RSView32 Release 6.0
Expanding
the World of MMI

by Jeff Storley, Product Marketing Manager

The advanced feature set of Rockwell Software's leading-edge MMI package, **RS**View32™ software, is now extended with release 6.0. By augmenting the most technologically advanced MMI software in the industry, **RS**View32 release 6.0 gives you the tools you need to build winning solutions in today's highly competitive world. This release introduces significant enhancements to its Visual Basic® for Applications (VBA) scripting, communications, alarming, graphics, and data logging.

Extending the Reach of Your RSView32 Projects

What's New with VBA Scripting?

RSView32 led the way in the marketplace by being the first MMI in the world to use Microsoft® Visual Basic technology for scripting. VBA and the **RS**View32 Object Model are now fully integrated into the **RS**View32 release 6.0 core product. With VBA and the **RS**View32 Object Model, you can create scripts to execute **RS**View32 commands, create tags, and access and share data with object models in other software products, such as Microsoft Access™ and Microsoft Excel.

Enhancements to the RSView32 Object Model

New Folder, Channel, and Node objects, along with Folders, Channels, and Nodes collections, allow you to customize communication using VBA. Several existing objects have enhanced properties, methods, and events. In particular, the Tag object and Tags collection now include event notification. With this enhancement, a VBA script can react to a change in

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About OPC

Based on Microsoft's Component object Model (COM) standard, OPC provides a transparent, standard protocol for communication between different devices on any network. OPC was developed specifically for the automation industry to provide a more robust and more efficient alternative to Dynamic Data Exchange (DDE) communication. Rockwell Software is one of the founders of and a major participant in the POC task force.

Did You Know?
The acronym "OPC" actually involves two acronyms: Object Linking and Embedding **(OLE)** and OLE for Process Control **(OPC)**.

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a tag's value, independent of events in **RS**View32. For more enhancements, see the **RS**View32 release 6.0 Object Model diagram on the next page.
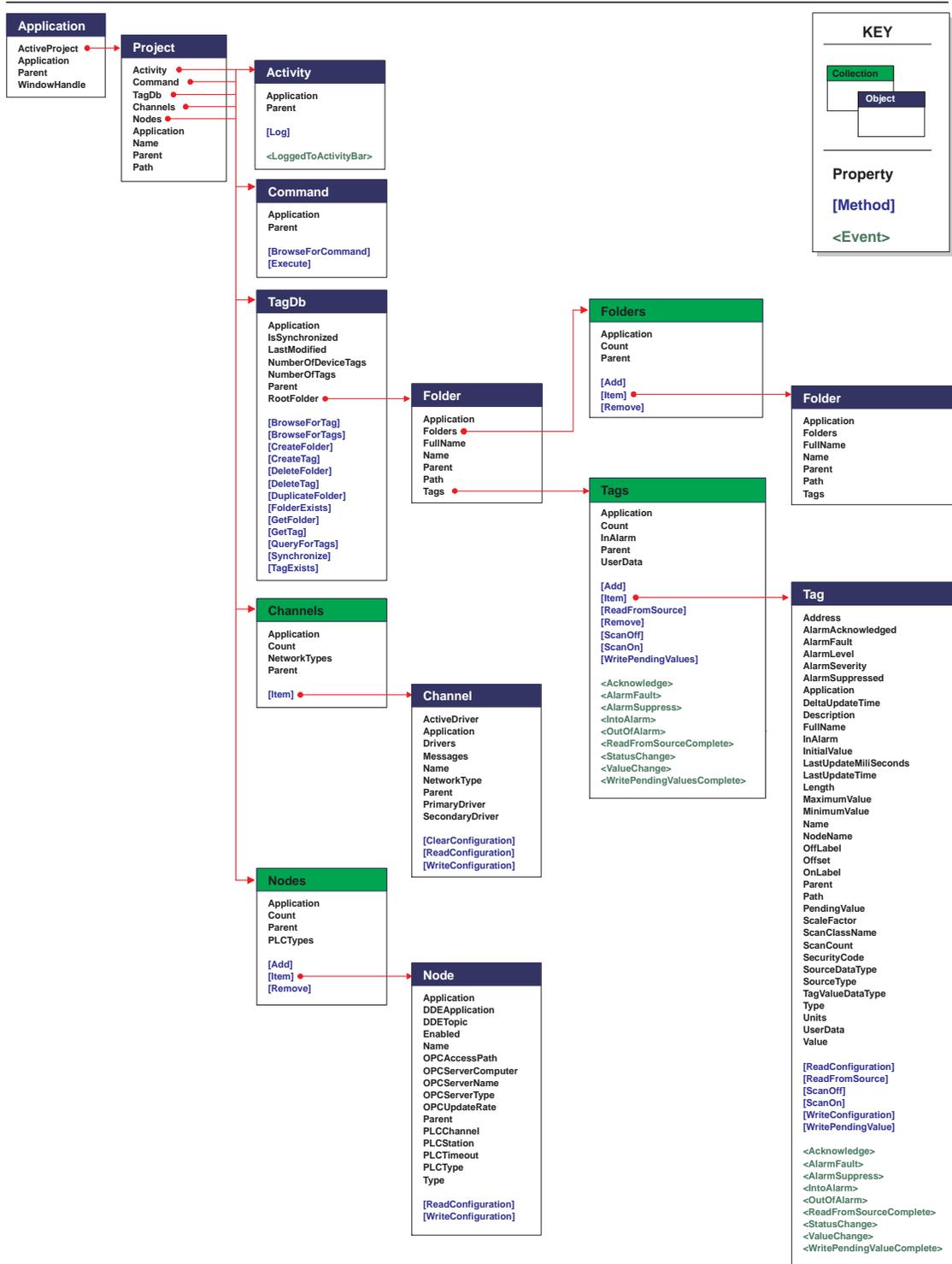
Expanding Your Communication Options

RSView32 release 6.0 includes the following enhancements to communications and tags:

▶ **70,000-tag option: RS**View32 is now available with up to 70,000 device tags.

▶ **SoftLogix5 extended support:** Now you can reference extended addresses in SoftLogix 5 "Soft PLCs®".

▶ **RSLogix 5 support enhancement:** This enhancement lets you import symbols from an **RS**Logix 5 processor database.

▶ **OPC support:** This enhancement lets you communicate with non Allen-Bradley devices by configuring **RS**View32 as an OPC client. You can also use OPC to set up peer-to-peer communications and exchange data between **RS**View32 machines.

▶ **Status information for DDE and OPC Client communications:** Previously available only for Direct Driver communication, this feature provides important troubleshooting information during project development, system integration, and project runtime. **RS**View32 software can trap and log to the activity bar or activity log any DDE or OPC Client errors.

Enhancing Your Alarm Options

Release 6.0 provides these advanced customized alarm enhancements for runtime operators:

RSView32 6.0 Object Model

KEY

Collection

Object

Property

[Method]

<Event>

Application
- ActiveProject
- Application
- Parent
- WindowHandle

Project
- Activity
- Command
- TagDb
- Channels
- Nodes
- Application
- Name
- Parent
- Path

Activity
- Application
- Parent

[Log]

<LoggedToActivityBar>

Command
- Application
- Parent

[BrowseForCommand]
[Execute]

TagDb
- Application
- IsSynchronized
- LastModified
- NumberOfDeviceTags
- NumberOfTags
- Parent
- RootFolder

[BrowseForTag]
[BrowseForTags]
[CreateFolder]
[CreateTag]
[DeleteFolder]
[DeleteTag]
[DuplicateFolder]
[FolderExists]
[GetFolder]
[GetTag]
[QueryForTags]
[Synchronize]
[TagExists]

Channels
- Application
- Count
- NetworkTypes
- Parent

[Item]

Channel
- ActiveDriver
- Application
- Drivers
- Messages
- Name
- NetworkType
- Parent
- PrimaryDriver
- SecondaryDriver

[ClearConfiguration]
[ReadConfiguration]
[WriteConfiguration]

Nodes
- Application
- Count
- Parent
- PLCTypes

[Add]
[Item]
[Remove]

Node
- Application
- DDEApplication
- DDETopic
- Enabled
- Name
- OPCAccessPath
- OPCServerComputer
- OPCServerName
- OPCServerType
- OPCUpdateRate
- Parent
- PLCChannel
- PLCStation
- PLCTimeout
- PLCType
- Type

[ReadConfiguration]
[WriteConfiguration]

Folders
- Application
- Count
- Parent

[Add]
[Item]
[Remove]

Folder
- Application
- Folders
- FullName
- Name
- Parent
- Path
- Tags

Folder
- Application
- Folders
- FullName
- Name
- Parent
- Path
- Tags

Tags
- Application
- Count
- InAlarm
- Parent
- UserData

[Add]
[Item]
[ReadFromSource]
[Remove]
[ScanOff]
[ScanOn]
[WritePendingValues]

<Acknowledge>
<AlarmFault>
<AlarmSuppress>
<IntoAlarm>
<OutOfAlarm>
<ReadFromSourceComplete>
<StatusChange>
<ValueChange>
<WritePendingValuesComplete>

Tag
- Address
- AlarmAcknowledged
- AlarmFault
- AlarmLevel
- AlarmSeverity
- AlarmSuppressed
- Application
- DeltaUpdateTime
- Description
- FullName
- InAlarm
- InitialValue
- LastUpdateMiliSeconds
- LastUpdateTime
- Length
- MaximumValue
- MinimumValue
- Name
- NodeName
- OffLabel
- Offset
- OnLabel
- Parent
- Path
- PendingValue
- ScaleFactor
- ScanClassName
- ScanCount
- SecurityCode
- SourceDataType
- SourceType
- TagValueDataType
- Type
- Units
- UserData
- Value

[ReadConfiguration]
[ReadFromSource]
[ScanOff]
[ScanOn]
[WriteConfiguration]
[WritePendingValue]

<Acknowledge>
<AlarmFault>
<AlarmSuppress>
<IntoAlarm>
<OutOfAlarm>
<ReadFromSourceComplete>
<StatusChange>
<ValueChange>
<WritePendingValueComplete>

▶ **Wildcard support for the Alm_In_Alarm expression:** Release 6.0 returns a true value if any specified tags go into alarm, such as Machine*. In addition, wildcard support for the **Alm_AllAcked** expression returns a true value if the alarms for all of the specified tags have been acknowledged by the software.

▶ **Alarm summary object support for blinking colors:** A timer rate lets you use this feature to attract the operator's attention to high-priority alarms.

▶ **Alarm prevention when approaching normal operating range:** As analog values go into alarm and then back out again, the values trigger separate alarms as they cross each threshold. This optional toggle allows you to disable an alarm when a tag value is already in alarm and crosses the out-of-alarm threshold.

Improving Productivity with Enhanced Graphics

To help improve your productivity, **RS**View32 release 6.0 provides the following enhancements to graphics:

▶ **ActiveX Toolbox:** This toolbox allows you to store ActiveX™ objects you frequently use in a customizable toolbox for quick access when creating graphics displays.

▶ **Continuously updating input fields:** To eliminate the need for two graphics objects on the screen for input, such as a numeric display field and a numeric input field, you can configure a single input field that displays the current tag value when you are not using the field for input.

▶ **Two new display types, Replace and On Top:** These help you manage graphic displays at runtime more easily. The **Replace** display type lets you open a new display and automatically close open displays using a single command, so you do not need an Abort command to close a display when another display is opened. The **On Top** display type lets you keep a graphic display, such as a pop-up display, on top of other displays already open on the screen. You

can allow cached displays to remain animated when hidden, using the /ZA parameter with the Display command.

▶ **PrintDisplay command:** This command prints the specified graphics display. If the display is not open, the software loads it first, then prints it.

▶ **On-screen keyboard:** Operators of touch-screen terminals can enter keyboard input without a hardware or software keyboard attached to the terminal.

Customizing Data Logging Paths and File Names

Release 6.0 includes the following enhancements to data logging:

▶ **ODBC database support:** Now you can log **RS**View32 tag data to an Open Database Connectivity (ODBC)-compliant database, such as SQL Server™ or Microsoft Access, as well as to dBASE™ IV narrow or wide formats.

▶ **Alternate paths:** Use alternative paths to log data to a secondary path if the primary path is full or unavailable. You can switch data logging back to the primary path automatically or manually, and you can merge the data from the secondary path to the primary path.

▶ **Long file name support:** This release lets you store data log files with long file names and a user-defined log file identifier string.

▶ **DataLogRenameFile:** This command lets you change the name of log files at runtime. In addition, the **DataLogChangeRate**

command gives you the option of changing the logging rate at runtime.

Enhancing Your Overall Application

Keeping future changes and expansion in mind, you can benefit from **RS**View32 release 6.0 as an enhancement to your entire application.

▶ **Year 2000 compliance: RS**View32 release 6.0 is fully compliant with year 2000 requirements.

▶ **Designed for Windows 95 and Windows NT™ compliance:** Release 6.0 is fully compliant with Microsoft's requirements for using the "Designed for Windows 95/NT" logo.

▶ **International time, date, and number support:** You can internationalize your **RS**View32 project by configuring time, date, and numeric formats to support local conventions.

For More Information

Release 6.0 of **RS**View32 MMI software is scheduled for availability in the second quarter of the 1998 calendar year. If you would like more information about this release , visit the Rockwell Software Web site at www.software.rockwell.com. You may also wish to contact you local distributor or Rockwell Automation sales representative or use the appropriate telephone/fax number at the end of this publication.