

# JOB PROFILE FORM



## 1. JOB DETAILS

Title: IoT Device Engineer

Team / Division / Group: Operational Technologies, Asset Transformation & Technology, Service Futures

Current Incumbent/s:

Reports to (Name / Title): Head of Operational Technology

## 2. JOB INFORMATION

### Job Purpose:

To provide technical expertise in delivering Operational Technology & IoT asset management strategies while maintaining, analysing and improving existing business practices, standards, processes, technologies, systems and procedures.

### Responsibilities:

- Applying asset management methodology, root cause analysis (RCA), diagnosis to manage the OT devices
- The scope includes but not limited to Authentication and Orchestration of the OT environment, shared infrastructure and remote clients, related Industrial Control Systems, basic control field devices, communications and protocols.
- Assess and securely on board all new IoT devices onto YVW device management platform
- Deliver Operational Technology projects including upgrades/renewals, on its requirements, benefits and project.
- Provide technical services in the development and integration of key network operational management systems, including SCADA, DMS, Big Data, IoT device management platform, Jasper, Octaplant, Data Analytics, digital meters/IoT devices, communication systems and IoT related operational platforms/systems.
- Analyse, develop and plan improvement strategies for operational technology related services including delivery, technology, security, data and data analytics to ensure all effort and investment is aligned with YVW's corporate objectives, regulatory compliance requirements, industry standards and customer expectations.
- Consult and work on the alignment of IT to OT strategic, tactical and dynamic needs, standardising technology policies, practices and procedures involving IT and OT components (i.e. IT/OT convergence).
- Incorporate Cyber Security policies and guidelines into the way of working in OT.
- Maintain specifications and standards in all IoT devices of OT operations (e.g. SCADA, Communications, PLCs, RTUs, external system interfaces, etc).

# JOB PROFILE FORM



- Develop and maintain asset class plans for Lo/L1 OT basic field control devices and ensure they align to the Asset Management Framework
- Work closely with other specialists (e.g. SCADA System Specialist, OT Security Specialist, network specialists focusing on the OT environment) to implement strategies and technologies

## 3. PRE-EMPLOYMENT REQUIREMENTS

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Qualifications / Certificates | Tertiary qualification in Engineering, Information Technology, or relevant fields.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Experience                    | <ul style="list-style-type: none"> <li>• Experience in deployment and management of IoT devices.</li> <li>• Experience in IoT headend systems, management platforms, and communications technologies.</li> <li>• Experience in SCADA systems desired, including Aveva EcoStruxures GeoSCADA Expert (ClearSCADA).</li> <li>• Experience in Operational Historian platforms desired, such as Aveva OSI PI Historian.</li> <li>• Root Cause Analysis and problem solving.</li> <li>• Broad knowledge of industrial control systems, communications, and IOT technologies.</li> <li>• Experience in programming, data management, database administration is desired.</li> <li>• Experience in project and program management practices.</li> <li>• Experience in procurement and contract management.</li> <li>• Understanding of cybersecurity standards and requirements in an Operational Technology environment.</li> <li>• Understanding of OHS law, obligations and regulations.</li> </ul> |

## 4. POST-EMPLOYMENT TRAINING, CERTIFICATES OR INNOCULATIONS

| Title                                                              | Method of Training<br>(eg. certificate, ticket, observation, on-the-job etc...) | Renewal Required<br>(Y/N/Unsure) | Renewal Frequency<br>(eg. Never, 1 year, 5 years etc...) |
|--------------------------------------------------------------------|---------------------------------------------------------------------------------|----------------------------------|----------------------------------------------------------|
| Experience as a specialist within the Operational Technology field | Moderate                                                                        |                                  |                                                          |
| Asset Management                                                   | Moderate                                                                        |                                  |                                                          |

# JOB PROFILE FORM



|                                                                                                                                                |                  |            |  |
|------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------|--|
| Bachelor's Degree in Mechatronics Engineering, Electrical Engineering, Computer Science, Information Technology (IT), or a related discipline. | Mandatory        | Degree     |  |
| SCADA & Industrial Control Systems (ICS)                                                                                                       | Mandatory        | On the job |  |
| Information and Communications Technology (ICT)                                                                                                | Mandatory        | On the job |  |
| Data Analytics                                                                                                                                 | Highly Desirable |            |  |
| Internet of Things (IoT) & LPWA Comms such as NB-IoT, LoRaWAN etc                                                                              | Mandatory        |            |  |
| Industrial Cyber Security                                                                                                                      | Highly Desirable |            |  |
| Systems Engineering                                                                                                                            | Highly Desirable |            |  |
| Meter Management Platform                                                                                                                      | Mandatory        |            |  |
| Digital Water Meter & Pressure sensors & IoT Devices                                                                                           | Mandatory        |            |  |
| Risk Management Awareness                                                                                                                      | Highly Desirable |            |  |
| Asset Management System                                                                                                                        | Highly Desirable |            |  |
| Dashboard reporting system (BI)                                                                                                                | Highly Desirable |            |  |
| Data Analytics                                                                                                                                 | Highly Desirable |            |  |
| Root cause analysis                                                                                                                            | Highly Desirable |            |  |

## 5. JOB SPECIFIC REQUIREMENTS

|                  |                                                                                                                                                                                                                                                                      |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Key requirements | Hybrid working - meeting stakeholders, leaders and impacted teams at the Mitcham office and at other sites as directed (e.g. treatment plants or other external sites) to build a strong understanding of the YVW "business" and to develop effective relationships. |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## 7. RELATED JOBS

|                                       |                                                                                                                               |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Role before<br>(Name, Team, Division) | Engineering roles particularly electrical, SCADA, IoT Device Coordinator, IoT device specialist or industrial control systems |
| Role after<br>(Name, Team, Division)  | SCADA Systems Specialist, OT Specialist, Architecture, Project Management, Head of Operational Technologies                   |