Scripts and .NET
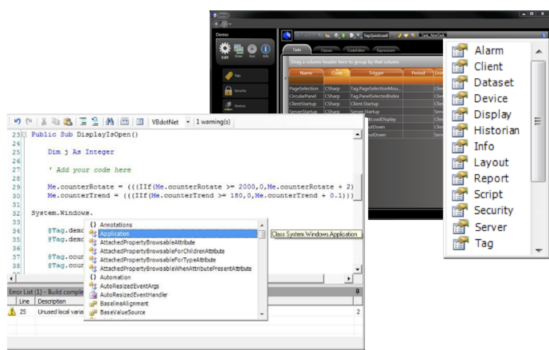
.NET to the Core

Built-in Code Editor

FactoryStudio includes an integrated script editor for developers to create custom functionality for the 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 watch values of objects changing 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 execute on the server for global reach, or they can execute on the client side for 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 allowing access to all .NET operands and classes.

Object Orientation, Project Elements

All project elements, including Tags, Datasets, Alarms, devices and status of communications are immediately accessible via IntelliSense, as they are native .NET objects, no temporary tags 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 so 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, isolated from the real- time database, for maximum system security and performance.

> **Complete debugging tools**
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> Online project changes and configuration can be done while running and debugging.