# Cnix

2024

# Cnix
**Data Service Platform**

## Introduction

- **General**

  - Founded in 2003
  - CEO : Changdeuk Kang
  - Major Product : Data Service Platform for Industry

- **Company**

  Cnix is the company that supplies Data Service Platform for IT services such as A.I, Big Data, IoT and so on. Special things that only Cnix can do are integrtation of different kinds of PLCs, the super fastest Data acquisition and Archiving.

- **Major Business**

  - VDS(Video Distribution System)
  - PSD(Platform Screen Door) Control and Supervising System
  - DAQ(Data AcQuisition System)
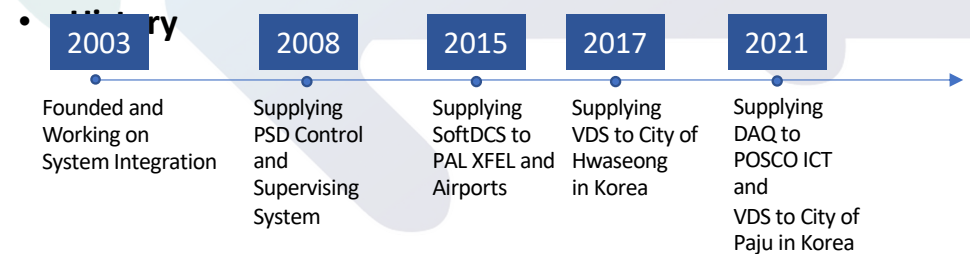  - SoftDCS(software based Distributed Control System)

  See our commercial services.

## Business

- **Base Technology**

  - Experienced Engineering on Factory Automation
  - System Integration
  - Industrial Network
  - CPU's OS of PLC and DCS
  - Linux and Open Source Technology

- **Major Customers**

  - Central and Local Governments
  - POSCO ICT
  - GS Neotek
  - Hyundai Movex
  - PAL (Pohang Accelerator Laboratory)
  - KAC (Korea Airport Cooperation)

- **History**

| 2003 | 2008 | 2015 | 2017 | 2021 |
|------|------|------|------|------|
| Founded and Working on System Integration | Supplying PSD Control and Supervising System | Supplying SoftDCS to PAL XFEL and Airports | Supplying VDS to City of Hwaseong in Korea | Supplying DAQ to POSCO ICT and VDS to City of Paju in Korea |

| Products Line | Commercial SW Packages |
|---|---|

## Data Service Platform

"**Data Service Platform**" is the name of major product of Cnix which can serve data of industry fields to IT services such as AI, Big Data, IoT and so on. It is composed up of softDCS and Archiving System.

### softDCS

"**softDCS**", which means "software based Distributed Control System", is playing the role of engine in Data Service Platform. The main features of softDCS are system integration of different kinds of industrial devices in data level and super fast communication with devices. The performance of integration and data gathering that were confirmed in fields is over than **1 M events per second.**

### Archiving System

"**Archiving System**" is the super fast archiving system for data which are fed up by softDCS. The performance of archiving reaches up to **18 M events per second**, which was confirmed in field.

**VDS**

"**VDS**", which means "Video Distribution System" includes softDCS and Archiving System, is the name of commercial SW package for building up Smart CCTV system. It already has been installed and working in the cities of Hwaseong and Paju in South Korea and done PoC test in another 2 local govenments. In the case of Hwaseong, the number of CCTVs which are connected to VDS is over than 12,000. For more information, see this video.

**PSD**

"**PSD**", which means "Platform Screen Door", is the name of PSD Control and Supervisoring System of Cnix. It was designed and applied by Cnix at first in Korea. PSDs of subtrain in the line of 5,6,7 and 8 of Seoul city whose number reaches up to 200 stations are being controlled and monitored by Cnix.

**DAQ**

"**DAQ**", which means "Data AcQuisition", is the nickname of softDCS which is used only for data gathering and service to Front-End-Applications. The reason why they would choose the softDCS of Cnix for their DAQ is that they have too many PLCs and standalone devices and too many different kinds of devices. For more information, see the followings.
"How to synchronize communication devices in industry fields"
"The required function and performance for better industrial A.I"
"Siemens and Toshiba"

**softDCS**

"**softDCS**" can be supplied to build up Data Service Platform without Archiving system at the request of clients. See the representitive example.

# What is the Data Service Plartform?

## Smart Technology



Cloud

**Platform Interface**

**Industrial Data Service Platform**

**Process Engineering System Extension**

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"**Data Service Platform**" of Cnix was designed for factory automation systems to be able to transform legacy factories to single machine so that IT services such as A.I, BigData, Cloud and IoT can do their jobs with the best efficiency.

Data Service Platform would perfectly separate IT service layer from field layer , and load all data into memory with their meta information from all devices in fields. It means what IT services have to know is only the name of data without regarding of hardware in field and IT services would not be affected by the change of hardware system configuration.

The powerful features of Data Service Platform makes IT services to be able to integrate, control and supervise all processes from the process of matertals input to the process of final products output of big plant. If they need to link logically with high speed between each signal from different kinds of PLCs it can be easily done on Data Service Platform by engineering environments which is provided by Cnix.

Let's imagine what if you have application software and IT services which can control and supervise the required all processes for your products in regardless of hardware configurations in field layer. Then it is same for you to get the single virtual machine for your products, which is synchronized in time domain from inputs to the last products. Even such application software and IT services can be packaged to be sold as SW packages for same processes and reduce dramatically the cost for commissioning of plant replication. Data Service Platform of Cnix makes it possible.

Data Service Platform was designed and developed by field engineers who expertize in control system. But it can be applied to Smart City, too.

For more information, see the playlist of "Smart Technology" from official channel of Youtube and Facebook.