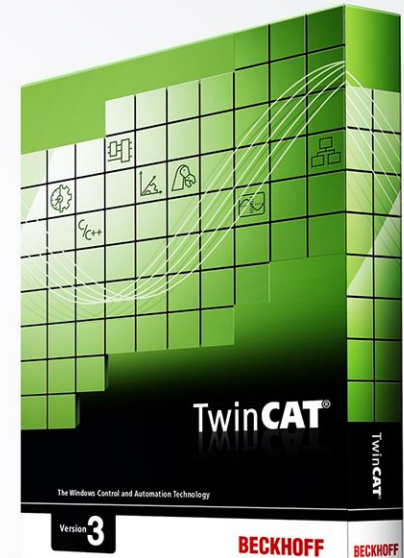
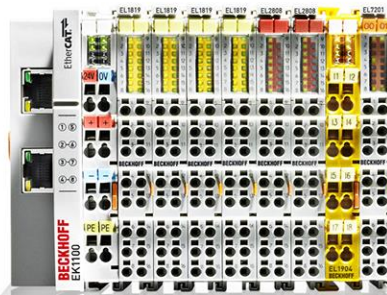


TwinCAT HMI Standalone Server

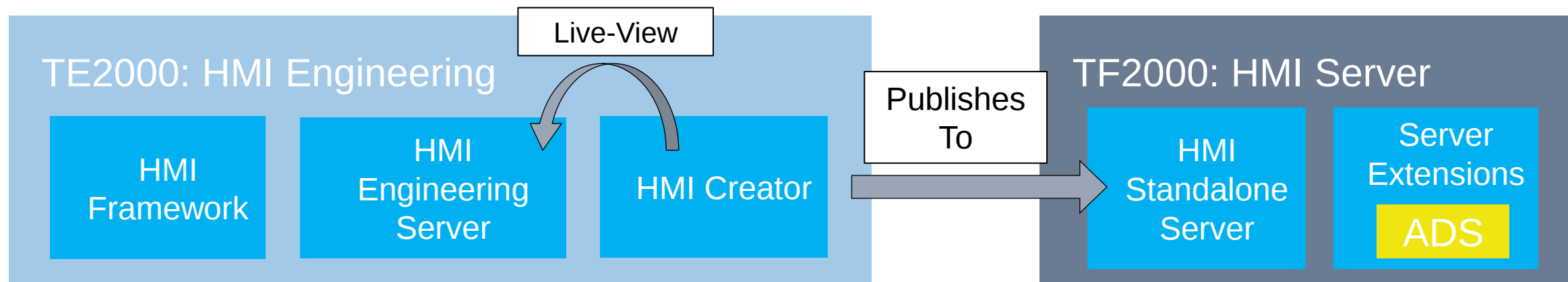
BECKHOFF



- **Introduction**
- Deployment
- Server Configuration



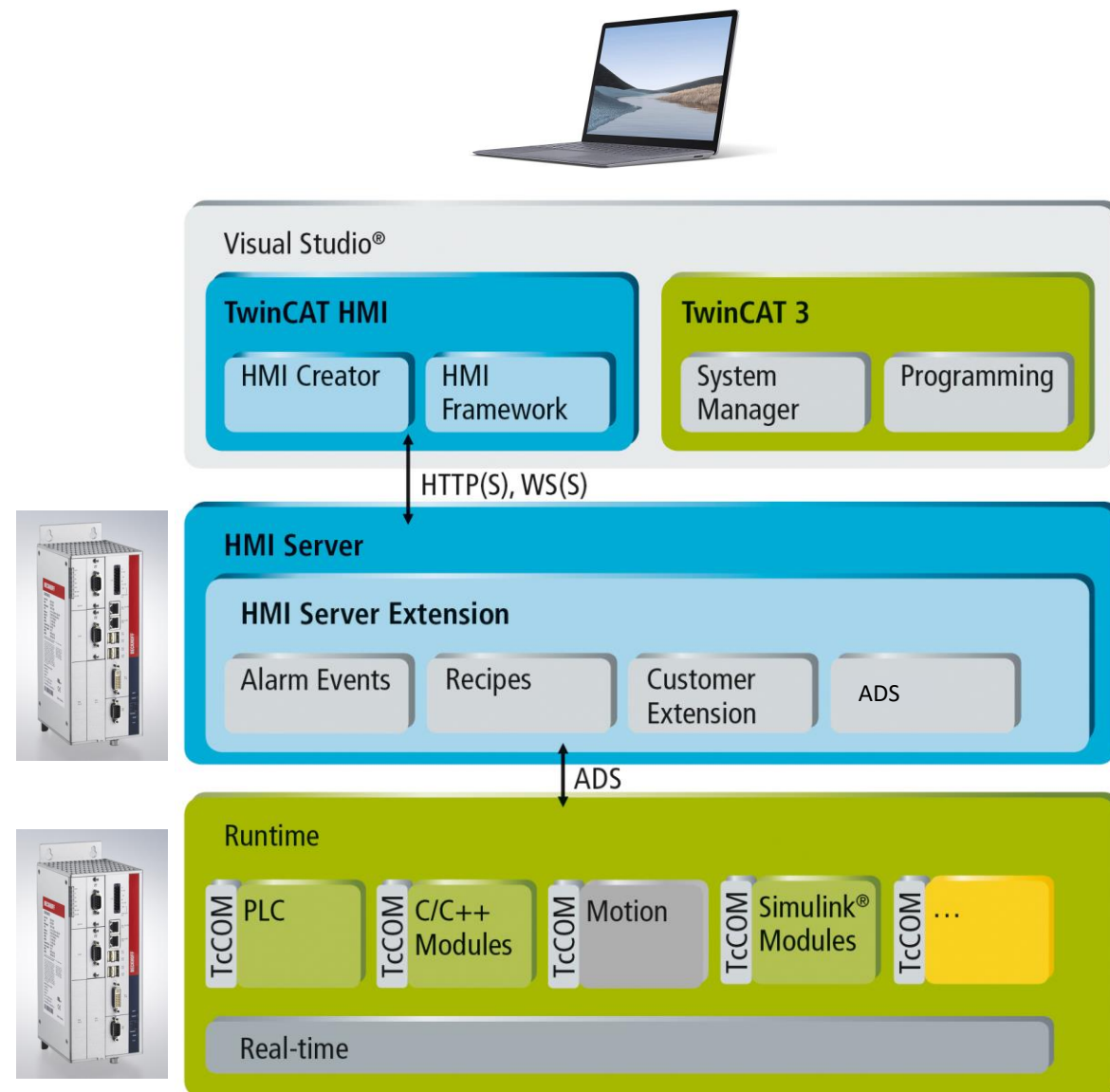
- **HMI Creator** used to develop HMI screen
- **HMI Server** stores, produces created content for HMI clients.
- Available HMI servers:
 - **Engineering Server**
 - Installs with TE2000; starts, stops with active TwinCAT HMI Project
 - Consumed through live-view, browser navigation
 - **Standalone Server**
 - Installs with TF2000



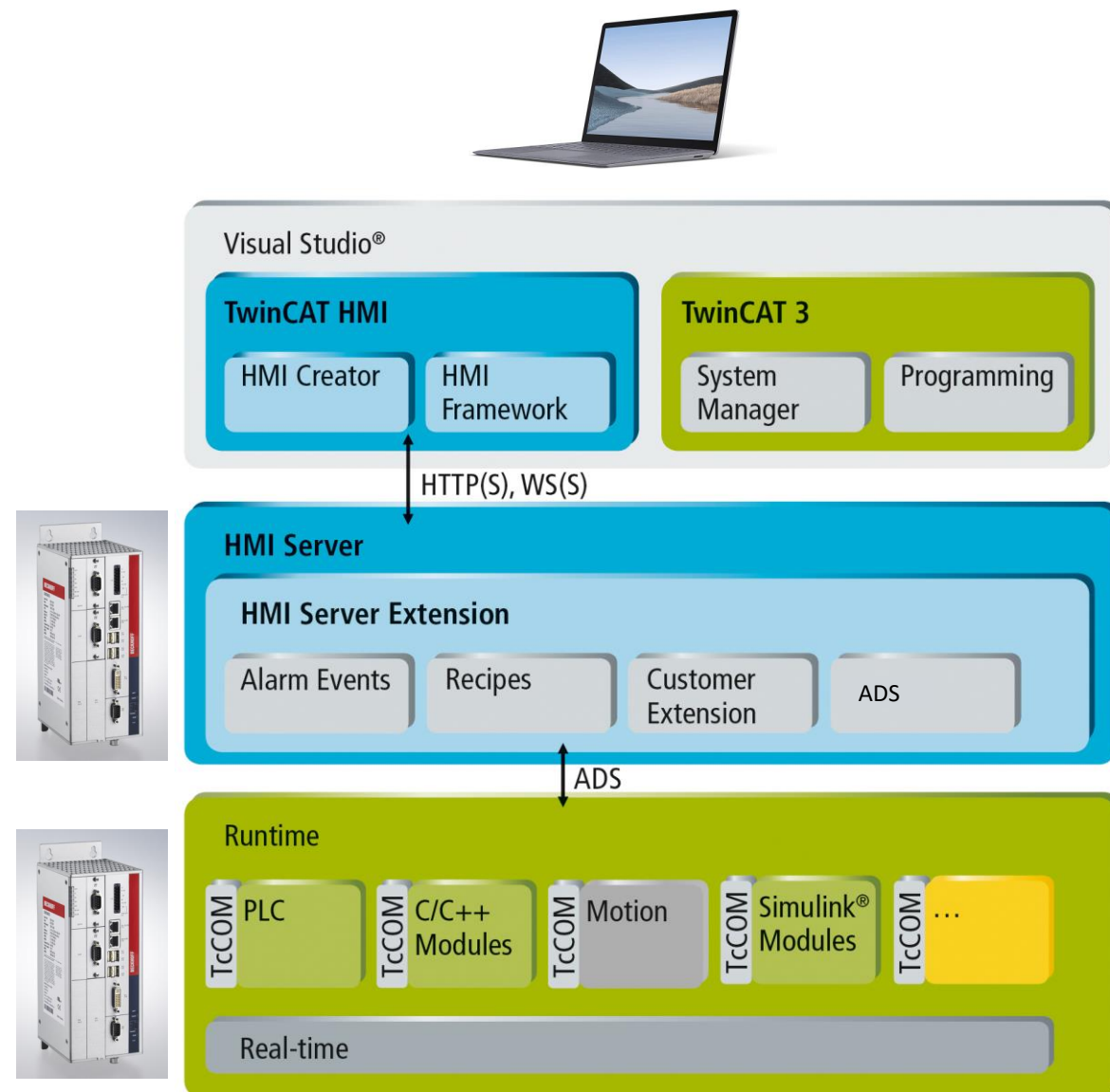
- Introduction
- **Deployment**
 - **Architecture**
 - Scenarios
 - Walkthrough
- Server Configuration



- **Main software components** are:
 - Engineering
 - Server (standalone)
 - Runtime
- Components may be on the same PC or separate PCs



- When components are separate the following may be needed:
 - **ADS Routes** for ads communication
 - **Proper firewall settings** to enable ethernet communication, discovery



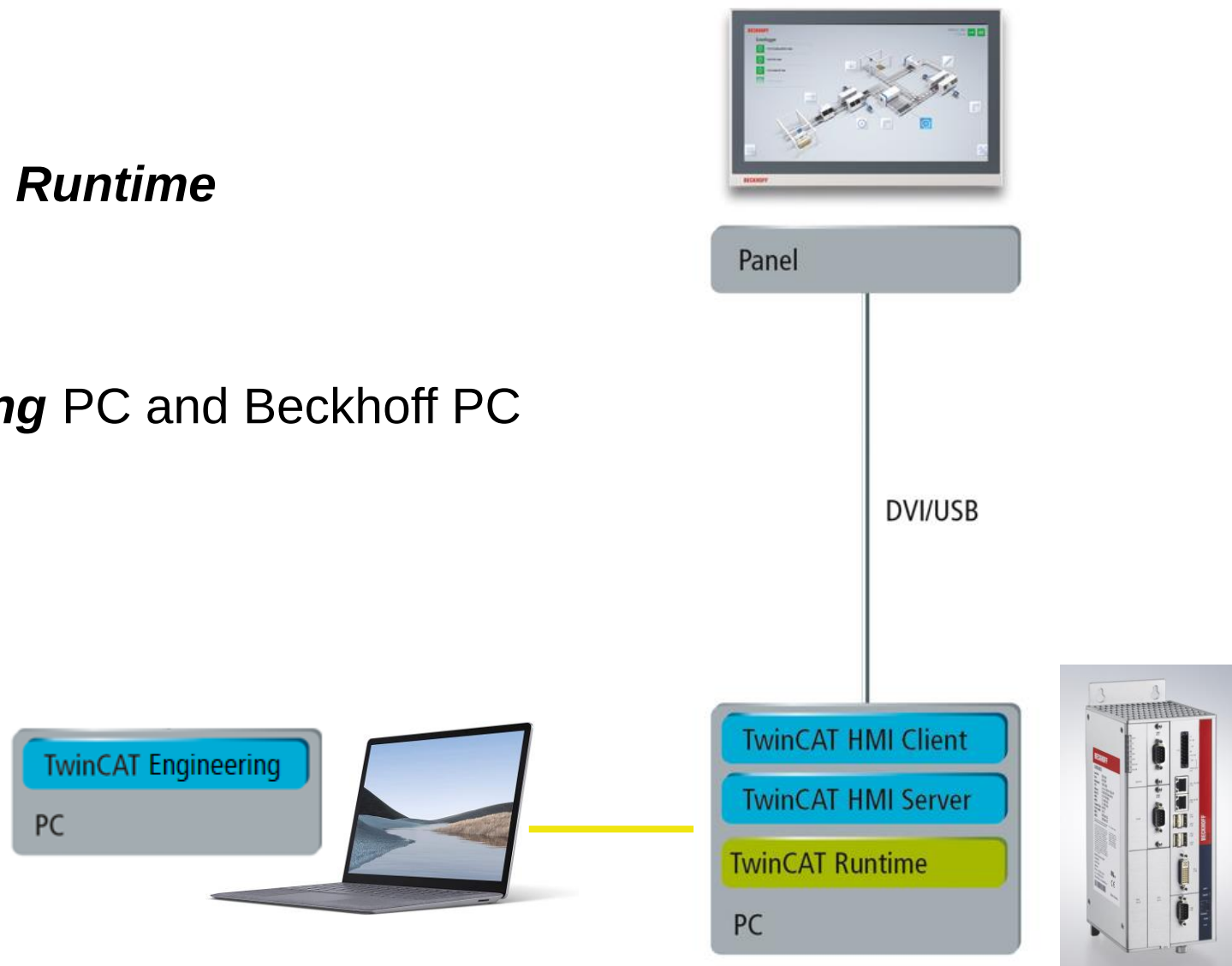
- Introduction
- **Deployment**
 - Architecture
 - **Scenarios**
 - Walkthrough
- Server Configuration



Local Client Scenario Overview

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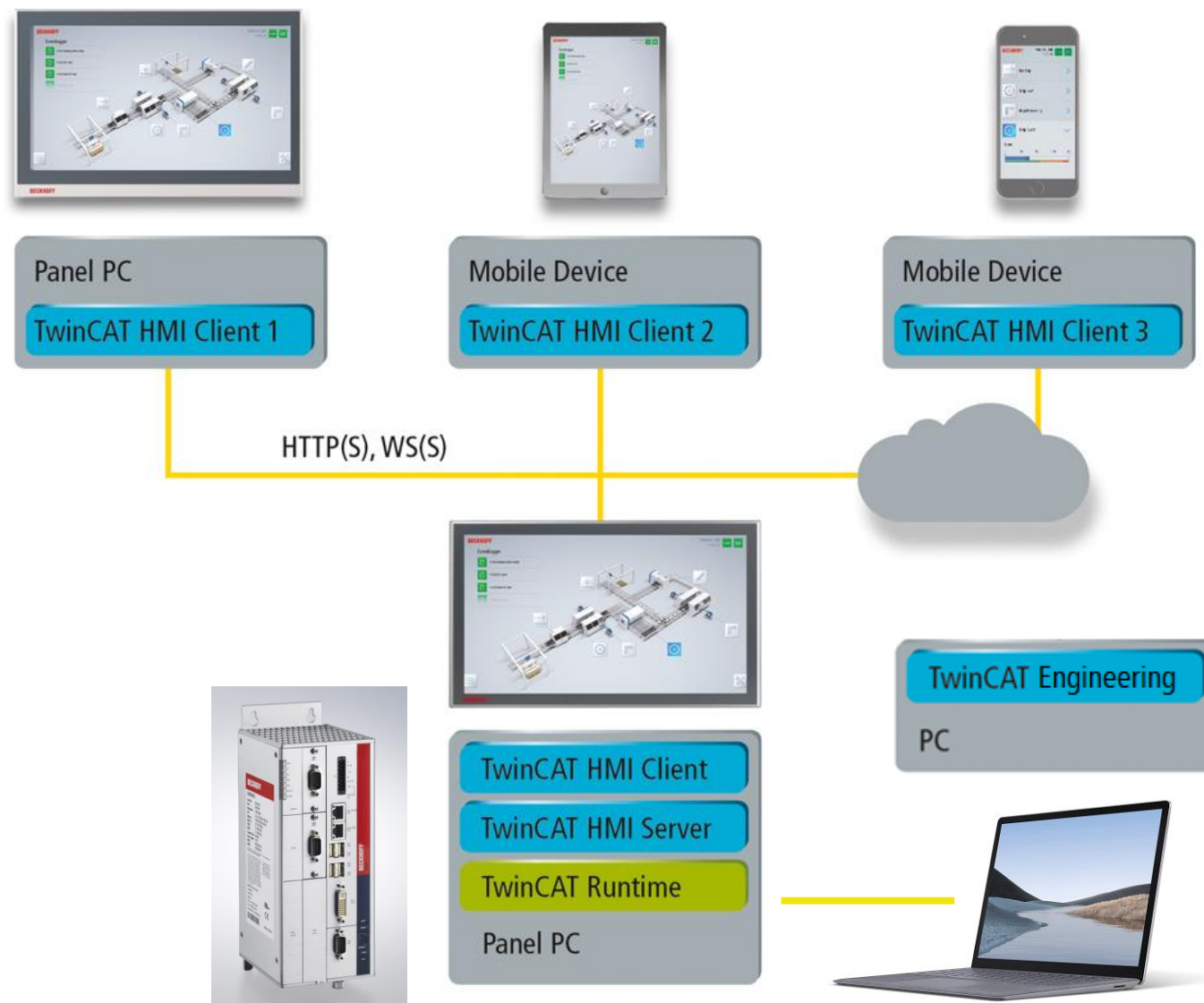
- Scenario has:
 - Laptop for **Engineering**
 - Beckhoff PC for **HMI Server** and **Runtime**
 - Local **client**
- Scenario Requires:
 - **ADS Route** between **Engineering** PC and Beckhoff PC



Remote Client Scenario Overview

BECKHOFF

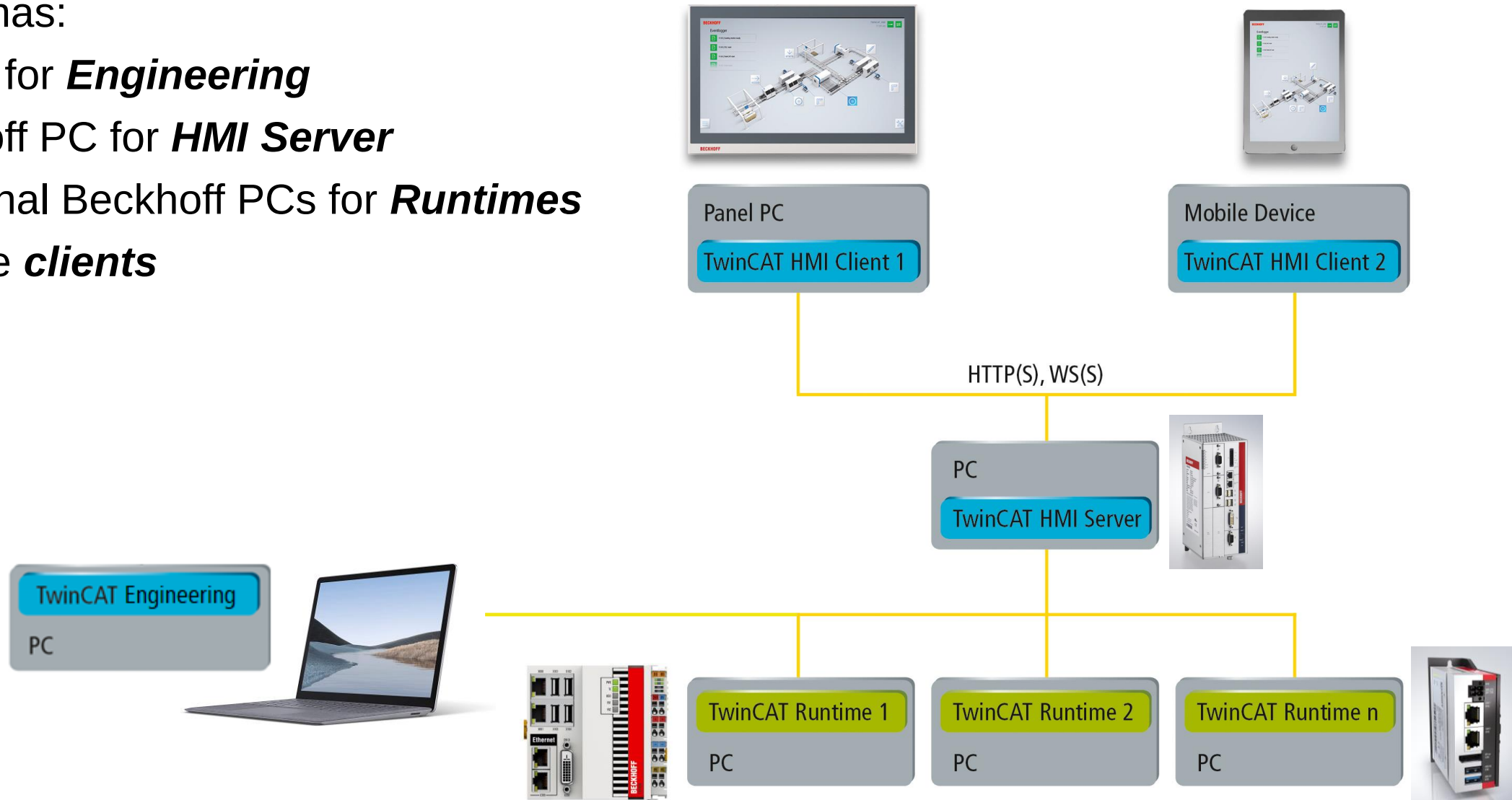
- Scenario has:
 - Laptop for **Engineering**
 - Main Beckhoff PC for **HMI Server** and **Runtime**
 - Local and remote **clients**
- Scenario Requires:
 - **ADS Route** from **Engineering** PC to Beckhoff PC



Distributed Deployment Scenario Overview

BECKHOFF

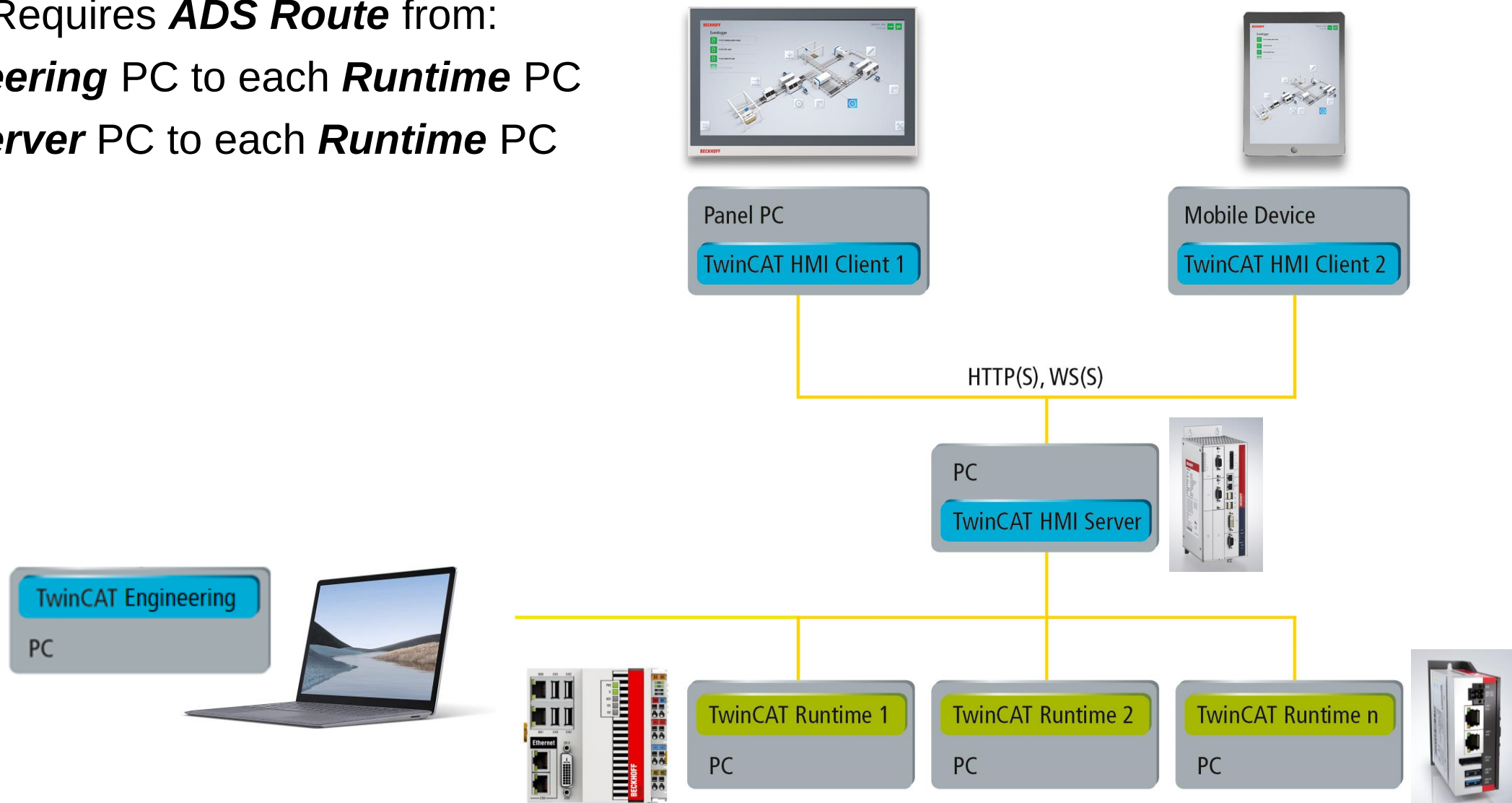
- Scenario has:
 - Laptop for **Engineering**
 - Beckhoff PC for **HMI Server**
 - Additional Beckhoff PCs for **Runtimes**
 - Remote **clients**



Distributed Deployment Scenario Overview

BECKHOFF

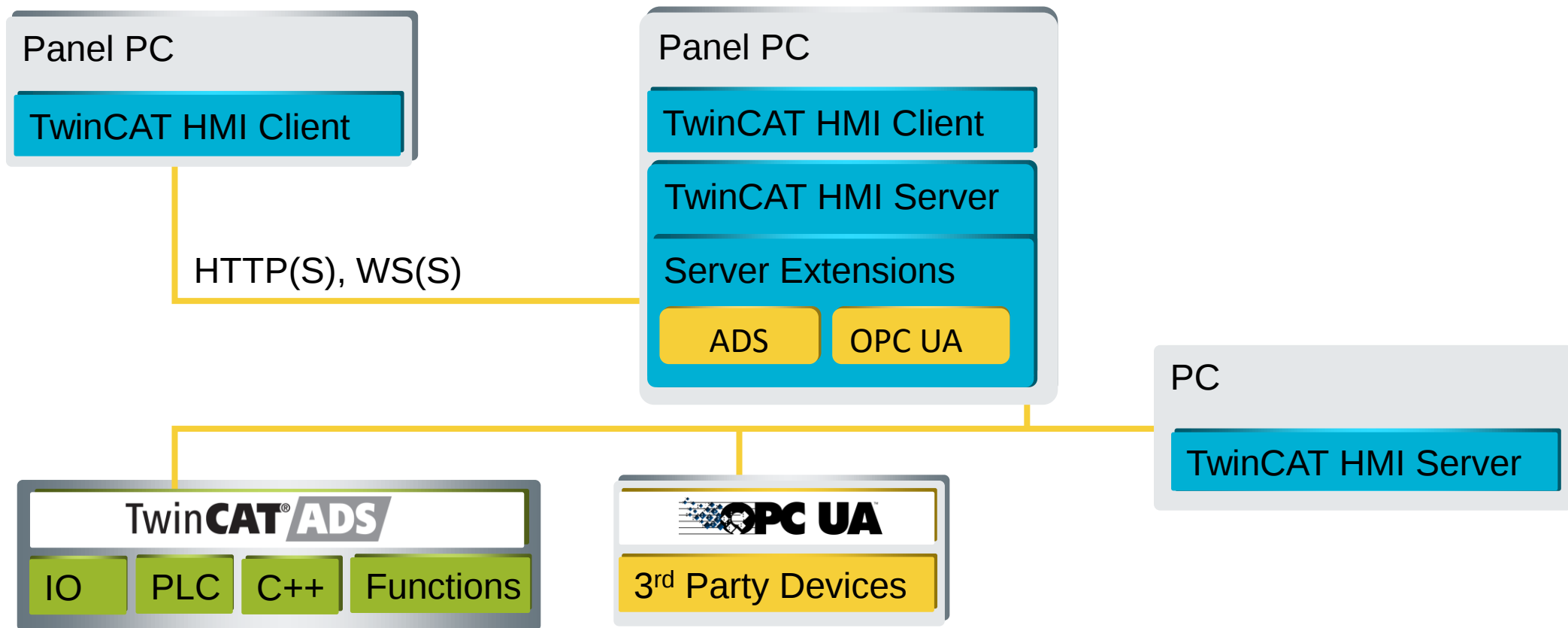
- Scenario Requires **ADS Route** from:
 - Engineering** PC to each **Runtime** PC
 - HMI Server** PC to each **Runtime** PC



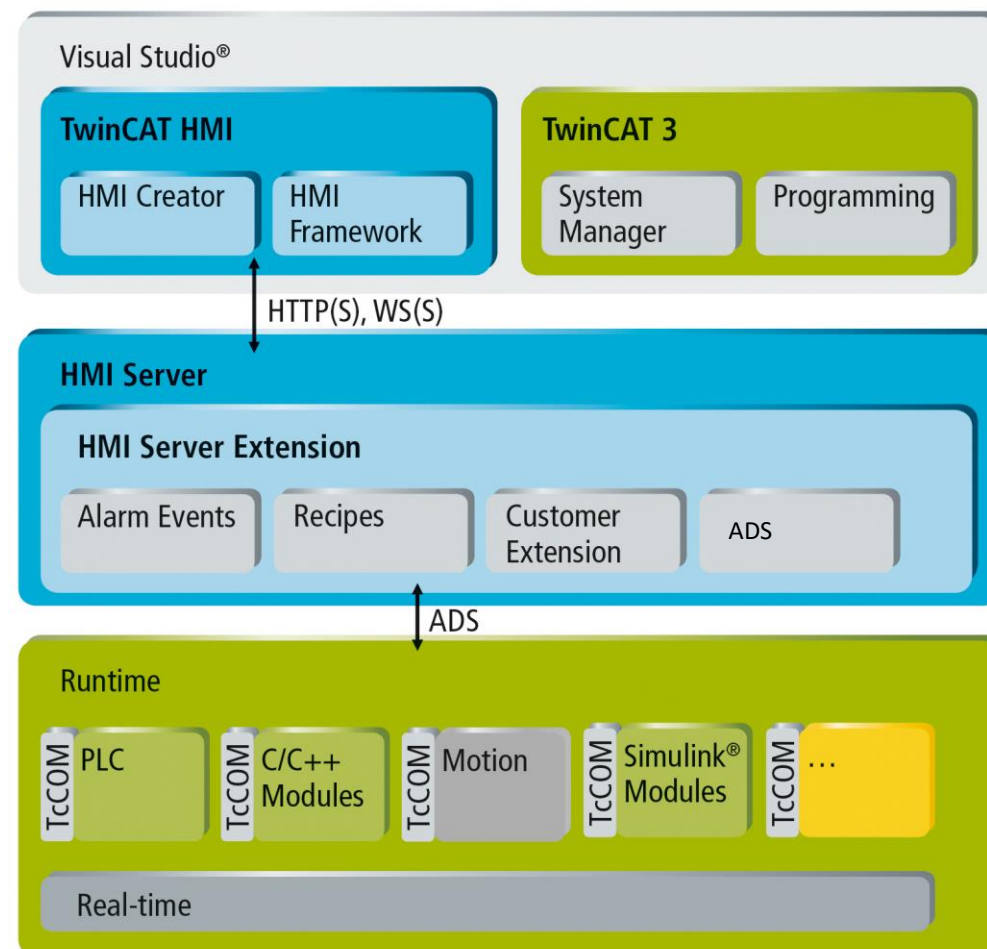
Additional Scenarios Possible

BECKHOFF

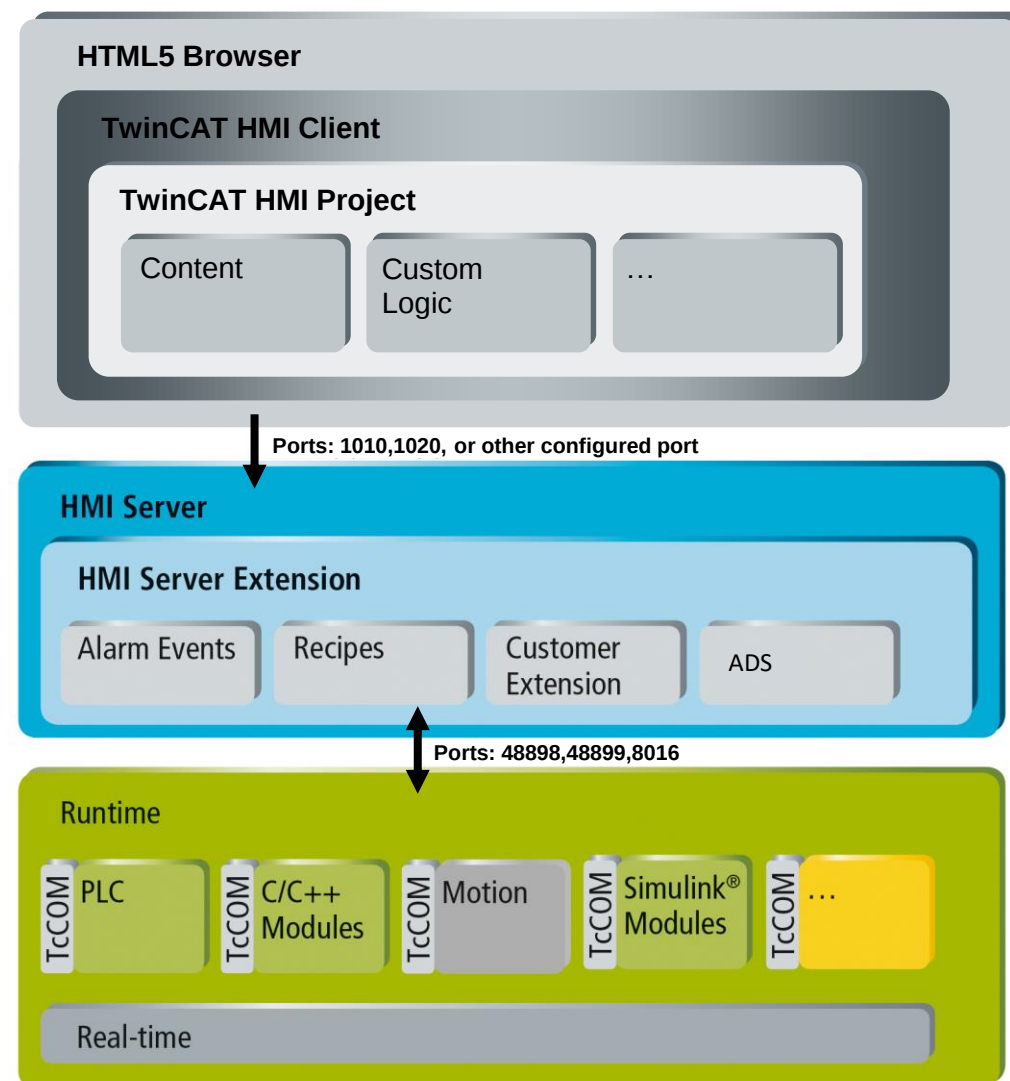
- Scenarios possible for HMI Server communication with:
 - OPC UA Third Party Device
 - Other TwinCAT HMI Server



- **ADS Route** needed when ADS traffic occurs between PCs
 - **Engineering** to **Runtime**
 - **Runtime** to **Runtime**
 - **HMI Server** to **Runtime**



- **Firewall** changes may be necessary to allow **ADS Route** communication
 - **48898** ADS TCP
 - **48899** ADS UDP
 - **8016** Secure ADS TCP
- **Firewall** changes needed to allow communication with HMI Server
 - Engineering to Server
 - Client to Server
 - **1010** or **1020** by default
 - Port configurable

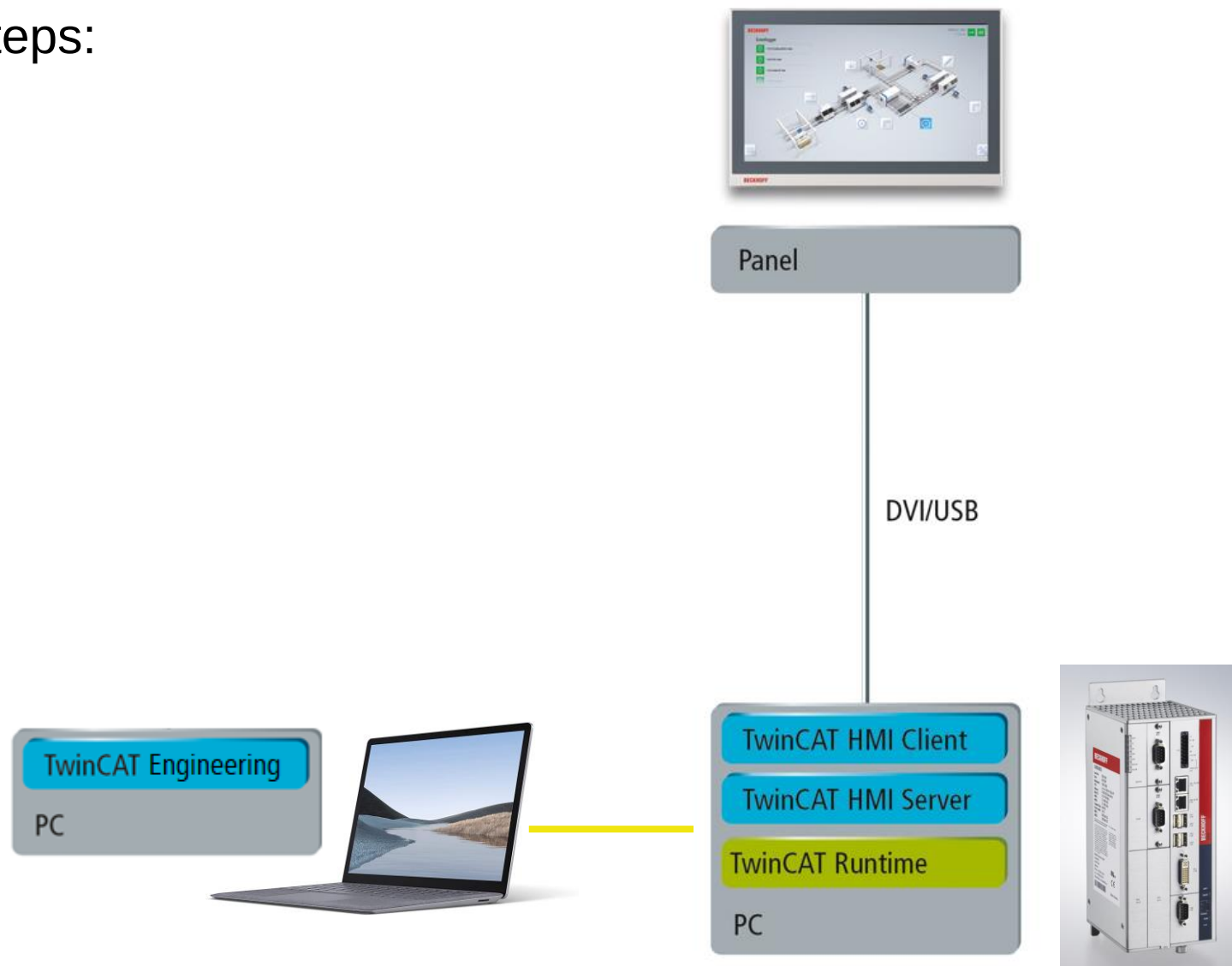


- Introduction
- **Deployment**
 - Architecture
 - Scenarios
 - **Walkthrough**
- Server Configuration



■ Standalone Server Configuration Steps:

- Server installation
- Establish routes
- Firewall settings
- Server license activation
- Server initialization
- Publish configuration
- Publish profile
- Publish project



- Introduction
- Deployment
- **Server Configuration**

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