



Management system
for operational and maintenance reports



The TAGWORK system for Energy & Environment:

Olicom has always been active in the developing of traceability technologies, both hardware and software, and their application in the labour market.

In collaboration with different Italian Multi-utility holdings, it has created the specific platform Tagwork Energy&Environment.

The technology chosen for this is the NFC (Near Field Communication).



Born to:

Tagwork Environment focuses on operational processes, monitoring and maintaining workers on the field; facilities in the environmental sector (waste-to-energy plant, MBT, composting, cogeneration, water cycle...) need timely testing and continuous refinements for the maintenance of the maximum operational efficiency.



Makes it possible to:

A) Digitally collect data and reports while ensuring a correct and proper organization of the data, accessible at all times.

Replace hard copies with traced technologies, provide for quality certification processes.

B) Offer a simple tool that can support workers on the field in the detection of anomalies or critical issues.

Working on the field with the necessity of motion and the possibility of environmental problems requires hardware and software equipment specifically designed to assist workers.

C) Track efficiency and data, allowing the responsible person to oversee anomalies and issues in real time.

Speeding up the search for different data by using a digital system is crucial to optimise the work time and achieve better quality of the work

Hardware:

The system uses identifying TAGs specifically created for both checkpoints and PPE and equipment's management.

The staff detect and report by the use of Smartphones and industrial Tablets IP68 that can read the TAGs.

Software:

The system is based on an App that can work both with or without internet connection and a Management and Consultation Console with different access rights.



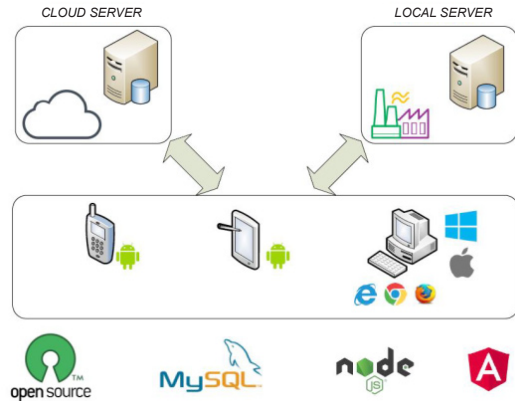
Structure:

The Tagwork platform consists of a basic system and optional modules.

This modular design allows future expansion for new features without having to modify what is already there and thus preserving the software's worth through time (high ROI and low TCO).

The software can be managed by Cloud service or by local server.

It uses tested standard of the "Open Source" world. It's easily integrated with managing and maintenance programs and customizable for specific needs.



How it works:

Operational and maintenance workers use Smartphones or Tablets with NFC technology to read the TAGs (placed in the checkpoints) and access to the programmed activities.

They can integrate the worksheets with:

- Voice memos
- Written memos
- Pictures

Moreover, they can see operating instructions for single activities' procedures:

- Video
- Pdf

Data ispezione	Codice TAG	Descrizione Tag	Attività	Frequenza	Operatore	Esito	Allegati
16/01/2018 07:45:56	BIO-01-001	SALA CONTROLLO	Rilevazione ORE TOTALI TRITURATORE BANO T1.0	giornaliera	WALTER POMPILO	13714	
16/01/2018 07:46:11	BIO-01-001	SALA CONTROLLO	Verifica serale eventuali INTASAMENTI alle bocche di carico/scarico	giornaliera	WALTER POMPILO		
16/01/2018 07:46:16	BIO-01-001	SALA CONTROLLO	Effettuare pulizia serale MACCHINE e VENTOLE motori della linea CSS	giornaliera	WALTER POMPILO		
16/01/2018 07:46:19	BIO-01-001	SALA CONTROLLO	Verifica corretto funzionamento ventilatori (QUADRO VNI)	giornaliera	WALTER POMPILO		
16/01/2018 07:57:53	BIO-10-005	TRITURATORE PRIMARIO	Pulizia delle vie di corsa del carroportone tritatore METZO	giornaliera	WALTER POMPILO		
16/01/2018 07:57:56	BIO-10-005	TRITURATORE PRIMARIO	Livello olio centralina idraulica METZO	giornaliera	WALTER POMPILO		
16/01/2018 07:57:59	BIO-10-005	TRITURATORE PRIMARIO	Livello grasso del serbatoio pompa tritatore	giornaliera	WALTER POMPILO		

Note	TAG	Allegati	Segnalato il	Segnalato da
	BIO-70-025	0	15/01/2018 10:35:15	WALTER POMPILO
	BIO-70-025	0	15/01/2018 10:34:27	WALTER POMPILO
	PC-70-11	0	15/01/2018 10:31:23	WALTER POMPILO
	BIO-70-025	0	15/01/2018 10:31:02	WALTER POMPILO



Additional modules:

In time, new features have been added to the application, thanks to the field experience:

A. Operational instructions management

Provides the creation of PDF files and the possibility to link them to the worksheets for the employees to see on their Smartphones and Tablets.

Example: specific instructions for fire-prevention training; instructions for components replacement.

B. Workers' activity configuration management

Makes it possible to create and send worksheets to a single employee who has to carry out specific tasks, without sending them to all of the workers.

Example: giving external workers limited access to specific activities.

C. Device management (Smartphones and Tablets)

Makes it possible to link a device to a worker and to export all the data from the worksheets made on the field.

Example: instant monitoring of who fixes a problem with a specific device.

D. PPE management (Personal Protective Equipment)

Provides the management and registration of the utilisation of PPE during operations in the facility.

Example: it can make it mandatory to register some PPE in order to access the worksheets on the devices.

E. Mail Alert

Enables workers on the field to submit their worksheets (and the associated memos and pictures) to a precompiled address book.

Example: signalling the immediate need of on-call personnel or external maintenance workers.



F. "Man Down" Application management

Enables the devices in use to manage emergency alarms, send alerts via emails, texts or phone calls.

With a dedicated localisation system, a GPS alerts can be activated.

This module is managed by the tagwork's console. Example: set up a call to one or more preset numbers in case of emergency.

G. "AR Manual" Application management (fruition of technical and operational contents in augmented reality) – in progress

Enables workers on the field to benefit from active multimedia contents, videos and patterned images.

Example: operational instructions for small maintenance or restoration activities.

