

Is CySCoS capable of over-the-air-updates?

“Over-the-air-updates” is a method to replace systems with successive software versions. Its partially unwanted attributes are:

- It uses the internet or rather rarely, radio connections.
- Time and amount of exchanged data are determined by the software provider.
- Arrive at the users’ at unpredictable moments.
- Cause momentarily limitation in system usage.
- In larger tams or projects, these updates lead to differing software versions installed at workstations, or used by workers .

The headline's question has to be answered in two steps:

1. Yes, it is possible to load new software over the air.
2. No, it is not possible to immediately execute new software updates. To do this, two activities are necessary, both enhancing security:
 - The received software has to be stored to an external data carrier as data.
 - This externally stored data has to be loaded as operational software via a different interface.

This procedure contributes to security in two ways:

- The user determines the time of effective update, e.g. in accordance with projects.
- The user has the opportunity to check the received software for correctness, completeness, security, or unspecified functionality.

This opportunity is not available at all with conventional over-the-air-updates!