

# AVEVA's HMI/SCADA 2020 R2 Release Collection

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## 1. What is the product?

We are pleased to announce the release of AVEVA's HMI/SCADA 2020 R2 collection of software. This 2020 R2 release ushers in a new industrial operations experience harnessing the power of the cloud, web, and mobile apps enabling unified operations and connected workers!

The 2020 R2 release builds upon AVEVA's approach of enabling operations with an Edge to Enterprise strategy. This strategy is not based on individual products, but the greater sum of our entire portfolio – a single line of sight to better understand the entire business and achieve a new level of unified operations offering standardization, remote work, and collaboration to drive real-time decision-making and optimization.

Edge to Enterprise is the world's first 'portfolio as a service' go-to-market strategy in the industry that recognizes customers need to scale uniquely and often differ in their digital maturity. AVEVA is the only industrial software supplier capable of offering a unified operations vision from Edge to Enterprise, where customers receive the flexibility to mix and match solutions for a highly comprehensive and scalable solution.

## 2. What products are included in this release?

- AVEVA™ System Platform 2020 R2
- AVEVA™ InTouch 2020 R2
- AVEVA™ Edge 2020 R2
- AVEVA™ Historian 2020 R2
- AVEVA™ Historian Client 2020 R2
- AVEVA™ Communication Drivers 2020 R2
- AVEVA™ Integration Studio (for Cloud Storage)

### 3. What's new in this release?

#### AVEVA™ Integration Studio

- **Cloud Storage and Management of Industrial Graphics**  
Share and collaborate on Industrial Graphics between projects and developers using Integration Studio for cloud storage.

#### AVEVA™ System Platform 2020 R2

- **Layouts Can Be Linked as Asset Content**  
Link a layout residing in the Graphic Toolbox to an asset or template and have it participate in auto-fill activities when the associated asset comes into focus.
- **Layouts Support Owning Object**  
A layout's owning object can be set and it will auto-fill based on the owning object's content.
- **Leverage Multiple Galaxy Style Libraries**  
Create and manage multiple Galaxy Style Libraries and switch between them at runtime.
- **Role-based Navigation Model**  
Let the navigation model adapt to reshape based on the logged-on user's assigned roles.
- **Dynamic External Content**  
External content objects now support expressions enabling the dynamic determination of content at runtime.
- **Layout Background**  
Specify a background image and/or color that will span an entire Layout.
- **Alias Name as Read-only Attribute**  
The alias name used for navigation is now a full attribute that can be referenced in runtime.
- **New Graphic Repeater OMI App**  
Enables the visual representation of data using Industrial Graphics. A selected Industrial graphic is repeated multiple times with custom data injected into each instance. The graphics can also be sorted into lists or grids.
- **Map OMI App Enhancements**  
Now supports boundary configuration, as well as Baidu as a map provider.

- **PLC Viewer OMI App Enhancements**  
Additional PLC languages and viewing options have been added, plus support for Schneider Electric's Unity Pro and EcoStruxure Control Expert.
- **Web Widgets**  
Import Web widgets and place them on panes and allow interaction with properties.
- **Subscription-based Platform Communications**  
Platform subscriptions are dynamically built as required to minimize inter-platform communication.
- **Flex License Mode Configuration**  
Flex license mode configuration has been enhanced.
- **Licensing Improvements**  
Galaxy repository keeps retrying license acquisition after failing to obtain a license or losing an acquired license.

## **AVEVA™ InTouch 2020 R2**

- **HARDENING WEB SECURITY**
  - **Web Client Reverse Proxy Support for Secure Web Access**  
Use any 3rd party reverse proxy to access Web Client from outside the control network.
  - **Web Client integration with AVEVA Identity Manager (AIM)**  
Web Client is integrated with AVEVA Identity Manager. You can manage user authentication from a central location.
- **PERFORMANCE IMPROVEMENT & USER USABILITY**
  - **Web Client Per-User Memory Tags**  
Configure any InTouch Memory tag to have a value per user in Web Client. This drastically improves the usability of the web client to support multiple users to view the same InTouch application concurrently.
  - **Web Client Performance Improvement**  
Significant improvement in Web graphics rendering time and memory space.
  - **Anonymous Connections with IFrame Connections**

Simplifies access to Industrial Graphics embedded 3rd portals and websites without entering user credentials for specified graphics. This greatly improves usability when using read-only access to Industrial Graphics in 3rd party portals and websites.

- **SQL Data Grid Support in Web Client**

A SQLDataGrid control in an InTouch application is transparently replaced by an HTML5 Web Widget based equivalent using the same configuration for display to render in the Web Client. Seamless without any re-engineering.

- **EMPOWERING CONNECTED WORKERS BEYOND HMI**

- **OPC UA Server**

Provide real-time process tags data to enterprise and business systems using industry standards.

- **Mobile App Support for Different Web Servers**

The AVEVA Mobile Operations app can now be used to connect the web servers of the visualization products in our portfolio: InTouch Web Server, Edge MA, PlantSCADA Web Server.

- **QRCode Scanner Web Widget**

Use a mobile or tablet camera to scan a QR Code from InTouch and Web Client to dynamically bring up an HMI display or faceplate, operator work instruction or any other contextual information.

- **Web Browser Web Widget**

Google Chromium based browser allows you to access modern websites from InTouch and Web Client.

**[NOTE 1]** Web Widgets work in both InTouch WindowViewer and the InTouch Web Client.

**[NOTE 2]** Both the Web Client and Mobile app support multiple language switching, allowing users to access an application in their preferred language.

## **AVEVA™ Edge 2020 R2**

- **INDUSTRIAL GRAPHICS ENHANCEMENTS**

- **Style Management support**

Create and modify styles for Industrial Graphics, including importing xml style libraries.

- **Tag Browser**

Use the included tag browser for Industrial Graphics to shorten development time.

- **Symbol Export**  
Export Industrial Graphics as .aaPKG files to be shared with other products within the AVEVA portfolio such as System Platform and InTouch.
- **Prevent Import Overwrite**  
Choose whether or not to overwrite imported symbols with new options in the interface.
- **Improved Edge Arrays Support**  
You can now use Zero as index (TagName[0]), and Arrays of Classes (TagName[1]).
- **MOBILE ACCESS IMPROVEMENTS**
  - **Trend Support for Indirect Tags**  
Mobile Access users can now use indirect Tags in Trend
  - **Trend Duration and start/end tags**  
Use tags for times for Trends and duration in Mobile Access
- **AVEVA EDGE IOTVIEW ENHANCEMENTS**
  - **Performance Improvements**  
Take advantage of overall performance improvements and stability
  - **Support Proprietary Files for Trends**  
Use Proprietary files for trends (not all types supported)
  - **Support for Alarms with Proprietary Files and Database**  
Choose “proprietary” and “database” History Format for Alarms (not all types supported)
- **AVEVA EDGE GENERAL PERFORMANCE ENHANCEMENTS**
  - **Open() with Position and at Cursor Location**  
Use the Open() function and specify the location parameters to use the format Open("Main", 1) to open a screen at the current cursor location
  - **Database Functions**  
Mobile Access users will see performance improvements when using database functions
  - **File Functions**  
Mobile Access will see performance improvements when using file functions

- **Export Project as .ZIP**

In the file menu users will find a new Export as zip option. This will work for general archive of the project, as well as for AVEVA Edge Management

**[NOTE]** Please review the detailed Edge 2020 R2 Sales Brief for additional information specific to the Edge 2020 R2 release.

## **AVEVA™ Historian & AVEVA™ Historian Client 2020 R2**

- **Simple Unit Conversion**

Simple unit conversion in Historian Client tools, SQL and REST (e.g. “liters/second” to “liters/minute” or “cubic meters/day”). It’s easy to convert engineering units that tag values are displayed in the client tools with ~600 predefined catalog units and the possibility of adding custom units easily.

- **Enhanced Excel add-in (64-bit)**

Batch-oriented summary statistics: Build reports on Excel with the capabilities of slicing by using an event ID, batch number, or other value change (aka “slice by”) to get summary statistics  
Dynamically refreshing custom functions

- **Browser-based Historical Alarm Grid**

New alarm grid on AVEVA Historian Client Web that can be easily filtered based on the model view or the AVEVA InTouch HMI alarm groups.

- **Alarm History**

Expanding on the alarming integration features, now it’s possible to integrate alarm history with historical overlays directly from AVEVA InTouch HMI with simple configuration, as an alternative to AlarmDB Logger.

- **Data Replication Across Satellite Connections**

Added support to data replication between historians across high-latency networks (multi-second ping times across network)

## **AVEVA™ Communication Drivers 2020 R2**

- **Drivers Available for Installation**

AVEVA Communication Drivers have been added to the installation media with the 2020 R2 release. Adding the drivers into the media facilitates start-up of projects and ensures customers can more easily leverage our communication offerings. The drivers are directly installable as

optional selections from the 2020 R2 installation media, either as part of the communication drivers pack, or as a customized download.

- **OPC UA Client Tag Prefix Enhancement**

Allows adding a prefix syntax to an alias set to simplify referencing of addresses that would otherwise be lengthy due to OPC UA syntax.

- **AVEVA EDGE SPECIFIC**

- **MQTT**

An updated MQTT driver supports the Eclipse Foundation Sparkplug-B specification in both Windows and Linux environments. The driver has also been enhanced to perform publishing optimization of the payload based on data changes and support store and forward when there is a network disconnect to the broker.

- **TI500**

Driver support for the Linux environment.

#### 4. Where to go for more information?

- Software and readme materials on the Knowledge and Support Center [Product Hub](#)
- [Website – AVEVA System Platform & OMI](#)
- [Website – AVEVA InTouch](#)
- [Website – AVEVA Edge](#)
- [Website – AVEVA Historian and Historian Client](#)
- [What's New Blogs](#)
- [What's New Video – AVEVA System Platform 2020 R2](#)
- [Release Video – Visualizing Data with the Graphic Repeater OMI App](#)
- [Release Video – AVEVA PLC Viewer OMI App](#)