A overview of QuickHMI and using JDBC(Java API) to connect it to Database

Siemens PLC

Bosch PLC

Beckhoff PLC

ABB PLC

Omron PLC

Mitsubishi PLC

Any PLC with OPC-UA server enabled

Different drivers provided by QuickHMI

Single Board Computer(e.g. RPi)
or
Cheap industrial PC

QuickHMI runtime

Log file(*.txt)

SQLite

IoT Cloud

AWS

Azure

IBM Watson

proprietorial drivers/scripts
made in Java/python/C#
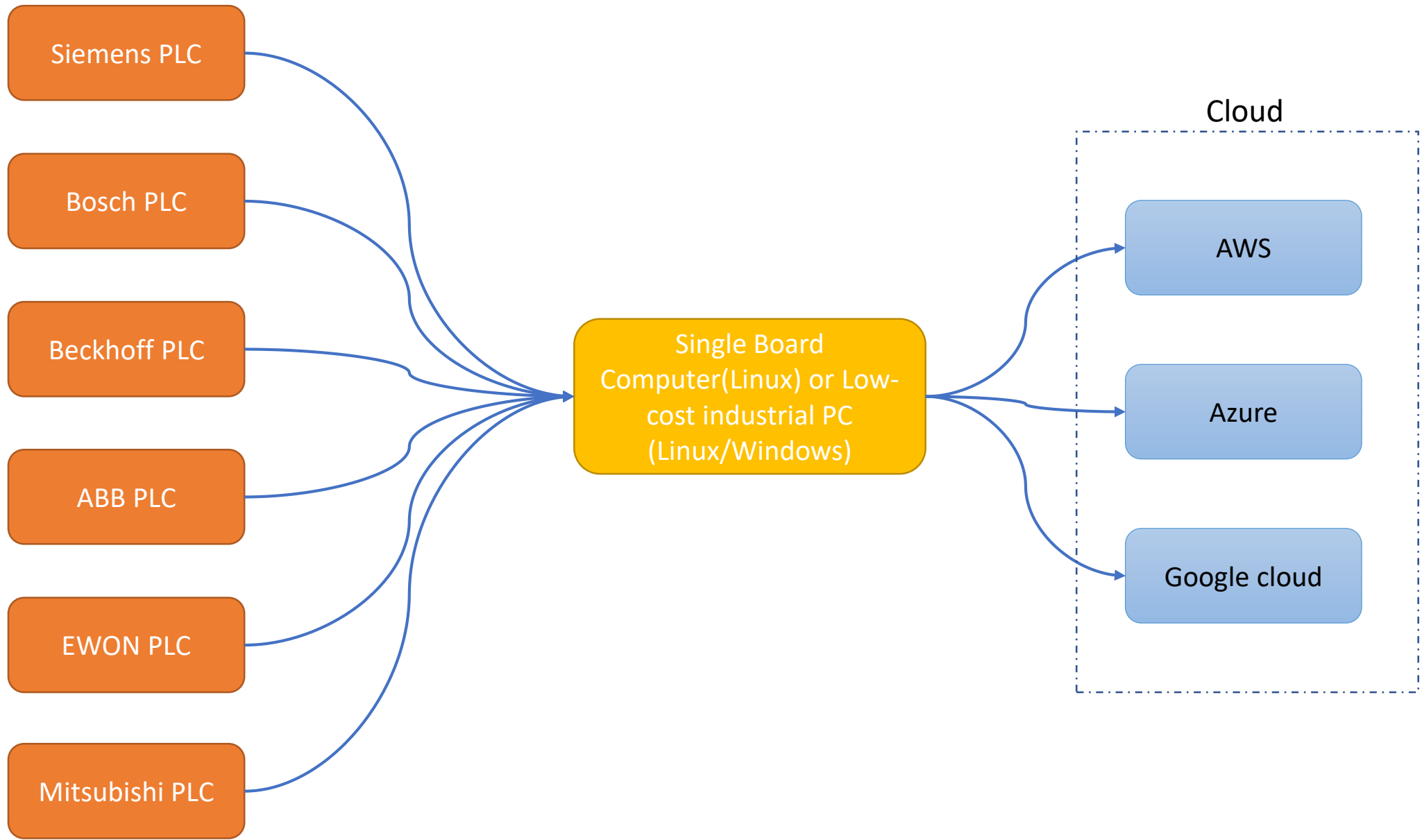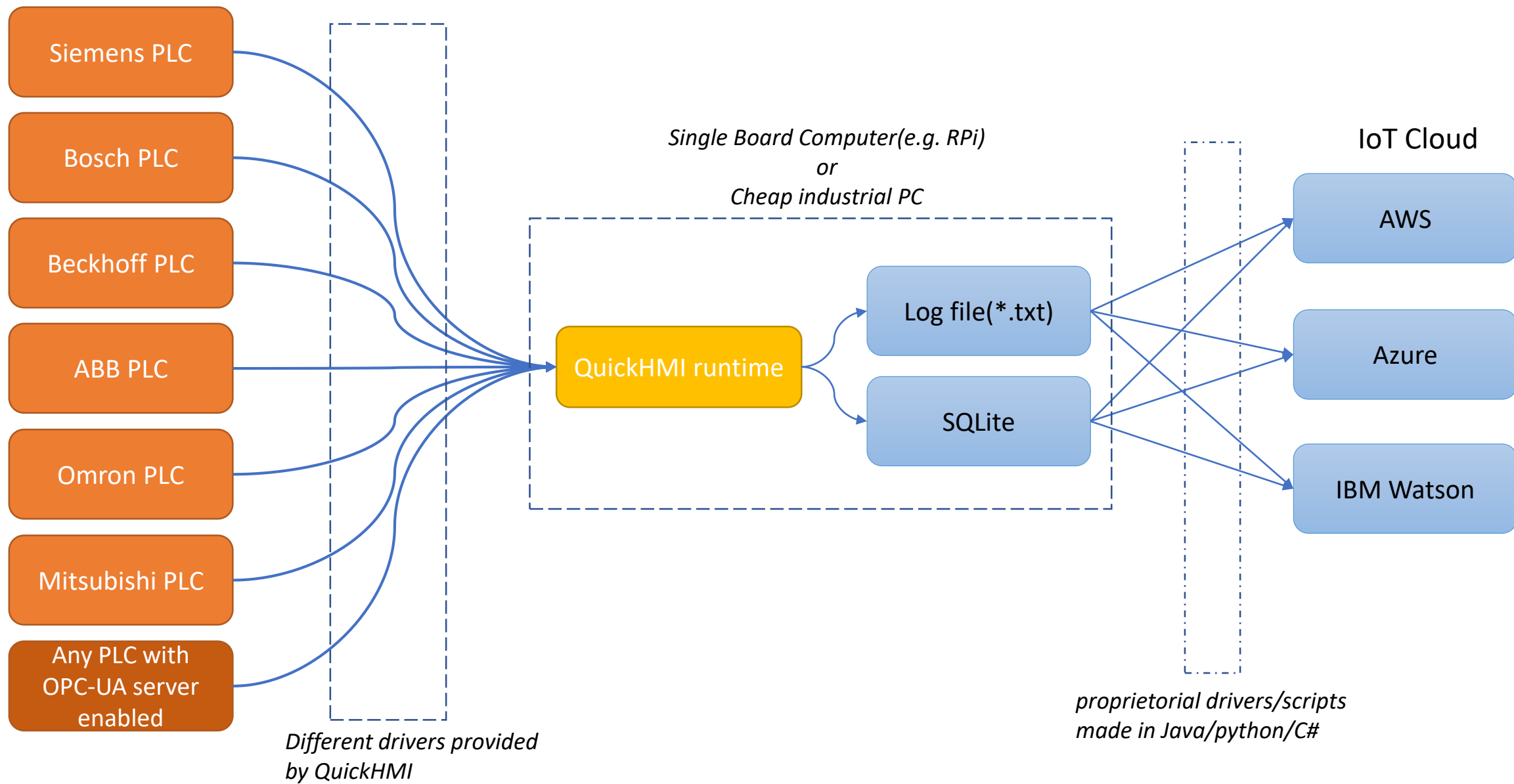
Tables needed in Database to populate data from QuickHMI:

```
CREATE TABLE QHMI_DATAIMAGE (
        TS TIMESTAMP,
        DATASOURCE VARCHAR,
        DATATYPE VARCHAR,
        VARNAME VARCHAR,
        VALUE VARCHAR,
        QUALITY VARCHAR
);
```

For the datalog:

```
CREATE TABLE QHMI_DATALOG (
        ID INTEGER PRIMARY KEY,
        TS TIMESTAMP,
        DATASOURCE VARCHAR,
        DATATYPE VARCHAR,
        VARNAME VARCHAR,
        VALUE VARCHAR,
        QUALITY VARCHAR,
        MESSAGE VARCHAR (1024)
);
```

Typically there are some established companies in Industrial Automation field providing drivers to connect to different kinds of PLC's and integrating different communication protocals in one software. The main issue with them is the cost, its very high and therefore not suitable for IoT applications. Some key names in this field:

Ignition
Wonderware
Kepware
Matrikon

Each of these one charge seperately for
*Runtime license (for each device)
*Every seperate driver
*Number of tags etc.

We need to find a solution where we can implement a Gateway (Single board computer or Low-cost industrial PC). Some key requirements:

Must not ask for runtime license for each device
Must have API available in Java or .NET for further development
Secure
Low cost

Based on these requirement some potentials solutions are proposed here.

1. QuickHMI
2. Apache
3. Woopsa (?)
4. Unserver
5. Custom made software drivers to read tags from different brand PLC's. (*Not a practical solution.*)

QuickHMI

What is it?

QuickHMI
GERMANY

What´s QuickHMI?

QuickHMI is a modern and reliable software for plant and machine visualization, as well as control instrument of automated industrial plants. **QuickHMI** is based on modern web technologies such as **HTML5** and **JavaScript** and is well prepared for the requirements of **Industry 4.0** If desired, provision of the **HMI as a cloud application** is also easily possible. With the scalable **QuickHMI** create small projects with a **Raspberry Pi** up to a large visualization of industrial landscapes.

General

- **Publisher:**   Indi.Systems GmbH (Copyright ©)
- **System:**   HTML5 application with client/server architecture
- **Current version:**   7 (Eagle)
- **Environment:**   Runnable on 32 bit and 64 bit systems

License model without runtime licenses

Licensing per Workstation > **NO RUNNING LICENSES** necessary.

Create your **QuickHMI** projects in any number and size. With the purchase of the **QuickHMI** system, you do not have to worry about further licensing the runtime environment.

QuickHMI

At this moment communication possible with which PLC's ?

Compatibility of PLC and other data sources

- Siemens S7 controllers (200, 300, 400, 1200, 1500 series and SoftSPS WinAC RTX), Logo! 0BA7 and Logo! 0BA8 and CPUs of other manufacturers (eg VIPA 100V / 200V / 300V / 300S)
- OPC UA or OPC Classic DA interface *1)
- TWINCAT2 from version 2.1 and TWINCAT3 is supported *1)
- MODBUS support, various devices can be connected via MODBUS TCP, RTU, RTU over TCP or ASCCI
- Allen-Bradley "Control Logix" or "Compact Logix" PLCs via the Ethernet/IP protocol
- MQTT-Protocol
- Various SQL databases using JDBC
- Files from the file system with the file system data source

*1) OPC Classic DA and TWINCAT data sources are not executable under Linux and Mac-OS. If these are to be executable under Linux and Mac OS, the use of OPC UA data sources is recommended.

QuickHMI

Industrial PC? Or Single Board Computer(RPi)?

QuickHMI

QUICKHMI SOFTWARE PACKAGE (VERSION 7.9.1.0 EAGLE)
includes:
QuickHMI Editor
QuickHMI Viewer (Win,Linux,MacOS)
QuickHMI Android App apk
QuickHMI Runtime Manager
Documentation package

Attention: Click on button 'Request trial' to get an E-Mail with a 14 Days trial license, once.
If you need additional trial licenses, please contact our support.

Request trial   Download

QUICKHMI UPDATE PACKAGE (VERSION 7.9.1.0 EAGLE)
(Requires installation of version 7 Eagle)
includes:
Updater Editor
Updater Viewer (Win)
QuickHMI Android Player apk
QuickHMI Runtime Manager
Viewer Setups Linux and MAC

Download

QUICKHMI RASPBIAN IMAGE
with installed
QuickHMI Runtime Manager (Eagle)
Zip file approximately 2 GB (download)
Image approximately 8 GB

Download

QuickHMI

License price
!Note! – No runtime license needed, once bought can be used to develop/deploy any number of projects

QuickHMI for commercial purpose

QUICKHMI PROFESSIONAL SINGLE LICENSE

Use the QuickHMI Editor to create and maintain your QHMI projects.
license for one PC Workstation
No runtime licenses necessary

€ 795,00 excl. taxes
Info plus 19% VAT 151,05 €
€ 946,05 incl. taxes

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