consulting |      |    |      |    |
| R&D                  |      |    |      |    |

# Report Generator System

## 報表管理中心



The screenshot displays the Report Generator System interface. The main workspace contains a grid of report elements:

- Top Left:** A pie chart titled "Share of Internet Population Growth: 2007 - 2012" showing regional distribution: Latin America (13.2%), Europe (14.1%), Asia (33.8%), Middle East (5.2%), and South America (35.7%).
- Top Middle:** A horizontal bar chart comparing data for 2017 and 2018 across five categories.
- Top Right:** A line chart showing trends for 2017 and 2018 with a y-axis ranging from 0 to 2000.
- Middle Left:** A horizontal bar chart similar to the top middle one.
- Middle Middle:** A line chart similar to the top right one.
- Middle Right:** A pie chart identical to the top left one.
- Bottom Left and Bottom Right:** Image blocks featuring a sunset background with two red heart-shaped balloons.
- Bottom Center:** A text block labeled "文字區域".

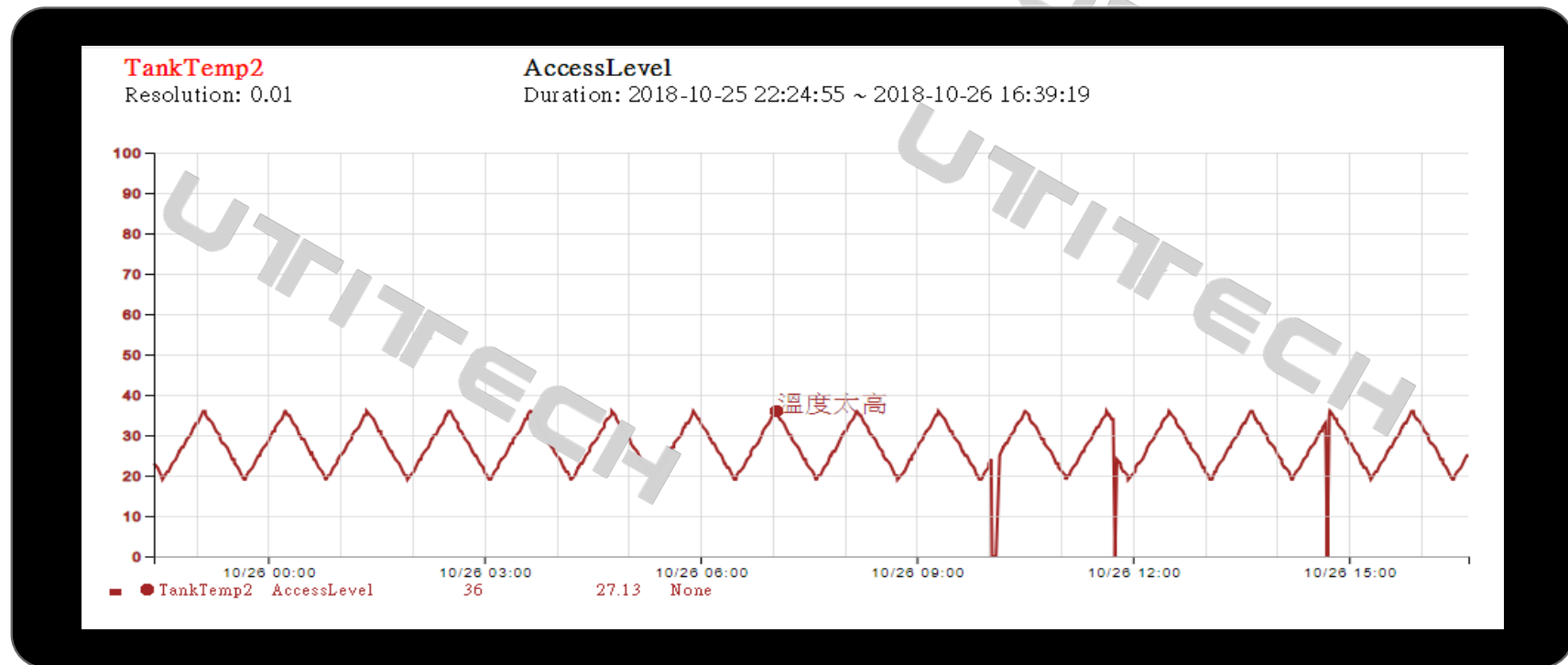
The interface includes a left sidebar with navigation options: 一般, 統計圖, and 表格. The right sidebar shows configuration settings for the selected element (Pie Chart):

- 基本設定:** 元件名稱 \*
- 元件類型:** 圓餅圖
- 進階設定:** 資料集 \* (Microsoft SQL Server), name, 值 \* (value), 圖表發散 \* (是), 佈景主題 \* (扁平)

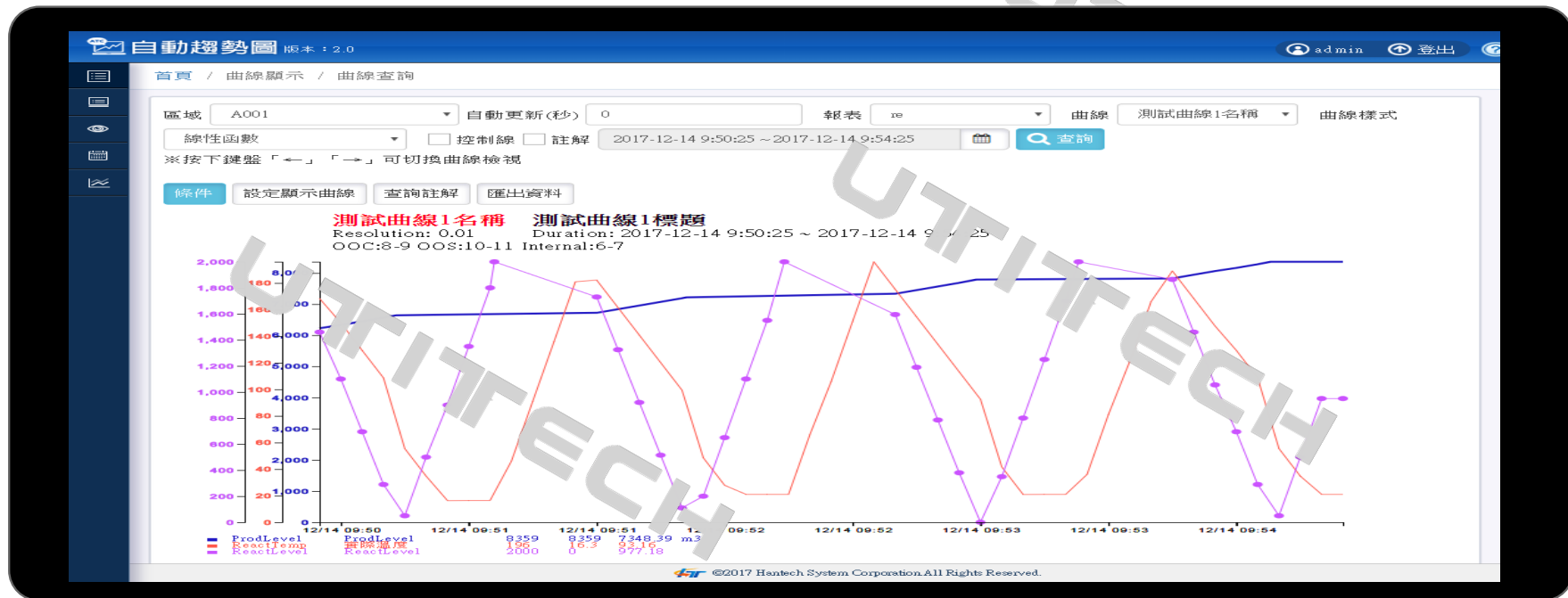
At the bottom left, there is a page indicator: + Page1. At the bottom right, there are three dots indicating more options.

# Auto Trend Chart

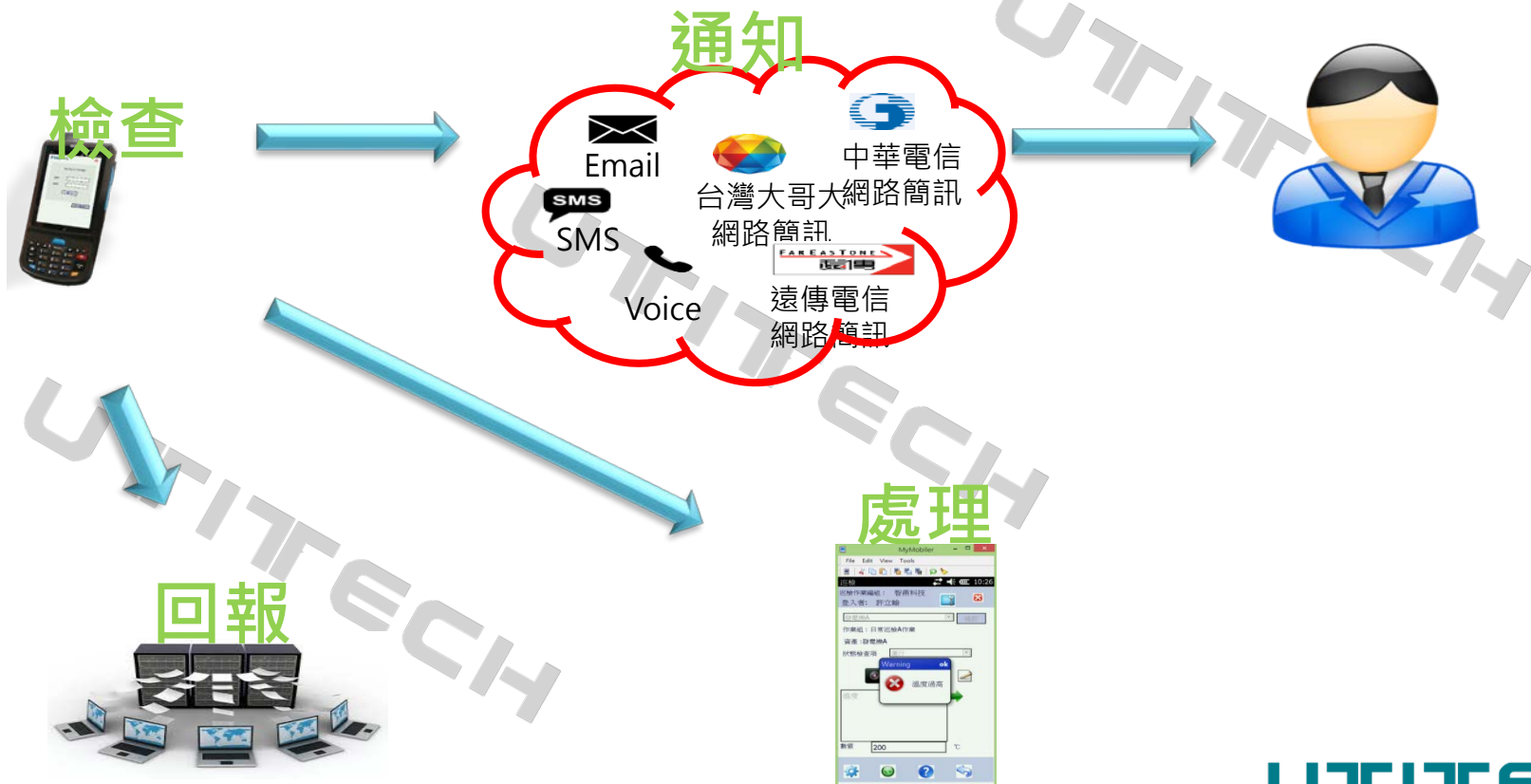
## 自動趨勢圖



# Auto Trend Chart 自動趨勢圖



# 全廠巡檢管理中心



# 全廠巡檢管理中心





企業ERP連接端口

生產履歷

資訊安全防護中心

企業流程  
管理中心

全廠訊息  
通知中心

全廠警報  
/事件中心

全廠報表中心

全廠巡檢  
管理中心

設備稼動/停機管理  
應變中心

全廠即時資料庫中心(Big Data)

全廠即時資料中心 (Realtime Data Center)

I-Cloud 私有工業雲



Historian



HMI



Data Gateway