System Update

Software Update for Embedded Linux IoT Gateway

Description:

This demo is presenting an **update process** of Linux based system (kernel and root file system). The backend is based on AWS services such as **AWS IoT**, **AWS Lambda** or **AWS S3** for images storage. It allows us to remotely trigger the update process from the **REST API** level.

The system used in the presentation is a custom distribution developed using the **Yocto Project** for Vitro Crystal platform. **SWUpdate** is used to handle the system update process.
We are using dual copy image-based updates. The system is working from one (active) partition, while the update is being flashed to the inactive one. Thanks to this, the reliability of the system is greatly improved. We **always** end up with a **working system**, even in a case when the update process gets interrupted (network/power loss).

There is an additional partition for the purpose of persistent configuration data, which should not undergo the update process.

Elements:

- Vitro Crystal board

vitro

Visit vitro.io for more details.