



# The PROFIBUS Group

20<sup>th</sup> Anniversary Celebration Conference

## PROFIBUS Device Configuration

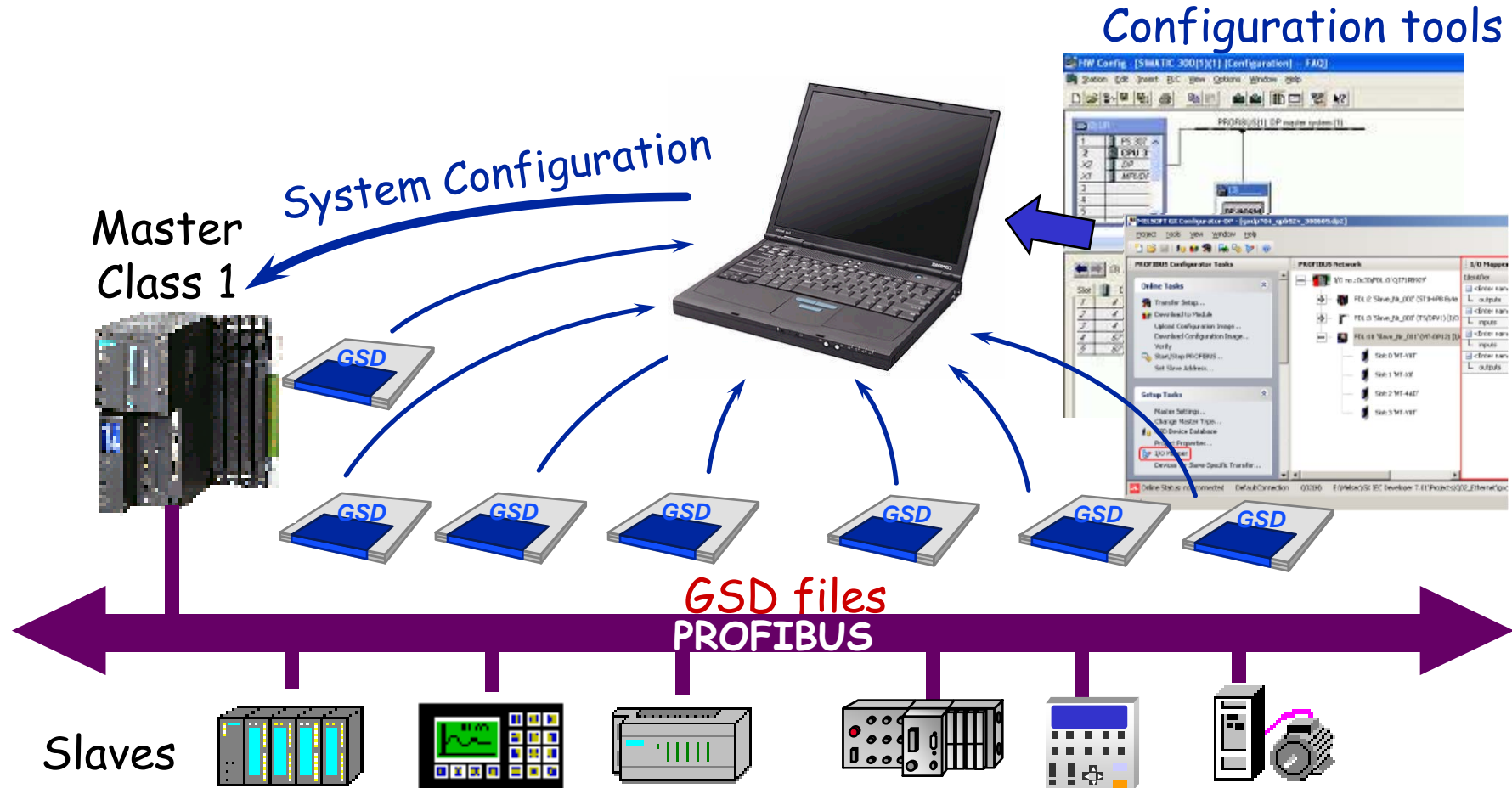
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- ⇒ Network configuration is the procedure of setting up the Class-1 master to communicate with its allocated slave devices.
- ⇒ Configuration is carried out with software tools that are specific to the master that is being used.
  - ✓ Siemens controllers - Step-7 Hardware Manager
  - ✓ Mitsubishi controllers - GX Configurator, etc
- ⇒ All PROFIBUS device suppliers provide standard "General Station Description" or *GSD files*.
- ⇒ GSD files can be read by the configuration tool to provide detailed information on the devices being used on the network.



- ⇒ GSD files simplify the integration of devices from different vendors.
- ⇒ Every PROFIBUS device is given a unique *identification number* which identifies the type of device and provides a simple check that the configuration is correct.
- ⇒ The ID number is just a 4-digit hexadecimal code.

E.g. ID = 806A - Siemens ET200S slave

- ⇒ The GSD file is specific to a particular ID number. So if we know the device ID number we can easily identify the GSD file.

## Our Two networks

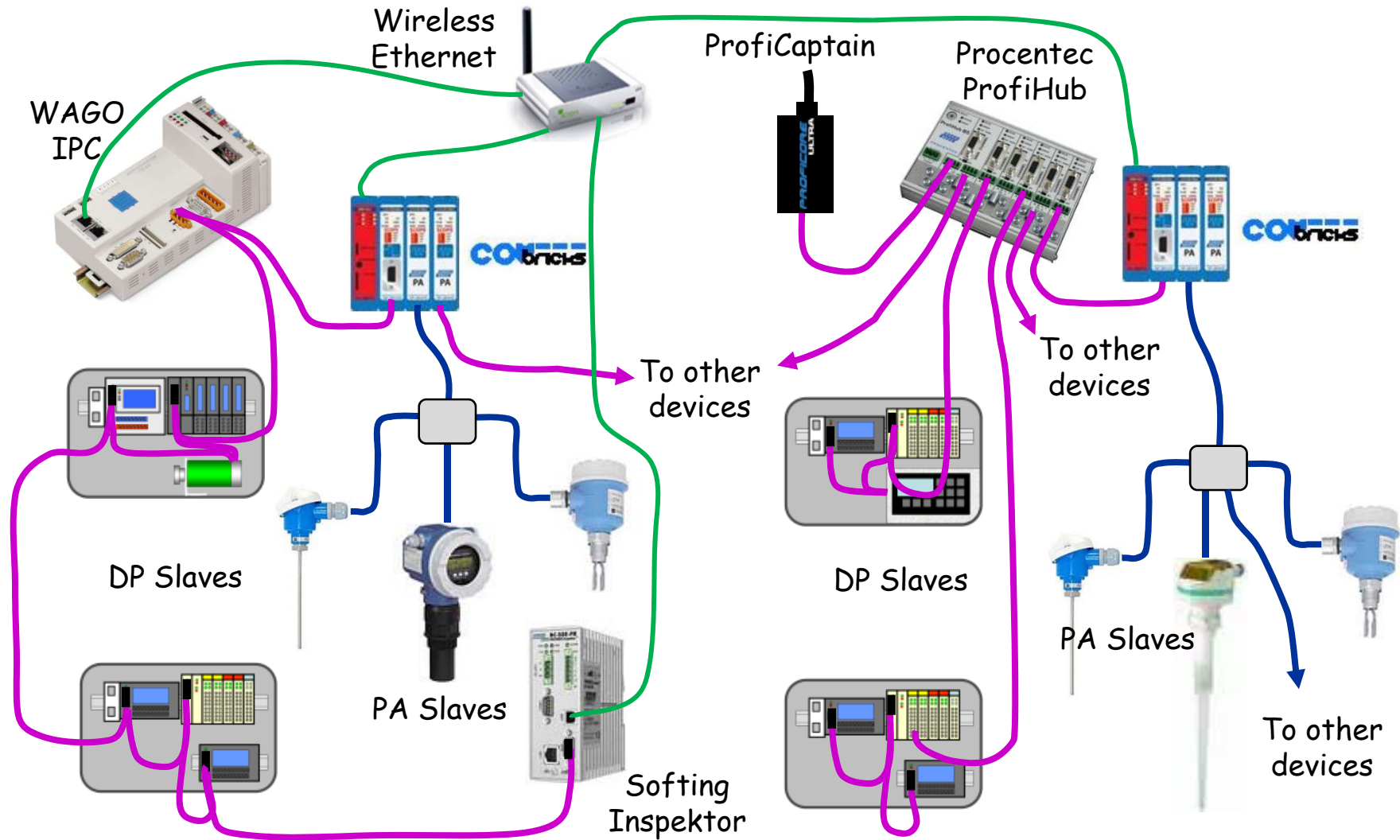
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1. A WAGO Industrial PC with a Class-1 master controlling several DP slaves in VTC Racks 1 & 2. This network also incorporates a Procentec COMbricks device with a transparent PA coupler module controlling several PA slaves.
2. A second network consists of several DP slaves in VTC Racks 3 & 4, A COMbricks unit with PA coupler controlling several PA slaves. This network is controlled by ProfiCaptain (Part of the ProfiTrace package)

The COMbricks units are connected via Ethernet to a wireless hub with open access from any of the PCs on the desks.

# Network Layout



- ⇒ The Exercise in this session is to add some new devices onto these networks, get them configured and working.
- ⇒ Devices that have been brought along:
  - ✓ Procentec PROFIBUS slave with digital IO. Just released device which is part of the COMbricks range.
  - ✓ Rotork valve & actuator (details unknown at this time)
  - ✓ WAGO slave (details unknown at this time)
  - ✓ E+H PA device (details unknown at this time)
- ⇒ I will demonstrate the method that can be used on network 1 with the Procentec PROFIBUS slave.
- ⇒ You can then have a go yourself - with some help from our experts!