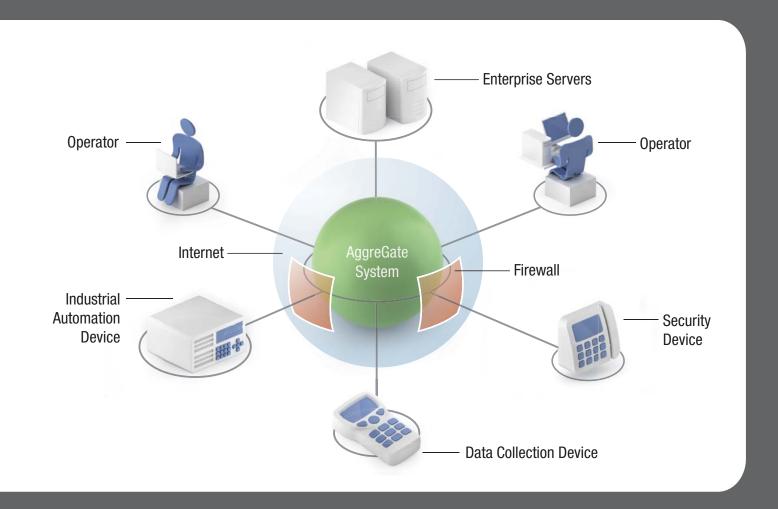
# **∆**ggreGate™

## A Complete Device Management Solution





So, you're working on a new hardware device that is going to take the market by storm. Perhaps it's a cutting-edge industrial controller, the newest home automation system, or possibly the latest in security technology. Or maybe you already have a system, and are looking for a way to remotely manage and expand it.

Whatever your project is, most of your time is probably spent on hardware and firmware... but what about the back-end software? This often-underestimated component of the development process may turn out to be the most expensive and time consuming part of your project.

Not to worry! Tibbo's AggreGate is here to help. Back-end software development may be expensive, but at the same time, many of its elements repeat from project to project. Tibbo has identified these common elements – managing connections, configuring devices, logging events, administering the database and users, etc. – and then combined them into one patent-pending product. By providing all of the generic facilities you need, AggreGate lets you concentrate on the unique features of your system. And, unlike some of the competition, AggreGate is a ready-to-use software bundle which you can download and test right now.

Being a flexible system, AggreGate can be adopted to work with practically any kind of hardware, but is especially easy to use with Tibbo's own BASIC-programmable devices and controllers. Free Tibbo BASIC libraries are available for easy AggreGate integration.

With AggreGate, you now have a complete suite of rapid development tools at your disposal. From our intelligent modules that simplify hardware design, to faster firmware development with Tibbo BASIC, to distributed management with AggreGate - we've got you covered.

Try it now! http://aggregate.tibbo.com

# വggreGate™

## Monitor and control a distributed network of intelligent devices





### **Device Connectivity Features:**

- Works with Tibbo's programmable modules and controllers. A comprehensive open-source Tibbo BASIC library is available.
- Connects with almost any device via programmable protocol converters.
- Many standard protocols are directly supported, including SNMP, Modbus and OPC.
- New devices may be also connected using custom software device drivers.
- · Automatic discovery of devices.
- Device data caching and synchronization.

### **Device Management Features:**

- Hierarchical multi-user environment with access control permissions.
- A secure GUI client and web interface for user interaction with the system.
- Automatic "learning" of device settings by the server.
- Remote configuration and modification of device settings.
- Real-time execution of device operations.
- Real-time monitoring of device status and events.
- Support for event acknowledgments by system operators (including e-mail acknowledgements).
- Customizable alerts (SMS, sound, popup messages, e-mail).
- Alert-to-action bindings allow to execute corrective actions when alert is raised.
- Advanced reporting facility, includes embedded editor, printing and exporting in different formats.
- Various charts for tracking real-time and historical values.
- Integrated SQL-based query language for data mining and batch configuration.
- Job scheduler for periodic execution of device-related or system actions.

- Intelligent replication of configuration, even between dissimilar devices.
- Interactive guides help new users become familiar with basic system operation.

#### **Development & Integration Features:**

- Modular, scalable system architecture.
- New data processing/presentation modules may be installed into server core as plug-ins.
- Integrated User Interface Builder for creating custom forms, widgets and dynamic maps.
- Expression language for flexible alert triggering and event filtering.
- · Pure-Java scripts for implementing custom actions.
- Support for multiple time zones and automatic time conversion.
- Embedded Web-service allows integration with third-party enterprise applications.
- Java and .NET open-source API's are available for integration with the customer's enterprise systems.
- Flexible customization and branding options, support for localization and user-provided graphical and text resources.
- Java-based architecture, key system components work under most modern operating systems.
- Compatible with most present-day database servers. An embedded database is bundled with the server to ensure fast deployment.
- Data export/import to XML, HTML, CSV, XLS, PDF, RTF, and more.
- Link Service routes data between devices hidden from each other by firewalls. Dynamic DNS Service and HTTP Proxy Service also available.

#### Tibbo Technology

tel: +886-2-26925443 fax: +886-2-26923139 9F-3, No.31, Lane 169, Kang-Ning St., Hsi-Chih, Taipei, Taiwan www.tibbo.com sales@tibbo.com