

Introduction

Ignition was designed to be a powerful industrial application platform, built from the ground up to support extensibility through a modular architecture. In fact, nearly all of the commercial pieces associated with Ignition, such as SQLBridge, Vision, and OPC-UA, are modules built with the same SDK that you have in your hands.

This guide was written primarily for 7.8 and 7.9 module development. There are new features and capabilities added in Ignition 8.0, and documentation is ongoing. Be sure to compile against Java 11 and update your artifacts to reference the new APIs.

As a platform, Ignition provides a variety of services that dramatically reduce the time and effort required to develop top-quality industrial applications. Instead of worrying about the OPC specification, or how to efficiently handle database connection pooling, you can focus on achieving your main goals. Using the SDK, you'll be developing *modules* that are loaded into the platform and given access to everything it can do. In addition to using these services, in many cases modules can extend them to provide additional implementations, such as adding a new way to authenticate users. Modules can provide new components for Vision screens, create new workspaces in the designer, and add drivers that expose data through OPC-UA. In short, if you can dream it, it's likely the Ignition platform can help you do it.

This document is written to be a friendly reference guide to the platform, and to provide all of the information you need to get started with the SDK. Some parts of the SDK might not be covered as well as they could be, and we always encourage feedback on this point, though when coupled with the technical documentation (the *JavaDocs*) everything should at least be represented. As questions come up, or you come up with ideas for ways the platform could be improved, we encourage you to contact us, preferably through the Module SDK Forum on our website or the comments section right here.

We hope that you will find programming for Ignition as exciting and fun as we've found the process of building it, and look forward to seeing the great things you create with the SDK!

Happy programming,

The Inductive Automation Development Team

Get technical in the API Javadocs!

In addition to this guide, another crucial piece of information for developers working with the SDK is the JavaDocs for the API. That library, compiled off of the source code, provides information about all of the classes and interfaces in the API.

The information in this document will often refer to code objects that will be further documented in that system. Javadocs are viewable on the web by following these links:

- [Ignition 7.8](#)
- [Ignition 7.9](#)
- [Ignition 8.0](#)

In addition, example modules and additional resources are provided at the Inductive Automation's [Github page](#).