

Industrial Communication Platform  
DeviceXPlorer® OPC Server



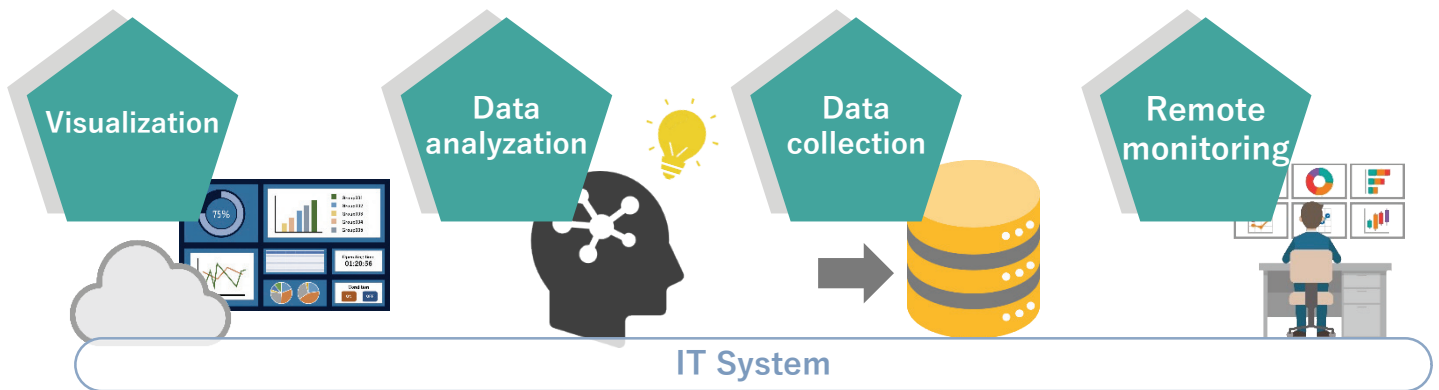
DeviceXPlorer®  
OPC Server

Check our  
YouTube channel  
for more details!



# Product Overview

## Industrial Communication Platform DeviceXplorer® OPC Server Ver.7



**NEW** HTTP

**NEW** MQTT

**OPC**

# Dxp SERVER

Collects data from various vendor devices and unifies into your IT systems!



### Special Features



Enables communication with various IT systems on cloud services and on-premises systems via OPC, MQTT, and HTTP communication protocols.



Can communicate with many kinds of devices (400+ series / 100+ vendors devices) in production sites. Enables centralized management of devices from various vendors.



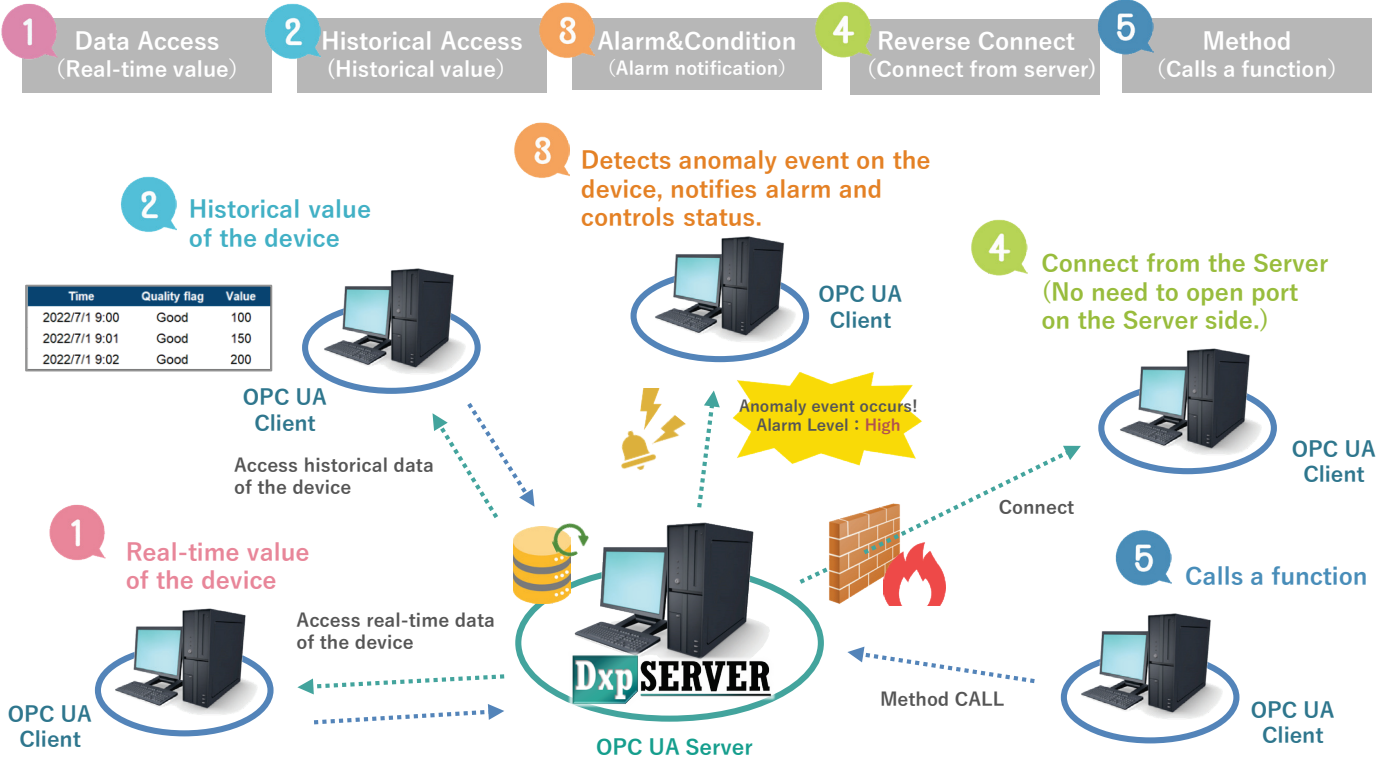
Hot Configuration feature allows you to change settings without stopping the system.

# Features

## Communication with IT system (OPC, MQTT, HTTP)

### ● Supports Industrial Standard "OPC UA"

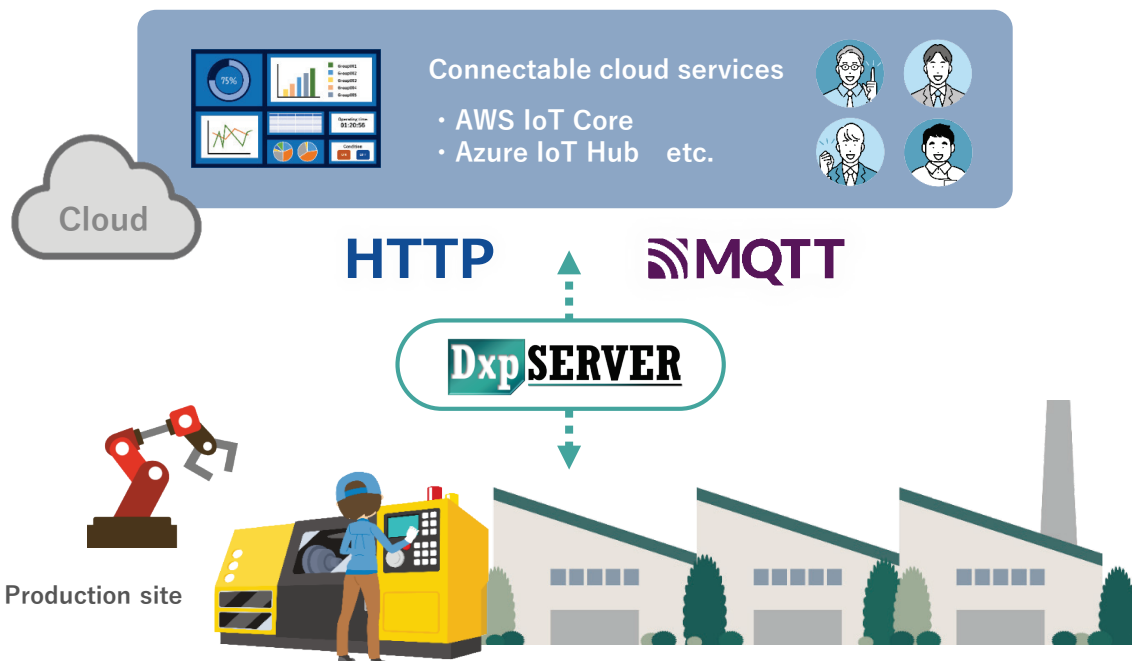
DxpSERVER supports industrial standard OPC UA protocol, as well as various OPC UA specifications for utilizing production facility data.



\*Historical Access and Alarm&Condition functions are limited to Professional Edition. Please see ["P.9 Editions"](#).

### ● Supports connection to the cloud (MQTT/HTTP)

DxpSERVER supports MQTT and HTTP, general communication protocols for cloud services.



\*MQTT and HTTP functions are limited to Professional Edition. Please see ["P.9 Editions"](#).

## Variety of connectivity

Check out the full connectivity list on our website



DxpSERVER enables connection to **more than 400 series/100 vendors devices**, including PLCs, Robots and processing machines.

<https://www.faweb.net/en/product/opc/plc/supportlist>



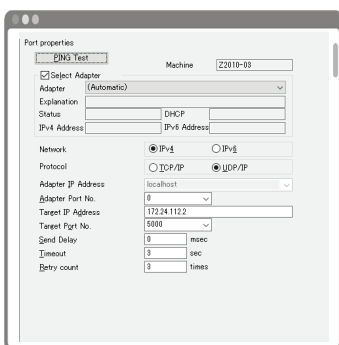
Modbus Supported	Robot·NC(CNC)	Server Function	Open Network
<ul style="list-style-type: none"> <li>AZBIL</li> <li>IAI</li> <li>MG (Formerly M-System)</li> <li>OMRON</li> <li>IDEC</li> <li>KOYO</li> <li>WAGO</li> <li>MTT</li> <li>Phoenix Contact</li> <li>HAKKO</li> <li>ANYWIRE</li> <li>Eurotherm</li> <li>COGNEX</li> <li>HIOKI</li> <li>HITACHI</li> <li>YOKOGAWA</li> <li>DELTA</li> <li>RKC instrument</li> <li>CHINO</li> <li>MITSUBISHI</li> <li>Panasonic</li> <li>CODESYS</li> <li>MOXA</li> <li>GRAPHTEC</li> <li>PATLITE</li> </ul>	<ul style="list-style-type: none"> <li>MITSUBISHI</li> <li>KAWASAKI</li> <li>YASKAWA</li> <li>FANUC</li> <li>YAMAHA</li> <li>SHIBAURA</li> <li>IAI</li> <li>SANYO</li> </ul> <p>Injection molding machine</p> <ul style="list-style-type: none"> <li>Sumitomo Heavy Industries</li> <li>The Japan Steel Works</li> </ul>	<ul style="list-style-type: none"> <li>OPC UA</li> <li>OPC DA/AE</li> <li>Modbus/TCP</li> <li>SuiteLink</li> </ul>	<ul style="list-style-type: none"> <li>MTConnect</li> <li>SLMP</li> <li>IEC60870</li> <li>IEC61850</li> <li>EtherNet/IP</li> <li>BACnet/IP</li> <li>CC-Link</li> <li>DNP3.0</li> <li>OPC UA</li> <li>OPC DA</li> <li>DDE</li> <li>ODBC</li> </ul>
		RFID/BCR	Energy-saving support device
		<ul style="list-style-type: none"> <li>MITSUBISHI</li> <li>OMRON</li> <li>KEYENCE</li> <li>COGNEX</li> </ul>	<ul style="list-style-type: none"> <li>EcoServer III</li> <li>E-Energy</li> <li>EcoMonitorLight</li> </ul>

## Simple setting

The setting of DxpSERVER is easy to configure.

To access data of devices, you only need to follow the 3 steps as below.

### 1 Port setting



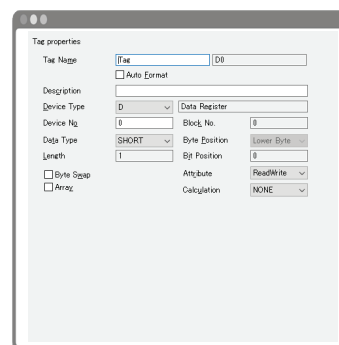
IP address, Port number etc.

### 2 Device setting



CPU model, network parameter etc.

### 3 Tag setting



Data address, data type etc.

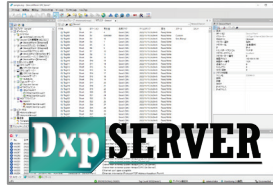
Check out the setting procedure



[https://www.youtube.com/@faweb\\_en](https://www.youtube.com/@faweb_en)

## Support 24 hours full operation

DxpSERVER utilizes a Hot Configuration function. This allows you to change settings **without stopping a running system**. It is ideal for the systems which require continuous operation.



Change setting during operation



SCADA etc.

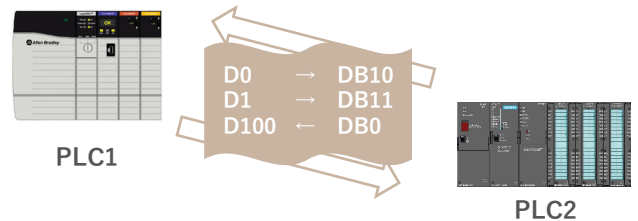
## Multilingual

DxpSERVER supports **multiple display languages**. Japanese / English / Korean / Chinese (Simplified / Traditional)



## Data bridge

Data can be exchanged simply between devices from different vendors, **just by selecting source and destination tags**.



## Script

Interpreted language "Lua" can be used to embed custom logic in DxpSERVER. **Embedded custom logic can be executed with periodic or event-driven timing**. e.g. Output files, Tracing data

```

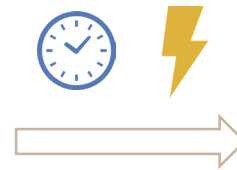
2  -- Check the open result
3  if (f == nil) then
4      Dxp.LogErrorMessage("File Open Error (" .. msg .. ")");
5      return;
6  end
7
8  -- Make CSV
9  local text = ""
10 text = text .. Dxp.GetCurrentTime():Format();
11 text = text .. "," .. @t("Tag001"):ToStringValue();
12 text = text .. "," .. @t("Tag002"):ToStringValue();
13 text = text .. "," .. @t("Tag003"):ToStringValue();
14
15 -- Write to file
16 fwrite(text .. "\n");
17
18 -- Close the file
19 fclose();
20
21

```

Lua script



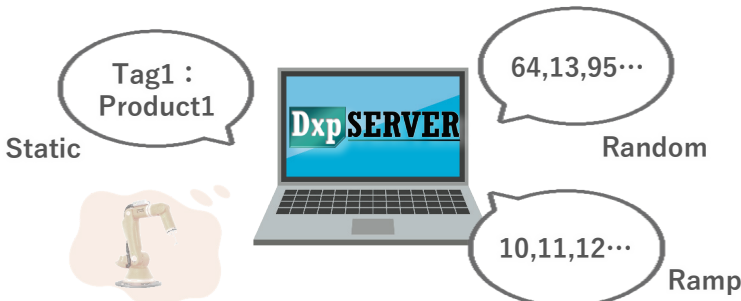
Cyclic or Event-driven



Output files

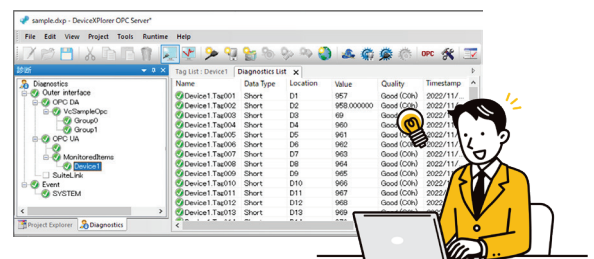
## Simulation

DxpSERVER is equipped with a simulation function that generates simulation data for tag values. **Systems can be debugged without an actual device.**



## Diagnostic function

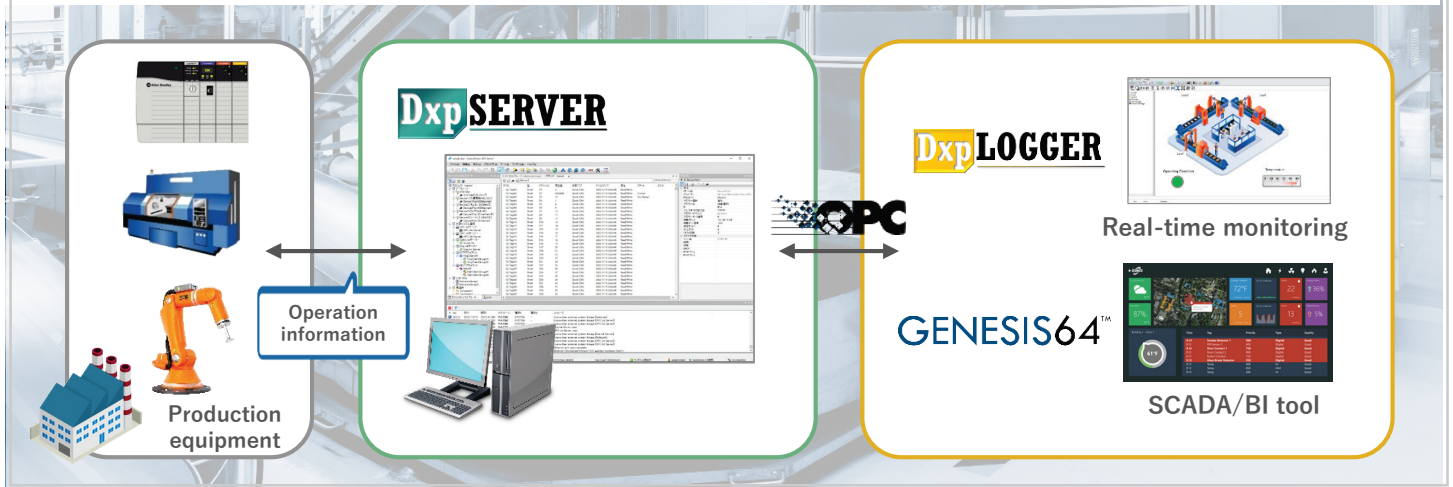
**Real-time status can be checked** for the connection to the device and communication with the system.



# Case Study

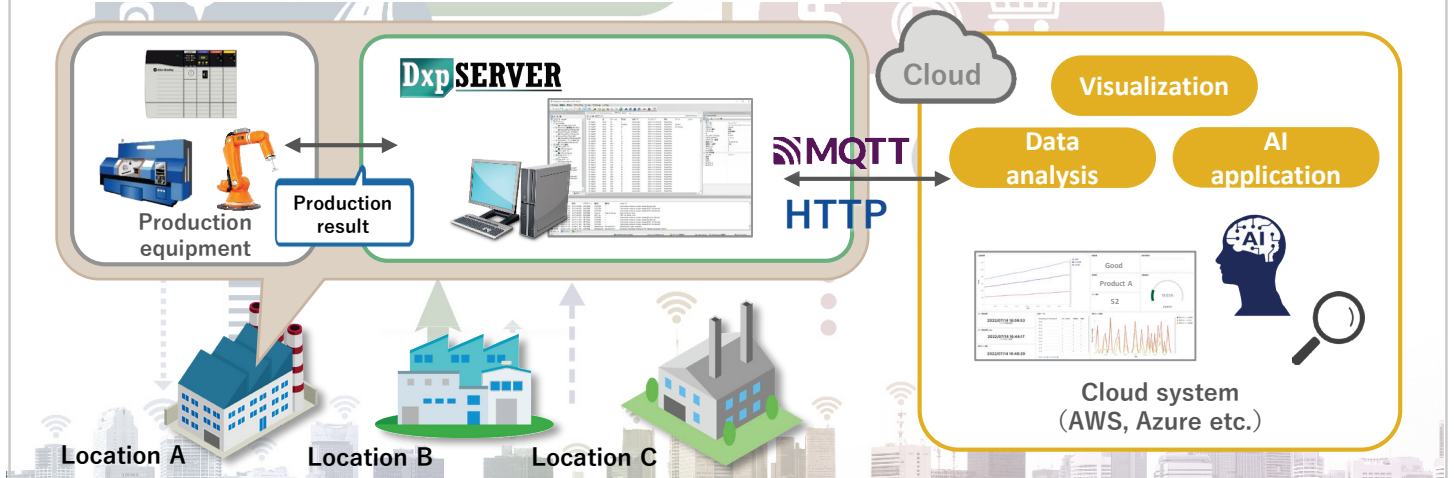
## Monitoring the equipment

- DxpSERVER enables visualization of the data in equipment used together with SCADA and BI tools that support OPC.
- You can monitor equipment operating status in production sites in real-time and immediately detect anomaly events.



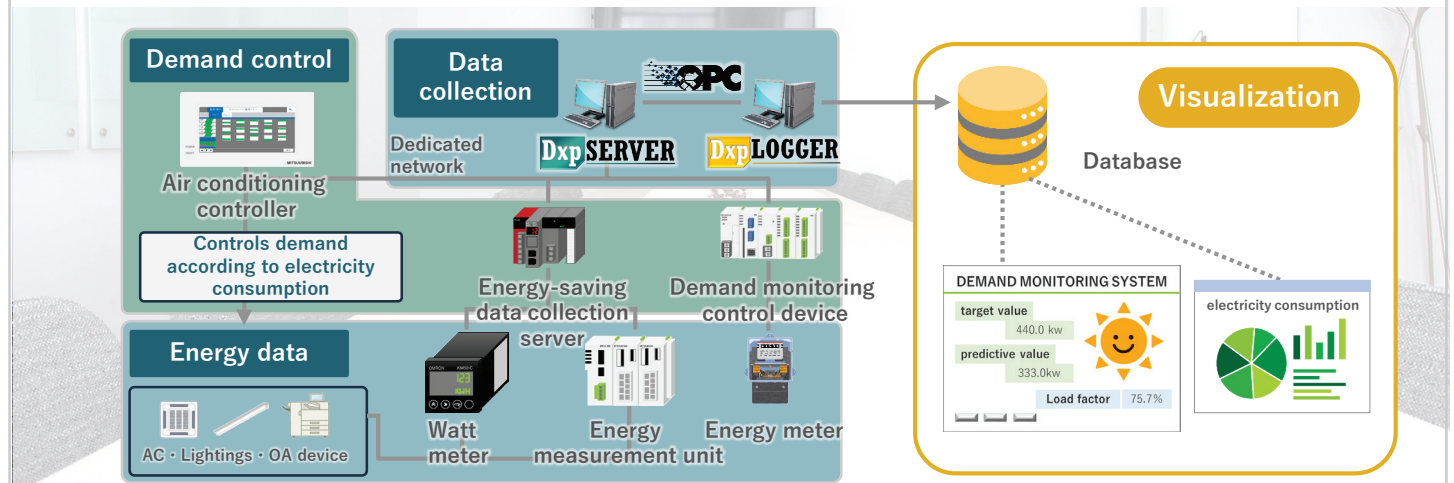
## Connection to cloud

- DxpSERVER uploads data from production equipment to cloud systems via MQTT/HTTP protocol.
- It enables centralization of data across locations by collecting data in the cloud.



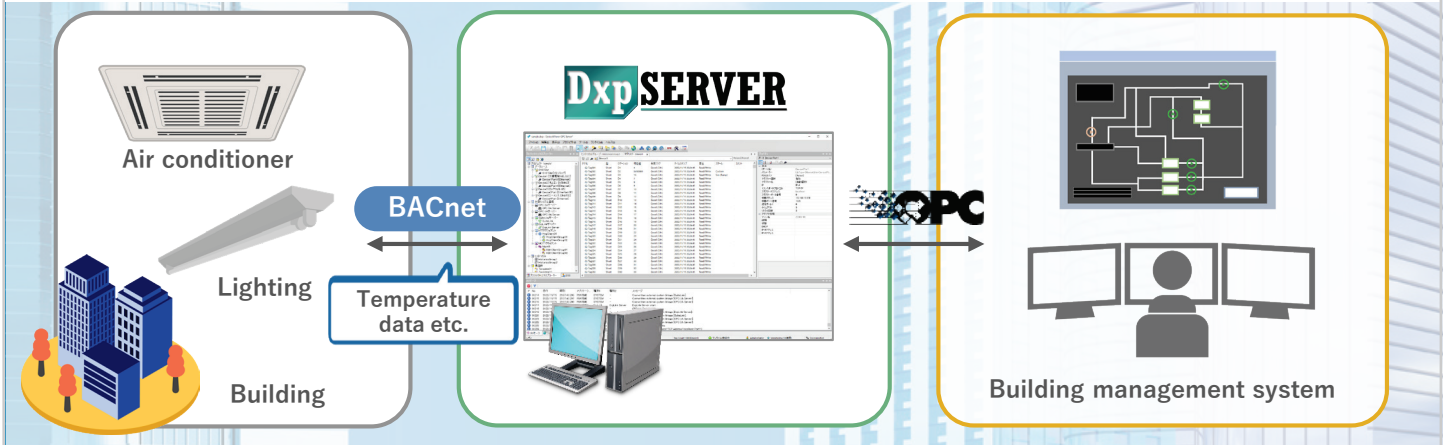
## Energy Visualization

- DxpSERVER enables real-time visualization of electricity consumption in offices and buildings.
- It collects the data to a database by using together with data logging software DeviceXplorer Data Logger.



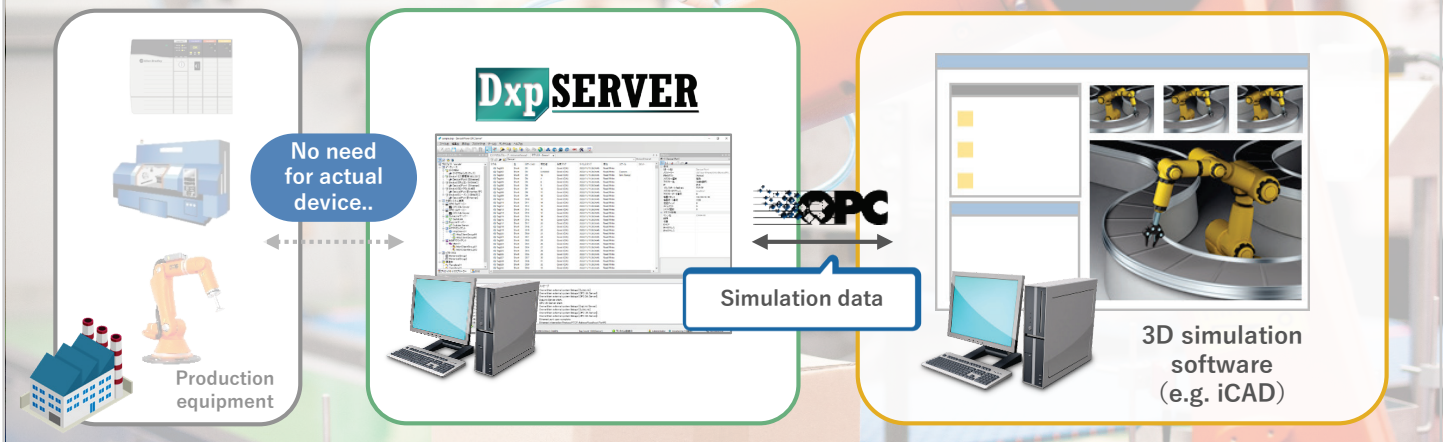
## Building management

- DxpSERVER enables integration of system with BACnet, a standard protocol in building automation.
- It allows monitoring status of facilities such as air-conditioning and lighting, and also supports control scheduling functions.



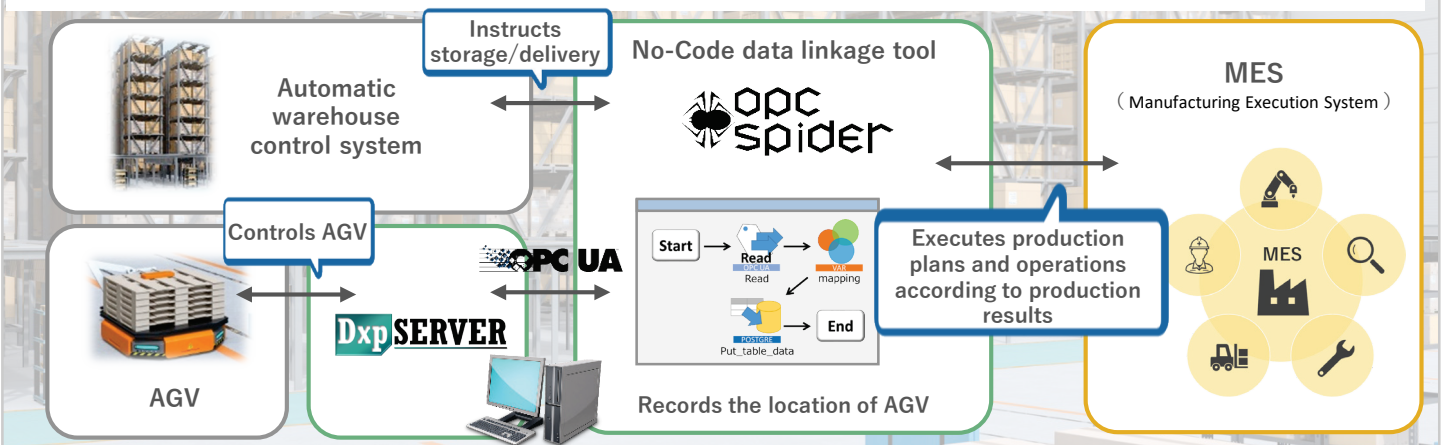
## 3D Simulation

- DxpSERVER connects production equipment and 3D simulation software via OPC.
- It enables interference checks, operation simulations prior to actual operation, as well as simulations to reproduce error status when it occurs.



## Inventory control

- DxpSERVER enables connection to AGVs, automated warehouses and MES systems.
- It automates the control of AGVs based on the production plan, instructs the automated warehouse for storage and delivery of goods, and updates the production results in the inventory management system.



# Specifications

Item	Description	
OS	Windows 11(21H2/22H2/23H2/24H2)* <sup>1</sup> Windows 11 Enterprise LTSC 2024 Windows 11 IoT Enterprise LTSC 2024 Windows 10 IoT Enterprise LTSC 2021 Windows 10 IoT Enterprise LTSC 2019 Windows 10 IoT Enterprise LTSB 2016 Windows 10(1809/1903/1909/2004/20H2/21H2/22H2)* <sup>1</sup> Windows Server 2025/2022/2019/2016	
Application Type* <sup>2</sup>	32-bit application(Win32/x86), 64-bit application(Win64/x64)	
Hard Disk	1GB or more	
Memory	1GB or more	
Framework	.NET Framework 3.5(32-bit edition only)	
License	1 license required per installed PC (Unrelated to the number of OPC Client connections)	
Protection	License is protected by Serial number and License Key(software or hardware key)	
Operating Mode	As a normal application or a Windows service program	
Max. Connections* <sup>3</sup>	255	
Max. Tags	Unlimited	
Support Protocol for External System	OPC UA1.04, OPC DA3.0/2.05A, OPC AE1.10, SuiteLink* <sup>2</sup> , DxpLink, HTTP* <sup>4</sup> , MQTT* <sup>4</sup> , Modbus/TCP Server* <sup>5</sup>	
Simulation Mode	Random, Ramp(Increment), Sine curve, Shared Memory (Static)	
Language	Japanese, English, Korean, Simplified Chinese, Traditional Chinese	
OPC UA Interface	Function Type	Server/Client
	Profile	Standard UA Server Profile Historical Raw Data Server Facet* <sup>4</sup> Historical Data Insert Server Facet* <sup>4</sup> Historical Data Update Server Facet* <sup>4</sup> Historical Data Replace Server Facet* <sup>4</sup> A&C Base Condition Server Facet* <sup>4</sup> A&C Refresh2 Server Facet* <sup>4</sup> A&C Address Space Instance Server Facet* <sup>4</sup> A&C Enable Server Facet* <sup>4</sup> A&C Acknowledgeable Alarm Server Facet* <sup>4</sup> A&C Alarm Server Facet* <sup>4</sup> A&C Exclusive Alarm Server Facet* <sup>4</sup> A&E Wrapper Facet* <sup>4</sup> Reverse Connect Client Facet
	Endpoint URI	opc.tcp://[IP address or machine name]:52250
	Security Mode	None, Sign, SignAndEncrypt
	Security Policy	None, Basic128Rsa15, Basic256, Basic256Sha256, Aes128Sha256RsaOaep, Aes256Sha256RsaPss
OPC UA Pub/Sub Interface* <sup>6</sup>	User Authentication	Anonymous, User Name/Password, X509 User Certificate
OPC DA Interface	Transport Profile	http://opcfoundation.org/UA-Profile/Transport/pubsub-udp-uadp
	Function Type	Server/Client
	PROG.ID	Takebishi.Dxp.7
SuiteLink* <sup>2</sup>	OPC Item ID	Use delimiters to specify device, group and tag names.
	Application Name	Any (default: "DXPV7")
	Topic name	Any (default: "Device1")
HTTP(S) Client (Ver.1.1)	HTTP Authentication	None, basic authentication, digest authentication OAuth2.0 authorization (only ROPC)
	HTTP Method	GET, PUT, POST, DELETE, OPTIONS, HEAD, TRACE
	Proxy Server	Supported (username/password authentication also supported)
MQTT(S) Client (Ver3.11)	Messaging System	Publish / Subscribe
	Protocol	TCP (WebSocket not supported)
	Authentication	Username/password, TLS authentication
	Other Function	QoS0/1/2, Retain/Will, TLS/SSL

\*1 In Windows 10/11 Home Edition, Windows Update type is fixed at "Current Branch" (update is performed automatically), so we are recommend using Windows Pro Edition or above.

\*2 64-bit DeviceXPlorer does not support the following communications, please use 32-bit DeviceXPlorer for the following:

- MELSEC EZSocket/GOT connection
- SYSMAC FinsGateway/SysmacGateway/CX-Compolet connection
- TOYOPUC CPU Port connection
- FANUC FOCAS connection
- Mitsubishi CNC EZSocketNc connection
- SuiteLink interface

\*3 Communication performance decreases in proportion to the number of devices and tags to be accessed.

\*4 These functions are available in DxpSERVER Professional Edition.

\*5 We provide "OPC DA/UA client" and "Modbus/TCP server" as data sources (a function to connect with devices).

\*6 We provide is a beta version. Please contact us if you require this function.



## Supported devices

Refer to the list of supported devices on the following website.

<https://www.faweb.net/en/product/opc/plc/supportlist>



## Editions

We offer three lineups, Single, Multi, and Professional, according to system requirements.

Edition	Professional Edition functions*	Accessible devices
Professional	✓	All devices
Multi	N/A	All devices
Single	N/A	Devices from 1 vendor

\* Professional Edition functions are: MQTT Client, HTTP Client, OPC UA Historical Access, and OPC UA Alarm&Condition functions.

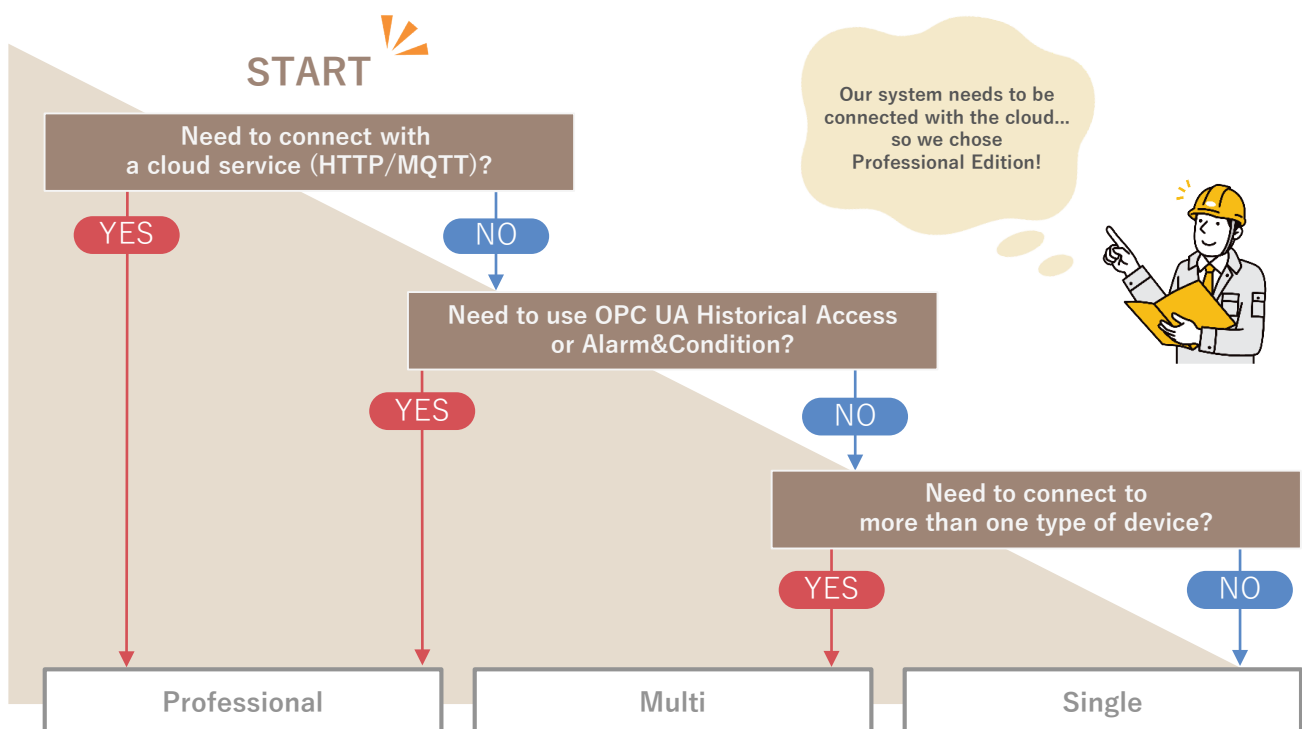
## Version Upgrade

To upgrade the version from previous versions please refer to following list. You can select Protect Key. For further details of Protect Key, please see "[P.10 License](#)".

Upgrade from (Ver.3-6)	Upgrade to (Ver.7)	Model
Enterprise	Multi	DXPV7ML-●●-V
Standard or Advanced	Single	DXPV7SG-●●-V

- No other version upgrade service available other than above.
- Minor version (version upgrades after the second digit, e.g. 7.0.0 → 7.1.0) can be upgraded for free of charge.

## How to select the Edition



# License/Maintenance Service

## License

License type	Protection system	Notes
Perpetual	Hardware Key	<ul style="list-style-type: none"> <li>• Activate by attaching USB Key to PC</li> <li>• Need to attach the Key to PC during operation</li> </ul>
	Software Key	<ul style="list-style-type: none"> <li>• Node-locked license</li> <li>• Activate the license via the internet*</li> </ul>
Subscription (Annual update required)	Software Key	<ul style="list-style-type: none"> <li>• Node-locked license</li> <li>• Activate the license via the internet*</li> <li>• A license activation process is also required when updating.</li> </ul>

\* For information on how to activate a PC that cannot connect to the Internet, please refer to the product manual.

Protection system	Hardware key	Software Key
	✓ Easy to activate the License There is a risk of losing the Key	When connecting to Internet : ✓ Easy No connection to Internet : Some process needed
	PC must have USB port	✓ No risk of losing the Key ✓ PC does not need to have a USB port

## Maintenance Service

Maintenance Service is only provided to products which are **within the maintenance service period and registered on the User Registration (Product Registration) page**.

One year of Maintenance Service is included with the original purchase. Maintenance Service is optional from the second year onwards. Subscription licenses include Maintenance Service and must be renewed annually.

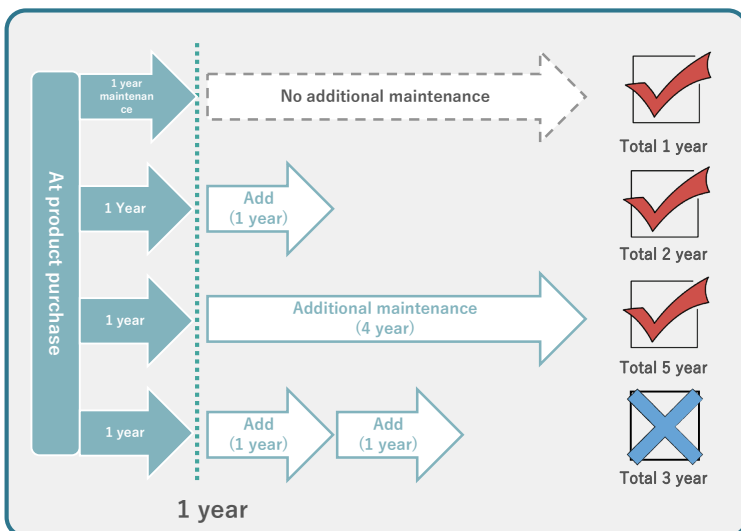
### Maintenance Service

- ◆ Technical Support\*<sup>1</sup> (Available : Weekdays 9:00-12:00, 13:00-17:00 (JST))
- ◆ Major Version Upgrade\*<sup>2</sup>  
(You can upgrade your product, including major version upgrades, free of charge. Major version upgrade means an upgrade of the first digit of the version.)

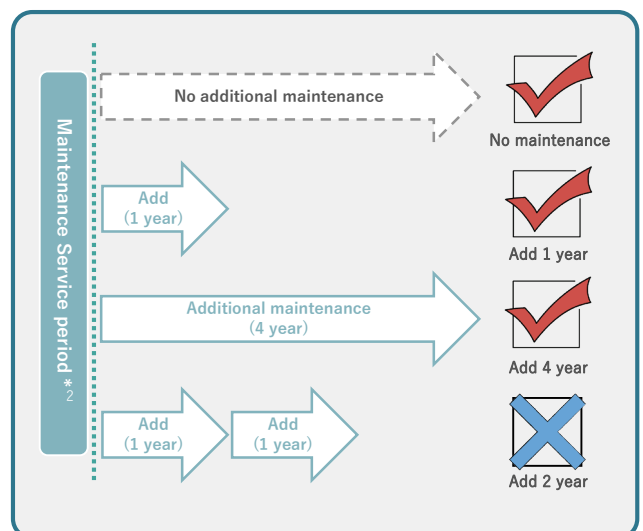
### Additional maintenance (updating Maintenance Service period)

- Additional maintenance can be purchased at the initial purchase of a product or at the time of update of the maintenance service period.
- Only 1 piece of additional maintenance can be purchased per product serial number (Additional maintenance is serviced for either 1 year or 4 years).

Example: It is not possible to add 2 years of additional maintenance by purchasing 1 year x 2 pieces.  
You can purchase additional maintenance (1 year) again after the maintenance period expired.



At initial purchase



At renewal of maintenance service period

\*1 We ask you to show the product serial number when you require Technical Support.

For pre-purchase, such as product selection, inquiry support can be provided without Maintenance Service.

We do not guarantee that all inquiries will be resolved. We will help as much as possible.

\*2 Minor version upgrades (version upgrades in the second digit or later) are available without Maintenance Service by downloading an update patch.

\*3 The Maintenance Service Renewal period starts 3 months before the expiration of the current Maintenance Service period.

Registered users will be notified 3 months and 1 month before the Maintenance Service expiration date.

Maintenance Service period for the additional maintenance starts the day after the expiration date of the previous Maintenance Service period.

## Model Code definition : DXPV7 **A** - **B** - **C** - **D**

<b>A</b>	Edition	<b>PR</b> : Professional <b>ML</b> : Multi <b>SG</b> : Single
<b>B</b>	License Key / Protection System*1	<b>HW</b> : Hardware Key (Perpetual) <b>SW</b> : Software key (Perpetual) <b>SS</b> : Software key (Subscription) <b>CL</b> : Software key (Subscription, For Cloud)
<b>C</b>	Maintenance / Upgrade / Bulk purchase	<b>Unspecified</b> : Normal product <b>RE</b> : Update Subscription <b>V</b> : Version Upgrade <b>MNT1</b> : Additional maintenance (1 year) <b>MNT4</b> : Additional maintenance (4 years) <b>A10</b> : Bulk purchase 10 pcs
<b>D</b>	Destination country*2	<b>Unspecified</b> : Japan <b>E</b> : Outside of Japan



The data can be **downloaded from our website**.

If you need an installation disk (DVD media), please place an order for "DxpSERVER V7 software media (model: DXPV7-MEDIA)" separately.

### Professional Edition

Product name	License type	Protection system	Model*2	
DxpSERVER V7 Professional OPC Server	Perpetual	Hardware Key	DXPV7PR-HW-E	
	Perpetual	Software Key	DXPV7PR-SW-E	
	Subscription (1 year)	Software Key	DXPV7PR-SS-E	
	Subscription (1 year) (Usage in the cloud)	-	DXPV7PR-CL-E	
	Update	Subscription (1 year)	Software Key	DXPV7PR-SS-RE-E
		Subscription (1 year) (Usage in the cloud)	-	DXPV7PR-CL-RE-E
	Bulk purchase (10 pcs)	Perpetual	Hardware Key	DXPV7PR-HW-A10-E
		Perpetual	Software Key	DXPV7PR-SW-A10-E
	Additional maintenance (1 year)*3	-	-	DXPV7PR-MNT1-E
	Additional maintenance (4 years)*3	-	-	DXPV7PR-MNT4-E

### Multi Edition

Product name	License type	Protection system	Model*2	
DxpSERVER V7 Multi OPC Server	Perpetual	Hardware Key	DXPV7ML-HW-E	
	Perpetual	Software Key	DXPV7ML-SW-E	
	Version upgrade (Target : Ver.3-6 Enterprise Edition)	Perpetual	Hardware Key	DXPV7ML-HW-V-E
		Perpetual	Software Key	DXPV7ML-SW-V-E
	Bulk purchase (10 pcs)	Perpetual	Hardware Key	DXPV7ML-HW-A10-E
		Perpetual	Software Key	DXPV7ML-SW-A10-E
	Additional maintenance (1 year)*3	-	-	DXPV7ML-MNT1-E
	Additional maintenance (4 years)*3	-	-	DXPV7ML-MNT4-E

### Single Edition

Product name	License type	Protection system	Model*2	
DxpSERVER V7 Single OPC Server	Perpetual	Hardware Key	DXPV7SG-HW-E	
	Perpetual	Software Key	DXPV7SG-SW-E	
	Version upgrade (Target : Ver.3-6 Standard / Advanced Edition)	Perpetual	Hardware Key	DXPV7SG-HW-V-E
		Perpetual	Software Key	DXPV7SG-SW-V-E
	Bulk purchase (10 pcs)	Perpetual	Hardware Key	DXPV7SG-HW-A10-E
		Perpetual	Software Key	DXPV7SG-SW-A10-E
	Additional maintenance (1 year)*3	-	-	DXPV7SG-MNT1-E
	Additional maintenance (4 years)*3	-	-	DXPV7SG-MNT4-E

### Others

Product name	License type	Protection system	Model*2
DxpSERVER V7 Software Media	-	-	DXPV7-MEDIA-E
DxpSERVER V7 license key replacement (Hardware key ⇄ Software key)	-	-	DXPV7-LICCHG-E

\*1 License type: Subscription (1 year) is only for Professional Edition.

\*2 The product with "-E" at the end of the Model code is for outside of Japan.  
The display language of the software can be changed from the configuration setting.  
Supported languages: Japanese, English, Korean, Chinese (simplified/traditional)

\*3 When purchasing additional maintenance when renewing the Maintenance Service period, the serial number of the product is required.  
Please see "[P.10 Maintenance Service](#)".



29, Mamedacho, Nishikyogoku,  
Ukyo-ku, Kyoto, 615-8501, Japan

**Contact Form** Available : Weekdays 9:00-12:00, 13:00-17:00 (JST)



<https://www.faweb.net/en/support/contact>

**HP** : <https://www.faweb.net/en/>

**YouTube** : [https://www.youtube.com/@faweb\\_en](https://www.youtube.com/@faweb_en)

