

# Release Notes

## FactoryTalk Analytics VisionAI 1.00.00 Release

---

Release - Sept 2024

Catalog Number FactoryTalk Analytics VisionAI

These release notes describe version information for FactoryTalk Analytics VisionAI, version 1.00.00 (released 9/2024).

---

### Contents

- [Overview](#)
- [Requirements](#)
- [Features](#)
- [Application Notes](#)
- [Known Issues](#)
- [Contacting Customer Support](#)

---

### Overview

FactoryTalk Analytics VisionAI is a quality inspection platform for manufacturing. It provides AI vision that identifies and classifies defects, delivering actionable insights used to improve quality and maximize yield.

FactoryTalk Analytics VisionAI will operate as part of FactoryTalk Hub and be available as a cloud-based Software as a Service (SaaS). The cloud software enables powerful features such as remote manageability, embedded analytics, large AI model management, quality events and notifications, and daily quality reports. There is also an edge application that runs on an industrial PC and consists of the vision tools and AI models used for real time defect detection. The edge software also manages communication with the inspection hardware (camera, lights, trigger, PLCs, etc.).

### Requirements

This release has the following requirements.

Internet browser: Use the Chrome browser to run FactoryTalk Analytics VisionAI. The latest version of the Chrome browser is recommended.

### Features

This release includes the following system features.

#### Inspect

- The sites, lines, and stations architecture enables true enterprise quality management. Manufacturers with multiple inspection stations across different product lines, made in different facilities, can operate and manage their quality system from a unified interface.
- The Overview window allows users to view the live camera feed and review current batch metrics of total number of items processed, failure count, and failure rate.
- The Timeline window allows users to see how the current inspection is performing over time and quickly identify and review failures.

- The Tools window allows users to review metrics on currently deployed tools to evaluate efficacy or spot underperforming tools in need of adjustment or additional machine learning (ML) model training.

## Manage Stations

- The Image window allows users to adjust camera exposure and gamma settings to ensure the camera sensor is receiving enough light to capture images at the desired frame rate.
- The Tools window allows users to define the area of interest (AOI) and choose from a variety of software tools to perform the inspection.
  - The Anomaly tool allows an inspector to create an ML Model that will identify defects in an image where defects are not well known or occur infrequently.
  - The Barcode tool allows an inspector to scan an area for the presence of any type of barcode.
  - The Classify tool allows an inspector to identify and classify products using custom defined labels.
  - The Defect tool allows an inspector to create an ML Model that will identify defects in an image where defects are well known or tend to occur frequently.
  - The Graded Anomaly tool allows an inspector to create an ML Model that will identify defects in an image where defects are not well known or occur infrequently and grade the anomalies by severity.
  - The Text tool allows an inspector to read and verify text utilizing optical character recognition.
- The Training window allows users to label product images. Labeling is done using a unique, no-code workflow that leverages simple mouse clicks or hot keys to indicate pass, fail, uncertain or discard. The labeling gallery is made to be easy to use with features such as batch labeling, smart grouping (unsupervised), and training reports.
- The Settings window allows users to group and correlate multiple images into a composite item.
- The Communication window supports PLC configuration. Users can configure the slots and mappings required natively within the app.

## Deploy

- Trained ML models are deployed from the cloud to the edge system on the production line.

## Analyze

- Users can pinpoint the timing and the proliferation of specific defects using out of the box dashboards. Users can toggle filters (time, station, operator, etc.) to better understand the potential root causes of an issue, without needing to export large sets of data for processing.

## Notify

- Quality events are customizable triggers that users can design for their specific needs. Users can set up events for many scenarios, such as when multiple items fail in a row or when a number of defects appear within a specified time window and send an email or text to the user as a result.

## Administration

- Admins can assign several different roles to users within their organization based on how the individuals will be interacting with the system: Admin, Editor, Operator, Viewer - where Admin and Editor levels have access to train models and change camera settings, and Operator and Viewer levels are restricted to watching the inspections.

## Application Notes

This release has the following application notes.

FactoryTalk Analytics VisionAI simplifies integration of the vision inspection system with the automation system. An add-on profile and add-on instructions are available to ease integration with Rockwell Automation control systems.

The FactoryTalk Analytics VisionAI edge application is supported on the Rockwell Automation ASEM 6300B-JB1 Compact Box PC and the FactoryTalk Analytics VisionAI Industrial AI Workstation.

FactoryTalk Analytics VisionAI supports integration with the following Basler cameras:

- 5MP Color: acA2440-20gc
- 5MP Mono: acA2440-20gm
- 10M Color: acA3800-10gc
- 10M Mono: acA3800-10gm
- 12.2MP Color: acA4024-8gc
- 12.2MP Mono: acA4024-8gm
- 20MP Color: acA5472-5gc
- 20MP Mono: acA5472-5gm

FactoryTalk Analytics VisionAI inspection stations are not dependent on an internet connection to deliver inspection results. In the event of intermittent internet issues, inspections will continue, and operators will view an offline version of the user interface. Upon reconnecting to the internet, data from previously inspected items will be uploaded to the cloud.

## Known Issues

- Role change to 'Service Contributor' should update role in FactoryTalk Analytics VisionAI to operator. Changing role in FactoryTalk Hub will not change the role in FactoryTalk Analytics VisionAI. [SWCISVAI-1]
- FactoryTalk Analytics VisionAI is using FT Hub privileges as baseline while setting User permissions in FactoryTalk Analytics VisionAI. [SWCISVAI-3]

## Contacting Customer Support

### Contact technical support

- Submit a Question (SAQ) on the Rockwell Software Support help portal: <http://rockwellautomation.custhelp.com>
- Call us at 1-(440) 646-3434

We are interested in your feedback and suggestions. FactoryTalk Analytics VisionAI is the solution of hundreds of suggestions and requests from our existing customers. We are sure that it will inspire many more and that you will find ways to use the solution that are outside of our scenario planning. Let us know what features will make it easier and more powerful and we will try to get them into the next version.

This page is intentionally left blank