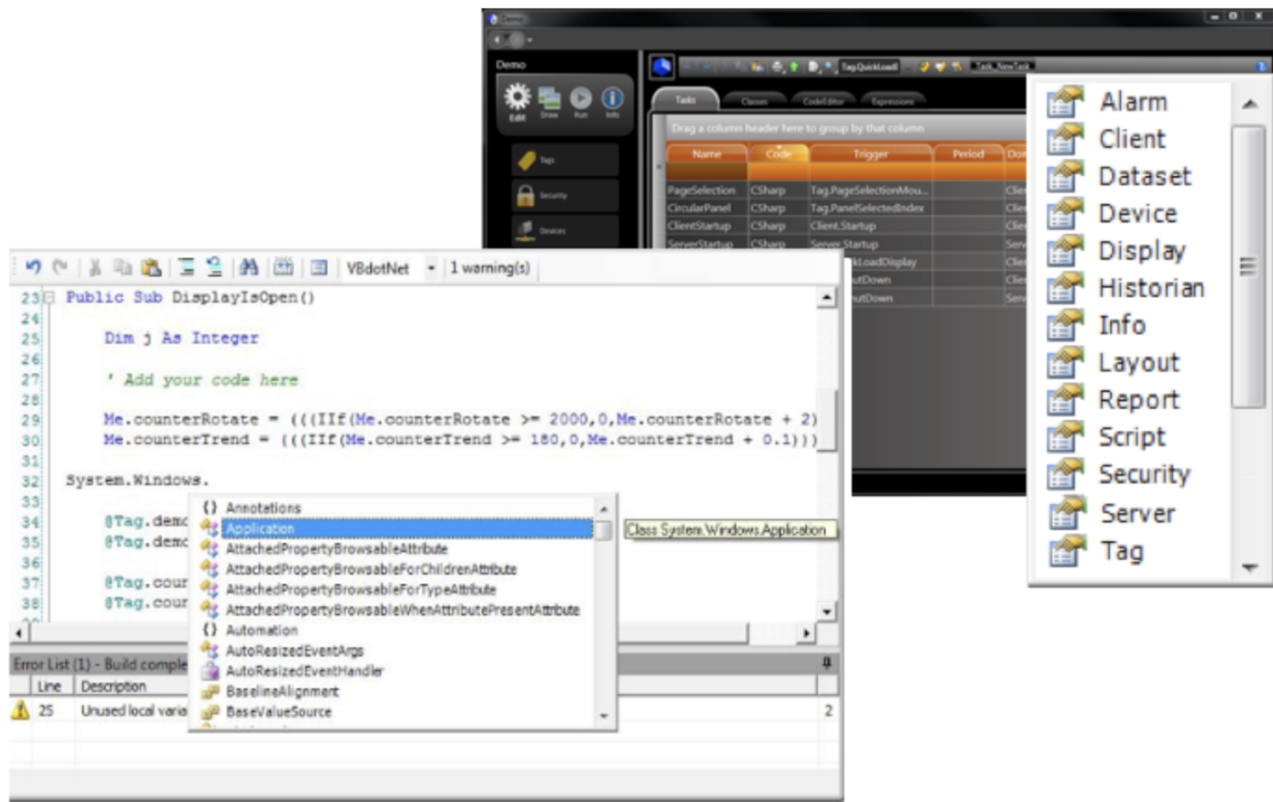


Scripts and .NET



.NET to the Core

Built-in Code Editor

FactoryStudio includes an integrated script editor for developers to create custom functionality for their application. The editor provides a powerful set of tools to help you test and evaluate your scripts. Debugging tools include assigning breakpoints, stepping into code, stepping over code, executing line by line, and watching values of objects change with each step.

Scripts are executed natively as managed code within the .NET framework, meaning you cannot create a script that would inadvertently cause the system to shut down. This provides a greater level of security and up-time for your application.

Server and Client Domains

Using the **FactoryStudio** script editor, you can create scripts that run on the server for a global reach, or they can run on the client side for a local reach.

Tasks, Classes and Expressions

You can create Tasks, .NET classes, and function libraries. In some cases, it may be more efficient or desirable to create one-line expressions, rather than full methods. For that purpose, **FactoryStudio** provides an expression editor that allows access to all .NET operands and classes.

Object Orientation, Project Elements

All project elements, including Tags, Datasets, Alarms, devices, and a status of communications, are immediately accessible via IntelliSense. Since they are native .NET objects, no temporary tag calls are required. With a single operation, you can move data from Tags to .NET external Data-tables.

C#, VB.NET and Code Translation

FactoryStudio includes industry standard languages of C# and VB.NET. Engineers no longer have to suffer through using old proprietary, single-threaded, or interpreted scripting editors. Translate your code between C# and VB.NET anytime to better leverage your expertise.

Events and Scheduling

Tasks and expressions can be triggered to execute by date, time, condition, calendar, tag change, or interval. Execution is distributed among processes, each running in its own application domain and isolated from the real-time database, for maximum system security and performance.

**Complete debugging tools**

Online project changes and configuration can be done while running and debugging.