Monitor GAP™ is a licensed software service tool that allows service personnel to view and edit runtime values for GAP (Graphical Application Program) generated application software. GAP software is Woodward’s pictures-to-code programming tool. This programming system uses libraries of control objects that are connected together in a graphical format. The final control design is displayed as a group of interconnected blocks that represent the actual functionality of the code running in the control hardware.

Monitor GAP works in parallel with the GAP graphical display and superimposes the actual runtime values on that display. In addition, Monitor GAP can edit variables that have been previously declared as ‘tunable’ in the original GAP design.

The GAP editor includes Monitor GAP within its core structure. As such, Monitor GAP can be activated by authorizing the Monitor license on an existing GAP editor installation.

Monitor GAP runs on a PC and accesses the actual runtime values from an OPC communications server. Some Woodward controls provide an OPC server directly to a TCP/IP network. Most controls communicate over a serial or Ethernet cable with the SOS Servlink OPC Server program that provides the OPC interface on a PC. Data is collected in real time so that the values displayed by Monitor GAP are always current.

Monitor GAP includes Woodward’s Control Assistant software package for additional servicing capability. This package displays values in a tabular (rather than graphical) format and allows monitoring/tuning of variables, management of configuration and set points, and loading of new GAP-generated application software. With a separately purchased Control Assistant license, application values can be viewed live in a strip-chart window. See product specification 03201 for additional information on Control Assistant.

- Powerful troubleshooting tool for GAP-programmed controls
- Easy to use graphical format
- Monitor / Tune variables
- Boolean, real, integer, string, timer values
- Integrated with Woodward’s Control Assistant program which provides tabular display and optionally live value trending
- Can be used with Woodward’s NetSim™ Control Simulator or with a live control
Applications

Monitor GAP™ can be used with any Woodward control that supports the Woodward Servlink protocol. It may also be configured to communicate with Woodward’s NetSim control simulation program. Contact your Woodward representative for more information.

Generally, service personnel use Monitor GAP for troubleshooting during initial commissioning or subsequent system modifications. The tool allows the user to see graphically the progression of value changes as they ‘ripple through’ the control design. Correct performance responses are easily verified, and abnormalities are made apparent by examination of appropriate control blocks.
Monitor GAP Display

Monitor GAP with Control Assistant TrendView (separate license required)
**Specifications**

Minimum PC requirements include:

- An Intel Pentium® 600 MHz processor
- 128 MB of RAM memory
- Microsoft Windows® XP or Vista
- Microsoft Internet Explorer 6.0 or higher

The use of a system that does not meet minimum requirements will in most cases result in degraded performance.

**Installation**

1. The free install software may be downloaded directly from the Woodward website ([www.woodward.com/software](http://www.woodward.com/software)). Select “GAP Editor/Monitor” from the upper window.
2. Run Setup.exe on the PC on which you want to install Monitor GAP.
3. Contact your local Woodward representative to obtain a license that will authorize the Monitor GAP software.
   (Note—The Monitor GAP license is independent of the license for the GAP Editor/Coder.)
4. From the same website, follow the instructions for Software Authorization.
   (Note)—Although the installation must be done on the target computer, the Internet download and license request from the Woodward website may be done from any computer. Call your local representative if you need assistance.

**Running Monitor GAP**

Prior to running Monitor GAP, the user must have already installed a copy of the GAP application software.

The default installation location can be found by clicking the “Start” button on the main toolbar and then clicking the “Programs” menu item. Look for an icon called “Woodward/GAP” to begin operation.

When connected to a control and running Monitor GAP, the GAP Editor functions are disabled. Monitor GAP always runs in read-only mode regardless of whether the Editor/Coder license has been activated or not.