At Edgecross Consortium, many leading companies with cutting-edge technologies have gathered, for going beyond the border of FA and IT. We are working together for an IoT open innovation.

Board Members

For Manufacturers

Join our Consortium?

We can work together to overcome challenges in manufacturing.

By bringing up challenges, we can generate solutions together by using the wide range of knowledge held by member companies in the consortium. You can also find appropriate solution partners to solve issues by interaction with them in the consortium.

For Vendors and System Integrators

You can drive forward the open innovation of IoT.

By obtaining Edgecross’s specifications and sharing the latest information with member companies in the consortium, you can accelerate the development of high-value-added solutions. You can also introduce your developed products at the marketplace, promote through the consortium events, in order to expand your company’s business.

Membership Advantages

Membership Categorizes

To participate in the Technical Working Group, advisor membership is required. (registration form the Board members is required. Please send a separate inquiry to the Edgecross Consortium secretariat office.)

Inquiries

Edgecross Consortium Secretarial office Info@edgecross.org
Room 301-2, Main Bldg., Kikai Shinko Kaikan Bldg., 3-chome 5-8 Shibakoen, Minato-ku, Tokyo, Japan 105-0011

Website
https://www.edgecross.org/en/

E-mail magazine
"EDGECROSS communication"

---

*1. To participate in the Technical Working Group, advisor membership is required. (registration form the Board members is required. Please send a separate inquiry to the Edgecross Consortium secretariat office.)

*2. The marketplace is available only in Japan.

---

TPM is a registered trademark of TPM Foundation. OPC-UA is a registered trademark of OPC Foundation. B&R is a registered trademark of B&R Automation GmbH. HITACHI is a registered trademark of Hitachi, Ltd. OMRON is a registered trademark of OMRON Corporation. IBM is a registered trademark of IBM Foundation. NEC is a registered trademark of NEC Corporation. ADT is a registered trademark of ADT Services, Inc. ABB is a registered trademark of ABB Group. Autogage is a registered trademark of Autogage Corporation. Hitachi, Ltd. is a registered trademark of Hitachi, Ltd. Hitachi is a registered trademark of Hitachi, Ltd. Mitsubishi Heavy Industries, Ltd. is a registered trademark of Mitsubishi Heavy Industries, Ltd. Mitsubishi Electric Corporation is a registered trademark of Mitsubishi Electric Corporation.
The open IoT, for the freedom of manufacturing innovation

Edgecross Consortium is a nonprofit organization with a gathering of the world’s leading companies, going beyond the border of FA and IT. We support open manufacturing innovation that is not dependent on a specific vendor.

The Value Provided by Edgecross’ Solutions

Any equipment can be connected
Link any equipment and machine, regardless of vendor or network. You can easily introduce IoT.

Innovation can extend to everywhere
From visualizing each facility, to optimizing your supply chain, you can expand IoT flexibly by using abundance of tools.

Coordinating FA and IT is easy
Crossing the boundary of the production floor, communication, and IT systems. IoT standardization is achieved. FA and IT is easily coordinated.

Consolidated management of data from manufacturing equipment through different communication protocols.

Challenge
A wide variety of old and new equipment exists in the factory, and their communication protocols vary too. It’s difficult to manage the operation data centrally.

Solution
Data collectors from Edgecross can absorb the differences in communication protocols. It becomes easy to manage data centrally and make the entire factory visible.

Improve quality yield rates through real-time defect detection.

Challenge
I want to detect the main cause of defect occurrences in the production process in real time, to keep the cost of unnecessary losses as small as possible.

Solution
If you use Edgecross’ edge applications, you can detect equipment in defect condition through real-time diagnosis.

Accumulate massive amounts of data in the cloud, for high-level analysis and predictive maintenance.

Challenge
I want to carry out predictive maintenance for equipment by using a cloud analytics system. However, I’m having a trouble importing equipment data into the IT system.

Solution
Edgecross’ IT Gateway can make linking of an IT system and equipment data. Making high-level analysis of equipment data is possible.
Our manufacturing site expertise is consolidated into solutions.

In Edgecross’s solutions, our consortium’s knowledge and expertise of the manufacturing site is consolidated. By combining our Edgecross Basic Software with "Data Collector", "Edge Application" and "IT Gateway", in accordance with your needs, your desired solution can be realized.

Coordination of the production floor and IT system

IT Gateway handles various IT protocols. You can realize seamless data coordination between various IT systems, including analytical systems and/or Manufacturing Execution Systems (MES) in the cloud and/or on-premise server, to optimize the supply chain and engineering chain.

Providing diverse solutions

A wide variety of edge applications that handle operation monitoring, preventative maintenance, and so on is available. By choosing appropriate applications based on your needs, you can find a solution within the edge computing layer.

Collect data from any equipment

By choosing appropriate data collectors based on your production site network, you can absorb network differences. Regardless of old or new, or manufacturer of equipment, you can easily collect and use data from various devices, equipment, lines, and cells.

Abundance of operating environment

Edgecross doesn’t rely on a specific hardware, and operates on various industrial PCs. You can use the industrial PC that you are already using.

Abundance of functions for utilizing data

Edgecross Basic Software has an abundance of functions that easily utilize data, from data collection to data feedback. By combination with Edge applications and IT systems, you can realize various solutions.

Real time data processing function

Produces time-series data in real time collected from production site and makes real-time analysis and diagnosis.

Data model management function

Manages production site data in hierarchy and abstraction manner for easy data utilization.
What you need for installing Edgecross.

You do not need special hardware for installing Edgecross. You can build up solutions by installing “Basic Software”, “Data collector”, and if necessary, “Edge application” and “IT Gateway” to the industrial PC you currently use.

**Items required for customers**

<table>
<thead>
<tr>
<th>Item</th>
<th>Classification</th>
<th>Provider</th>
<th>Requirement</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Software</td>
<td>Software</td>
<td>Edgecross Consortium</td>
<td>Required</td>
<td>- Improved productivity by Edgecross solution</td>
</tr>
<tr>
<td>Data Collector</td>
<td>Software</td>
<td>Consortium Member</td>
<td>Required</td>
<td>- Certified by the consortium</td>
</tr>
<tr>
<td>Edge Application</td>
<td>Software</td>
<td>Consortium Member</td>
<td>Optional</td>
<td>- Certified by the consortium</td>
</tr>
<tr>
<td>IT Gateway</td>
<td>Software</td>
<td>Consortium Member</td>
<td>Optional</td>
<td>- Certified by the consortium</td>
</tr>
<tr>
<td>PC</td>
<td>Hardware</td>
<td>Consortium Member</td>
<td>Required</td>
<td>- Certified by the consortium</td>
</tr>
<tr>
<td>IT System</td>
<td>Software</td>
<td>Consortium Member</td>
<td>Optional</td>
<td>- Certified by the consortium</td>
</tr>
</tbody>
</table>

**Recommended Hardware Specifications for Edgecross Basic Software**

<table>
<thead>
<tr>
<th>Item</th>
<th>Specifications</th>
<th>Recommendations</th>
<th>Specifications (Minimum)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OS</td>
<td>Windows® 10 Pro/Enterprise/Linux Enterprise 64bit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPU</td>
<td>Intel® Core i3 or above</td>
<td>Intel® ATOM E3826 1.46GHz or above</td>
<td></td>
</tr>
<tr>
<td>Memory</td>
<td>8GB or more</td>
<td>4GB or more</td>
<td></td>
</tr>
<tr>
<td>Storage</td>
<td>64GB or more</td>
<td>4GB or more</td>
<td></td>
</tr>
<tr>
<td>External Interface</td>
<td>Ethernet® (RJ45) 1 Port or more</td>
<td>Ethernet®</td>
<td></td>
</tr>
</tbody>
</table>

*The required hardware specifications may change based on the customer’s usage environment and Edgecross compatible software being used.

**Outline of Pricing and Form of Sales for Edgecross Basic Software**

<table>
<thead>
<tr>
<th>Item</th>
<th>Model Name</th>
<th>Price (Tax Excluded)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edgecross Basic Software (Windows Edition 1-License Edition)</td>
<td>ECP-BS1-W</td>
<td>JPY 98,000</td>
</tr>
<tr>
<td>Edgecross Basic Software (Windows Edition 5-License Edition)</td>
<td>ECP-BS1-W-5</td>
<td>JPY 240,000</td>
</tr>
<tr>
<td>Edgecross Basic Software (Windows Edition 10-License Edition)</td>
<td>ECP-BS1-W-10</td>
<td>JPY 450,000</td>
</tr>
</tbody>
</table>

You can check various video contents on the Edgecross Consortium YouTube channel.

Use Cases

Various companies are already working on manufacturing innovation with Edgecross solutions. The open IoT has conducted in a variety of results, including increased productivity and shorter lead times.

**OMRON Corporation, Kusatsu Plant**

"Improving productivity with Edgecross compatible i-Belt Viewer"

The introduction of i-Belt Viewer, that supports Edgecross, has visualized the number of completed assemblies, the status of transportation, and the number of inspection waits in control device production process, and contributed a significant reduction in lead time.

**IYAMA SEIKI CO., LTD.**

"Precise cost control in the precision machining industry"

Edgecross Data Collectors allow easy collections of actual operation data from machine tools regardless of machine tool vendors. In conjunction with the existing production management system, a flexible ANDON system has been installed.

**JIMTOF (Japan International Machine Tool Fair) 2018**

"Data Collections from various CNC machine tools."

Edgecross Data Collectors absorb differences of communication protocols and collect data on the operating status of 50 machine tools from 18 companies, realizing a unified visualization in real time.

**Mitsubishi Electric Corporation, Nagoya Works**

"Reducing loss costs using Real Time Data Analyzer"

At the servo motor manufacturing factory, the loss cost was reduced by using Edgecross-compatible software “Real-Time Data Analyzer” to perform preventative maintenance at the stage prior to the increase in defects.

Further information of Edgecross Consortium are available on our website.