

Real-time construction monitoring with RFID tags



To start with let's define what is an RFID tag. A Radio Frequency Identification Tag (or chip) is an electronic tag which sends (some models even receive and process) data to a RFID reader through radio waves. Before the construction starts Bitrant platform analyzes the project BIM Model generating an id for RFID tags and points (construction elements) where they must be implemented.



Also, Bitrent platform constructors will implement barcodes as to mark divers building units. Such a solution digitize the construction elements and enables to follow and check the construction process.

How it works:

When the construction is started, manufacturers implement RFID tags into construction elements and activate them.

As, we use distributed ledger to introduce roles in Bitrent platform (see Smart contracts in the Bitrent). After deployment, verified Bitrent users must scan tags and make a record in the blockchain.

Then, to confirm that the element is really implemented, other participants of the project how can make entries into the project node will confirm the record by scanning it.

So, each tag/barcode is entered into the digital progress statement and has 4 statuses:

- In the system
- Attached
- Implemented
- Approved

Bitrent platform smart contracts triggered when tags/barcodes statuses are changed. All participants (investors, developers, constructors) are notified and can see changes in the project Roadmap sections.

Our Telegram community: <https://t.me/bitrentio>