JANUARY 2021

Introduction to AVEVA™ Edge 2020 R2

Version 20.0.1

AVEVA

Agenda

Overview

Main Features and Competitive Advantage

Licensing

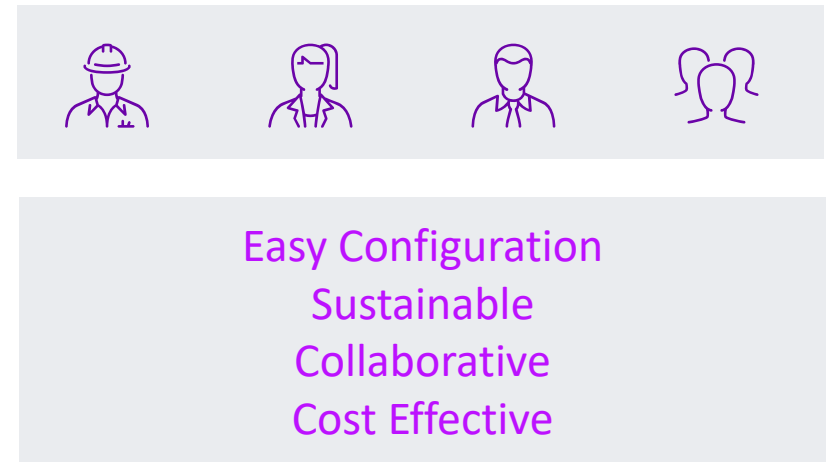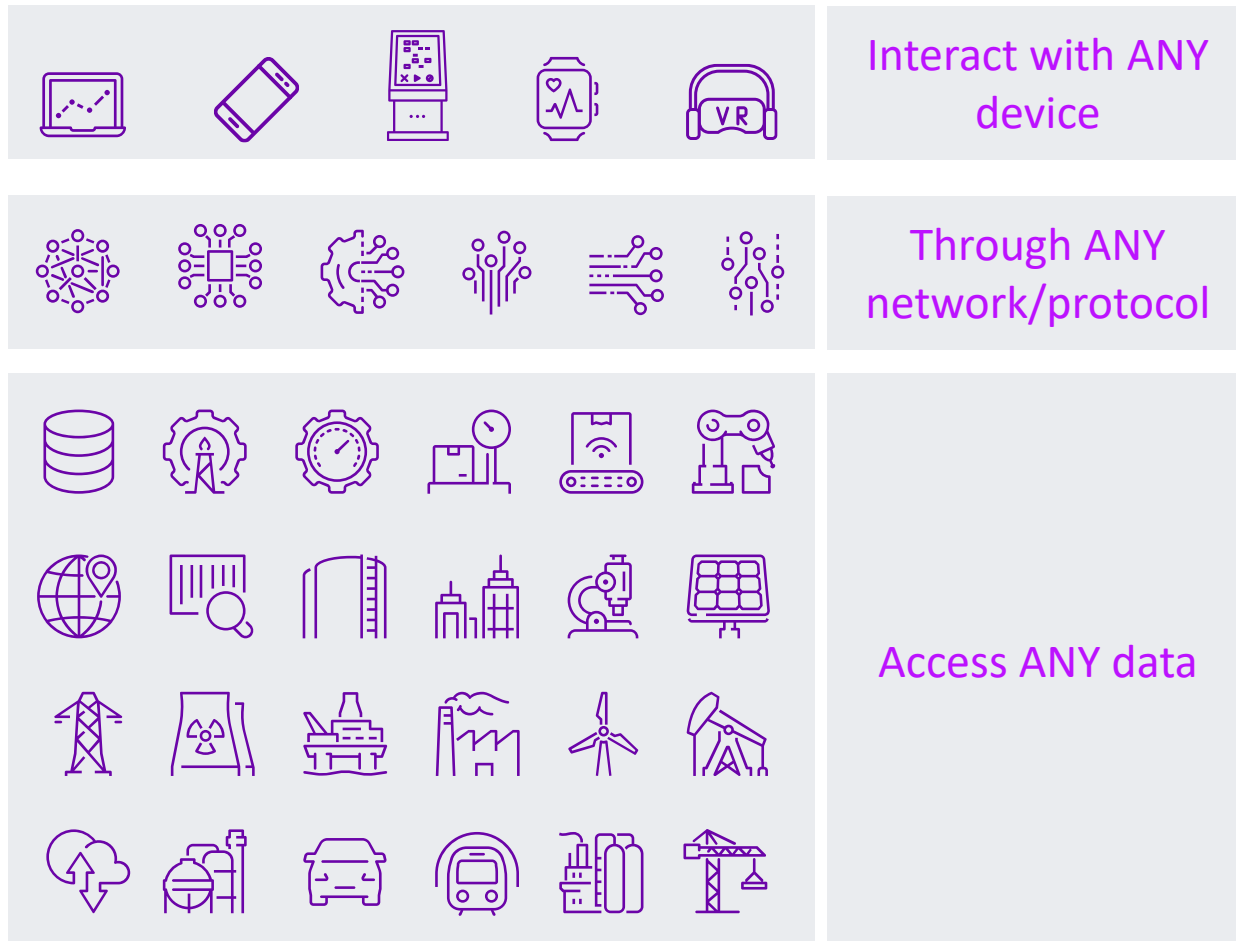Key Takeaways

AVΞVA

Overview

AVEVA

The Vision

An open-standard based architecture, designed from the ground up with <u>security</u> in mind.

Interact with ANY device

Through ANY network/protocol

Access ANY data

AVEVA™ Edge

Easy Configuration
Sustainable
Collaborative
Cost Effective

AVEVA

Bring a smarter future into focus with an Edge to Enterprise approach for your operations
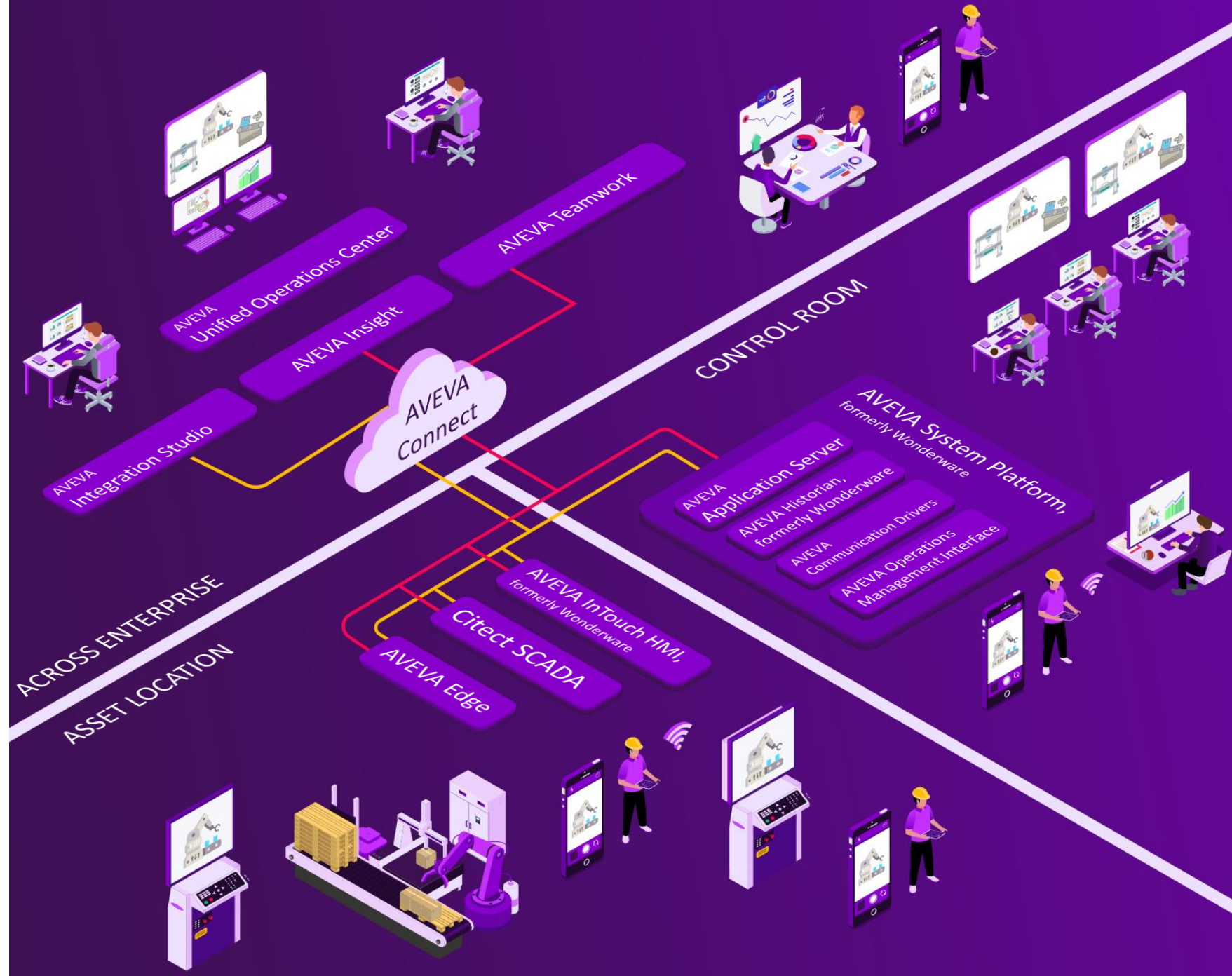
Collaboration

Line-of-Sight Visibility
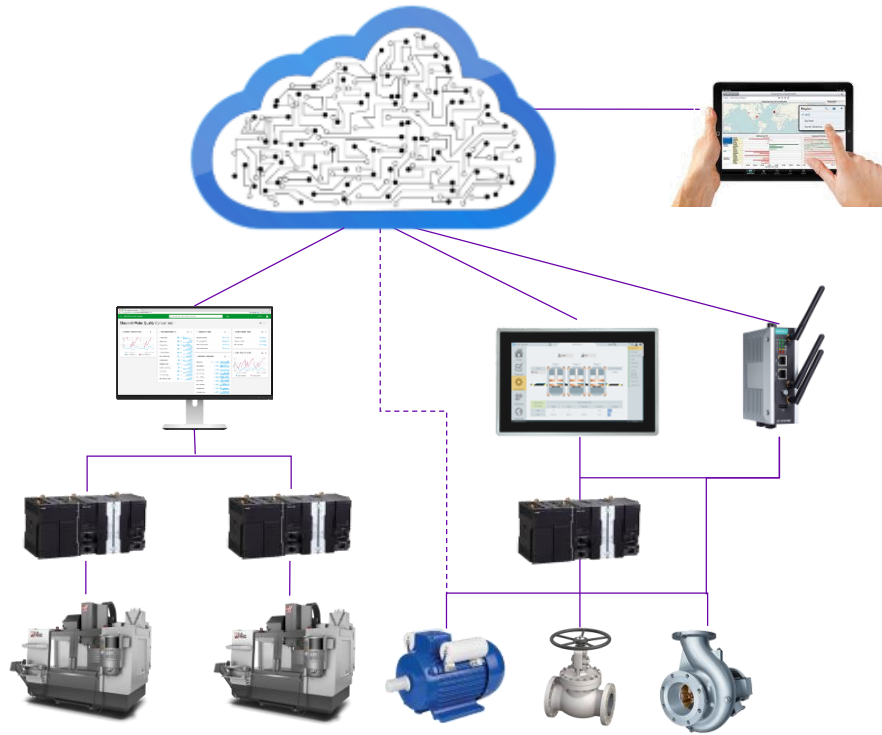
Remote Work

Standardization

Industrial Internet of Things (IIoT) / Industry 4.0

AVEVA Edge as an IoT Gateway and/or HMI/SCADA node

CLOUD

Premises

Cloud Analytics and Mobile Access
analytics, consolidation, artificial intelligence (AI), machine learning (ML), remote management/deployment, remote notifications and monitoring

Edge devices
data acquisition, data manipulation (aggregations, filtering, contextualization, normalization), link with the cloud, local maintenance, local operation

Instrumentation and Controllers
operational real-time control, raw data measurements

AVEVA
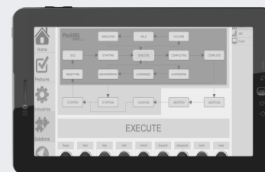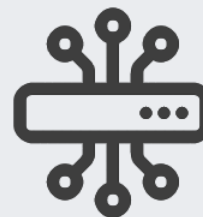
Main Benefits

Productivity   Reliability   Security

Portability

Windows   Windows IoT   Windows Embedded Compact   Linux
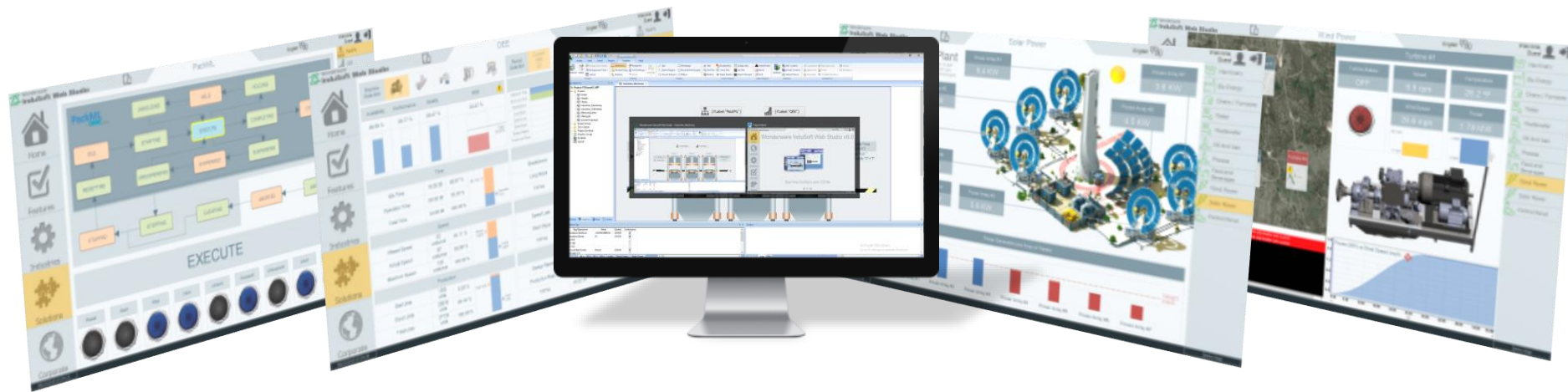
Mobility

Interoperability

OPC UA

MQTT.ORG

Value Proposition

Easy, simple, and powerful

AVEVA Edge is an easy-to-use, powerful, and affordable HMI/SCADA software and IoT/Industry 4.0 solutions for PCs, industrial panels, embedded & mobile devices

Develop your project once → Deploy and run it anywhere

Linux, Windows CE/Mobile, Windows Embedded, Windows Desktop and Server Editions, among others.

AVΞVA

Investment Protection and greater ROI

100% Compatibility with applications designed in previous versions
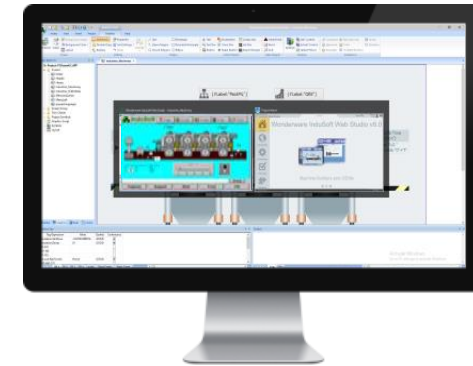

1997
AVEVA Edge 1.0

Windows NT
Windows 95
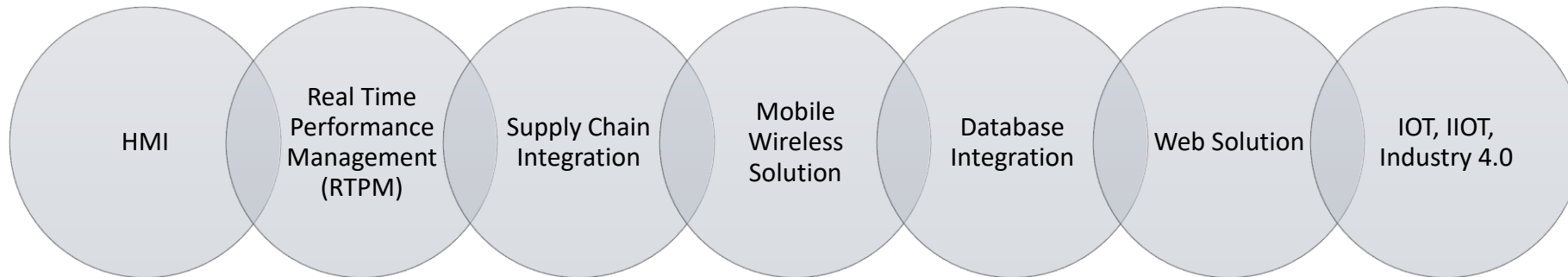Windows CE

Evolve protecting your investment!

2021
AVEVA Edge 2020 R2

Windows 10
Windows Server 2019 / 2016 / 2012 R2
Windows 10 IoT Enterprise (LTSC/LTSB)
Windows Embedded Standard 7 / Pro 8.1
Windows Embedded Compact 7 / 6 / 5
Linux

AVEVA

Vertical Markets

Any vertical market, any application

Oil and Gas | Building | Automotive | Instrumentation | Warehouse | Water & Waste | Machinery | Pharmaceutical | And Others...

AVEVA Edge

HMI | Real Time Performance Management (RTPM) | Supply Chain Integration | Mobile Wireless Solution | Database Integration | Web Solution | IOT, IIOT, Industry 4.0
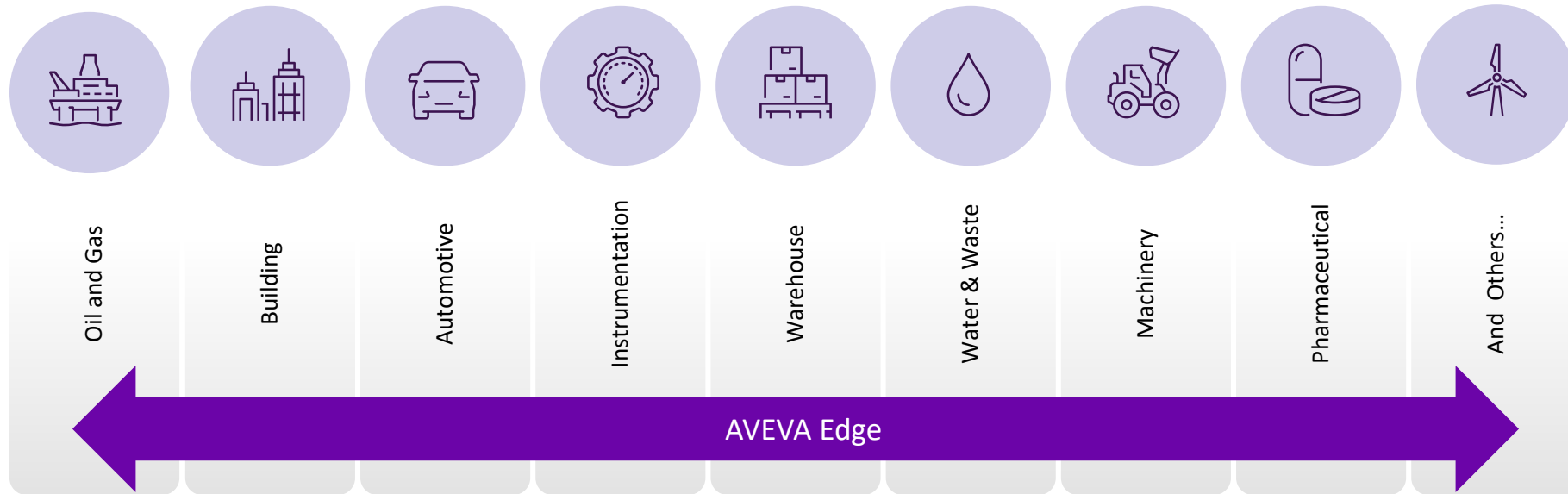
AVEVA

Main Features and Competitive Advantages

AVEVA

Native tools for SCADA, HMI, and IoT solutions

Comprehensive (everything included), mature, innovated and fully integrated
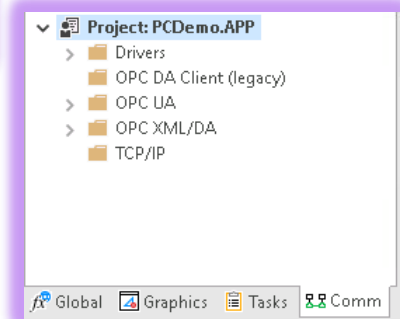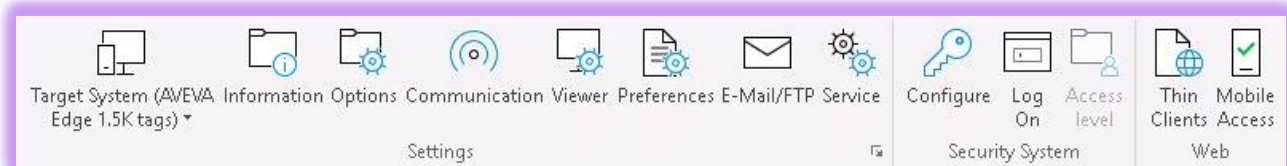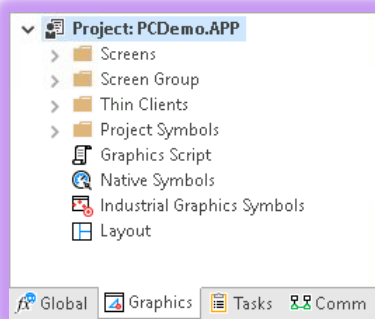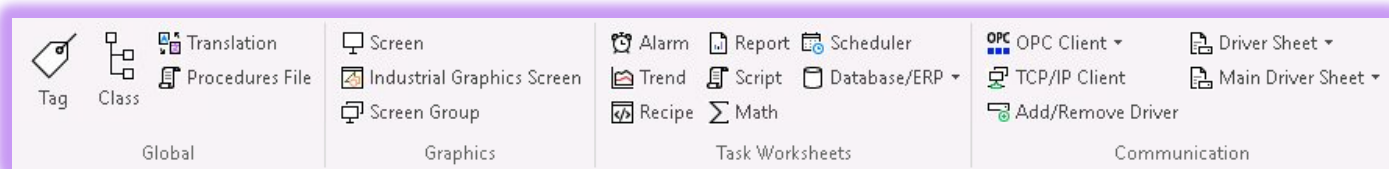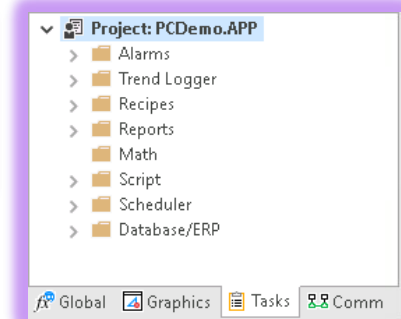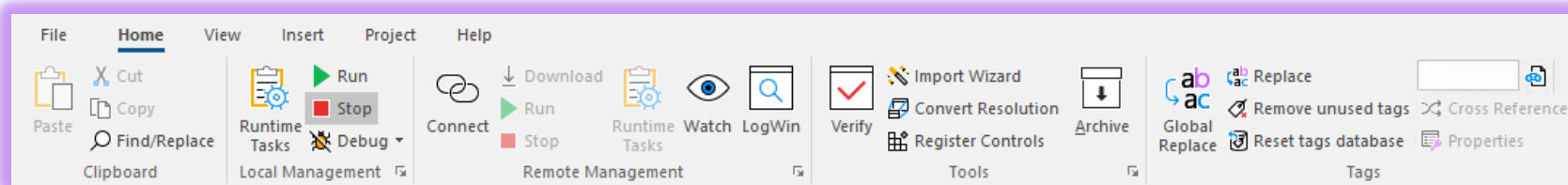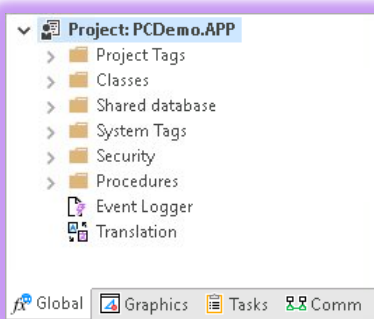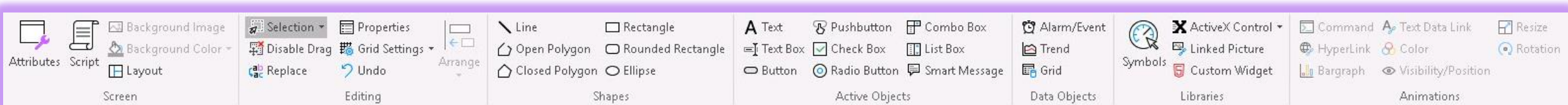
AVEVA

Solution in Layers

OEM-focused template-driven solution
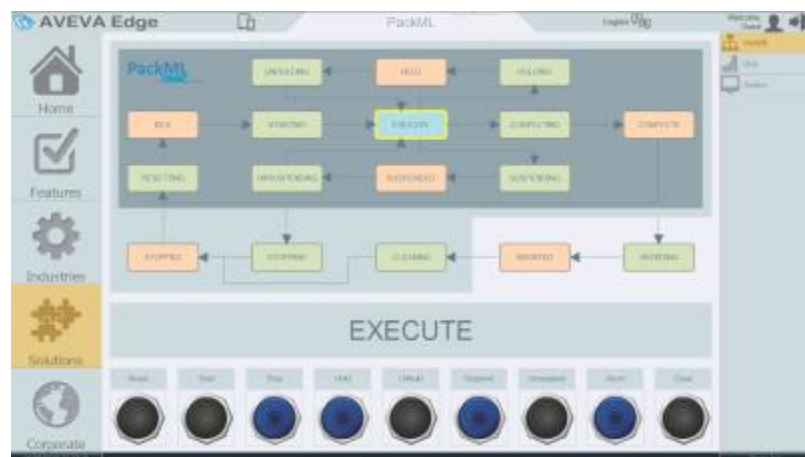
Customization
(User, Project, Development Specific)

Template
(Industry Specific)
Data Center Template

Product
(General Market)
AVEVA Edge

- Leverage unique capability that drastically reduces the engineering cost for multiple deployments.

- Design asset-agnostic and site-agnostic templates.

- Provide flexibility to customize templates during the runtime (on-the-fly).

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Modular Architecture

Flexibility

Layer of abstraction for Communication

Layer of abstraction for Databases/ERP

AVEVA EDGE

Layer of abstraction for Hardware/OS Platforms

Layer of abstraction for proprietary systems (APIs)
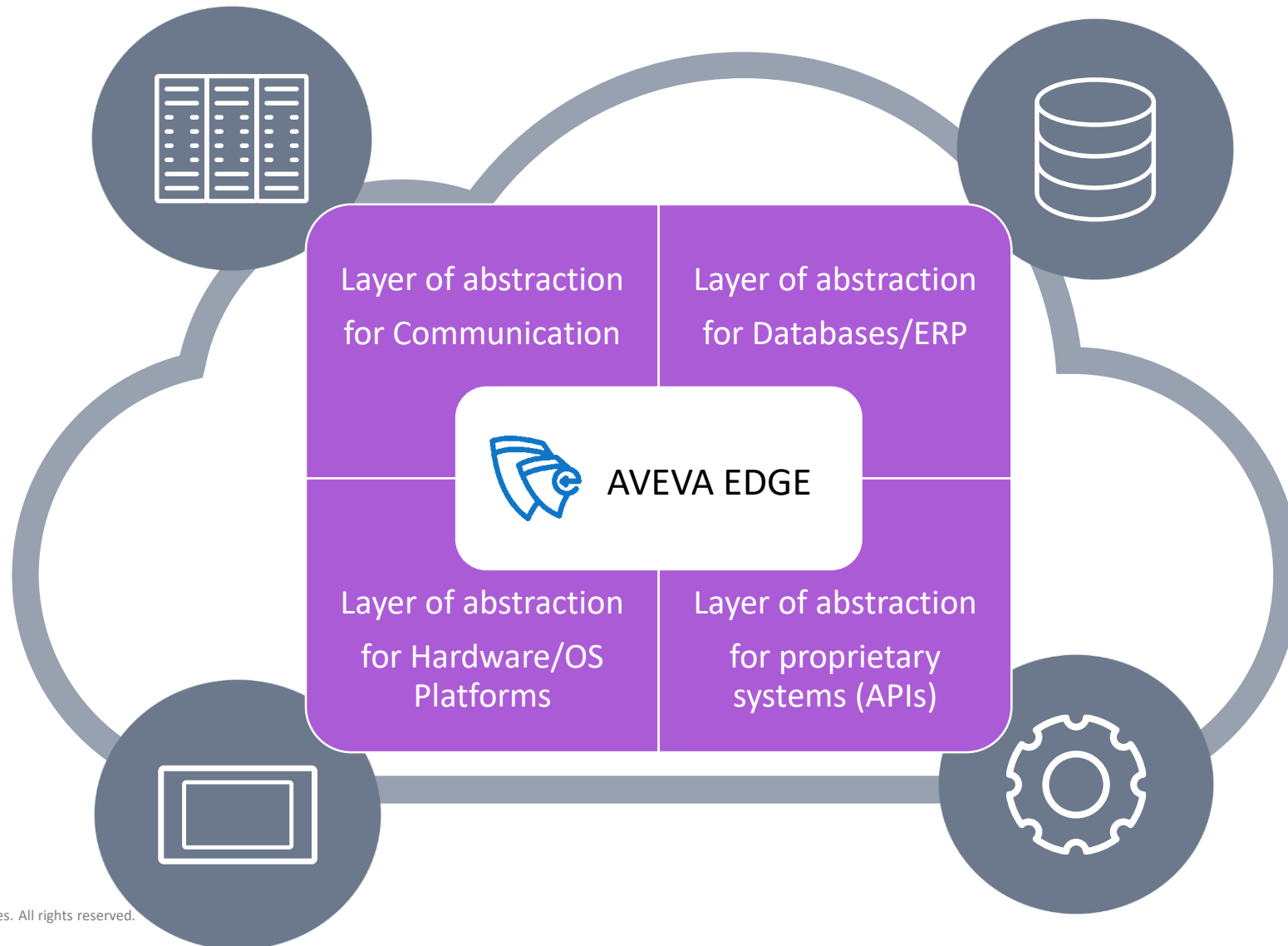
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Portability

Develop once, deploy anywhere

DEVELOPMENT (IDE)

AVEVA Edge
STUDIO

Windows

- Scalable in functionality
- Scalable in footprint (support for embedded devices)
- Scalable in platforms (hardware-agnostic)

RUNTIME EDITIONS

AVEVA Edge
SCADA

Windows

AVEVA Edge
Embedded HMI

Windows IoT

AVEVA Edge
Compact HMI

Windows Embedded Compact

AVEVA Edge
IoT View

Linux

AVEVA
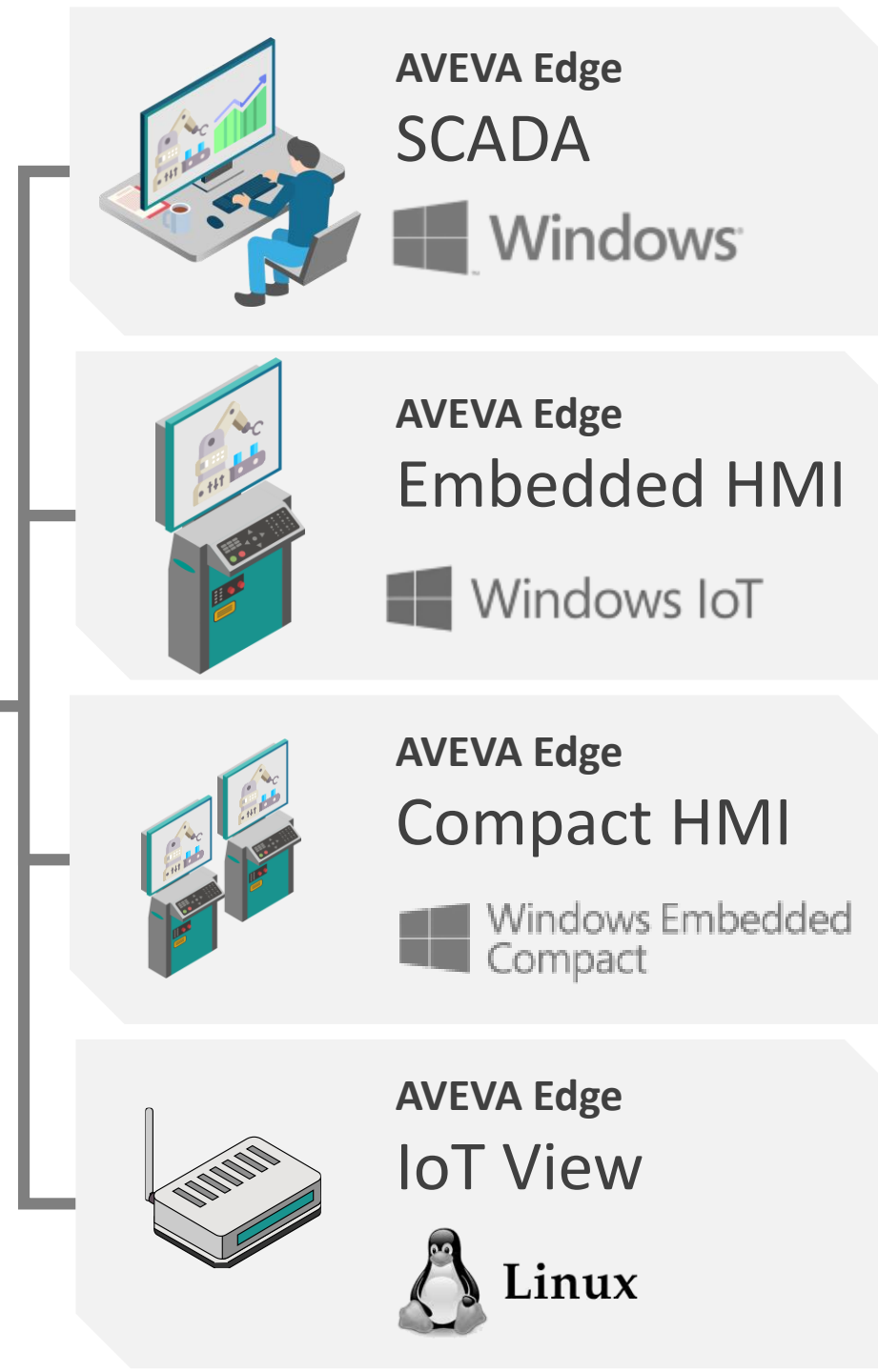
Mobility

Native Thin Clients

- **Secure**: Native secure connection with built-in encryption and authentication

- **Portable**: Access information for PCs, Tablets, Smart Phones, and wearable devices

- **Flexible**: Consume information from Web Browsers or dedicated Apps (AVEVA Mobile Access)

- **Customizable**: Custom user interface for each persona, based on their roles (lenses)

- **Scalable**: Auto screen scaling for different screen sizes and orientations

- **Interoperable**: Connectivity directly to Edge devices (e.g.: intranet WiFi - LAN) as well as to the cloud-based system (internet - WAN)

Mobile Access Thin Client

- Plug-in free
- HTML5 interface
- Platform agnostic
- Multi-use devices

Secure Viewer Thin Client

- Ability to prevent operator from closing or switching from the application.
- Dedicated devices (runtime-line user experience)

AV≡VA

Interoperability

OT+IT native integration

Native built-in drivers (connectors) for 100+ protocols

HTTP/HTTPS REST

Cloud and IT Integration
Email, data, and page interface from mobile devices

Mobile Access and Web Solution
Access to the system from anywhere using a single browser

Plant Floor Integration
Schneider-Electric, OMRON, GE, Allen Bradley , Siemens, Modbus, Profibus, DeviceNet, Beckhoff, MQTT Sparkplug B, OPC UA/DA/XML, and many others...

Client Stations
Redundancy
Data Exchange in Real-Time
Third-Party Systems
Thin Clients

Enterprise
Excel, Access , Oracle , MySQL, Sybase SQL Server, SQL Azure, AVEVA Historian, AVEVA Insight, AVEVA Integration Studio, OSI PI and many others...

Open Architecture
System Integration
Product Customization

- Web (HTML & XML)
- OPC UA, DA, .NET, XML
- TCP/IP OPC Server Gateway
- Over 150 Protocols (Drivers)
- XML ODBC/ADO DDE
- Driver & Database API

AVEVA

Unique, state of art Database Integration

Patented solution

- Easy configuration, not requiring scripts

- Native integration with:

  - AVEVA Historian on premises

  - AVEVA Insight on the cloud

  - Any SQL Relational Database

- Native:

  - Store-and-forward configuration

  - Redundant configuration

  - Historization of Process Data (Trend), Alarm notifications, and Process Events

- Support for third-party providers OLE-DB, ADO.NET, ADO, and ODBC

AVEVA Connect

AVEVA Insight

Microsoft® SQL Server®

ORACLE®

PostgreSQL

MySQL™

AVEVA

AVEVA Edge Management

Cloud-based edge management platform for provisioning of containerized solutions

IoT Smart Sensors

AVEVA Edge
SCADA
Windows

AVEVA Edge
IoT View
Linux
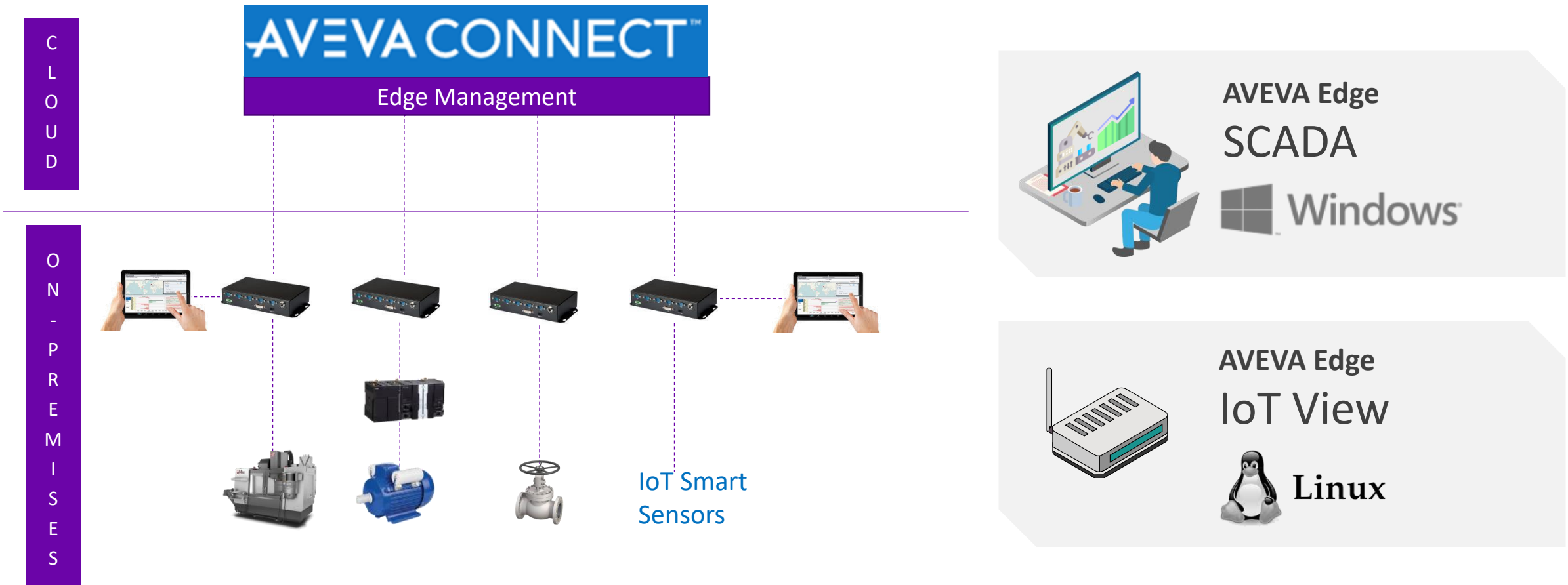
*Available with AVEVA Flex Subscription

AVEVA

Native Integration with System Platform

Edge to Enterprise solution made easy

Unified Operation Center (UOC)
Control Room

Enterprise SCADA

AVEVA System Platform

On Premise
Asset Level

AVEVA Edge

AVEVA Edge

AVEVA Edge

AVEVA Edge

AVEVA Edge

AVEVA Edge

- Seamless integrated development environment

- Support for Industrial Graphics and Galaxy Repository

- Automatic point mapping

- Event-driven communication (VTQ)

- Synchronized Alarm Status

- Native support for AVEVA Historian

- Remote Management and Deployment

- Native ITMEViewApp object for System Platform, MQTT Sparkplug B and/or OPC UA integration options

AVEVA

Import Wizards

Reduces drastically engineering cost to modernize projects with AVEVA Edge

Rockwell®
FactoryTalk™ ME/SE

Rockwell®
PanelBuilder32

EATON®
PanelMate

AVEVA Edge

Cost-effective method to modernize leveraging past engineering investments

Licensing

Licensing

Flexible, simple, affordable

AVEVA Edge SCADA — Windows

License Levels
AVEVA Edge UNLIMITED
AVEVA Edge 512K tags
AVEVA Edge 64K tags
AVEVA Edge 32K tags
AVEVA Edge 16K tags
AVEVA Edge 4K tags
AVEVA Edge 1.5K tags
AVEVA Edge 300 tags
AVEVA Edge 150 tags

AVEVA Edge Embedded HMI — Windows IoT

AVEVA Edge Compact HMI — Windows Embedded Compact

AVEVA Edge IoT View — Linux
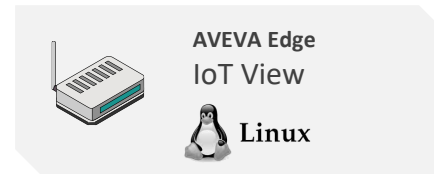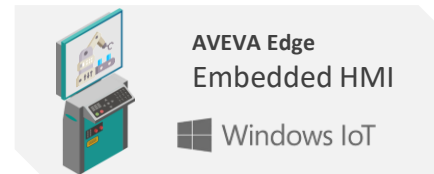
License Levels
AVEVA Edge UNLIMITED (*)
AVEVA Edge 4K tags
AVEVA Edge 1.5K tags
AVEVA Edge 300 tags
AVEVA Edge 150 tags

- All features available in any license (i.e.: license does not restrict features)

- Any license supports at least one concurrent Thin Client. Additional Thin Clients available for purchased individually

- UNLIMITED versions provide unlimited tags and unlimited Thin Clients (limited by physical constraints)

(*) Available for AVEVA Edge IoT View on AVEVA Flex Subscription

Key takeaways

AVEVA

Key Takeaways

Your success is our success

COMPREHENSIVE AND EASY TO USE

Mature, robust, reliable solution with native interfaces and tools to provide a high level of productivity

FLEXIBLE AND OPEN

Native Portfolio Integration and support to standards and extensibility for 3rd-party system integration.

SUSTAINABLE AND AFFORDABLE

Continuously evolving with flexible commercial models that suit your needs (CAPEX or OPEX).

AVEVA

This presentation may include predictions, estimates, intentions, beliefs and other statements that are or may be construed as being forward-looking. While these forward-looking statements represent our current judgment on what the future holds, they are subject to risks and uncertainties that could result in actual outcomes differing materially from those projected in these statements. No statement contained herein constitutes a commitment by AVEVA to perform any particular action or to deliver any particular product or product features. Readers are cautioned not to place undue reliance on these forward-looking statements, which reflect our opinions only as of the date of this presentation.

The Company shall not be obliged to disclose any revision to these forward-looking statements to reflect events or circumstances occurring after the date on which they are made or to reflect the occurrence of future events.

AVEVA

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ABOUT AVEVA

AVEVA is a global leader in engineering and industrial software driving digital transformation across the entire asset and operational life cycle of capital-intensive industries.

The company's engineering, planning and operations, asset performance, and monitoring and control solutions deliver proven results to over 16,000 customers across the globe. Its customers are supported by the largest industrial software ecosystem, including 4,200 partners and 5,700 certified developers. AVEVA is headquartered in Cambridge, UK, with over 4,400 employees at 80 locations in over 40 countries.

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