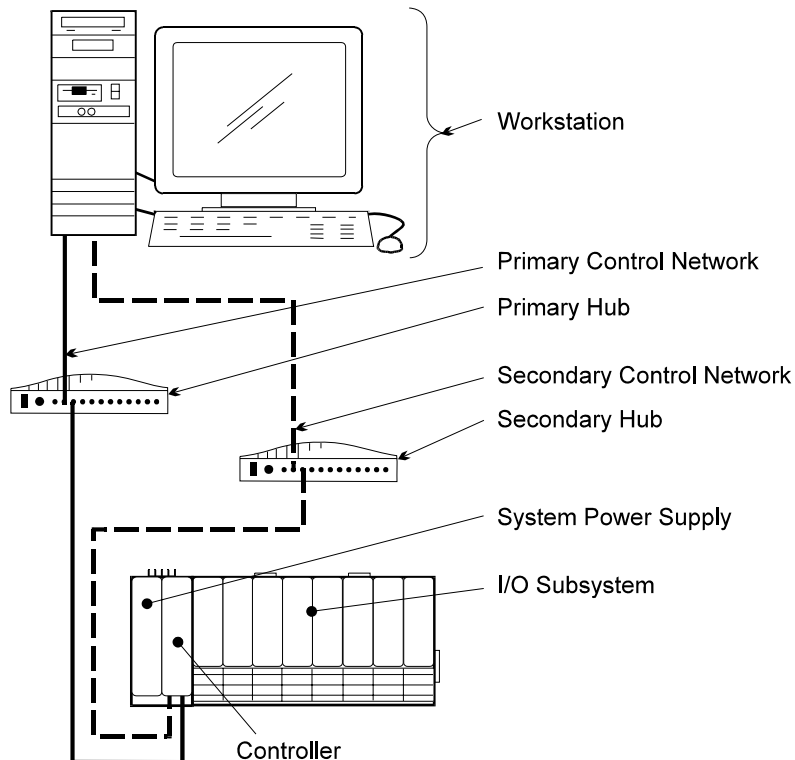# Chapter 1   DeltaV System Overview

This chapter gives an overview of the DeltaV digital automation system. It takes a brief look at the hardware, describes the basic concepts and terminology, introduces the major software components, and ends with a summary of the ways you can find out more about the DeltaV system from the Help and Books Online.

Hardware

The manual, *Installing Your DeltaV Digital Automation System*, also available as an online book, describes the DeltaV system hardware and provides instructions for installing and powering up the system.

The system hardware consists of the following:

- One or more DeltaV workstations
- A control network (optionally redundant) for communication between system nodes
- Power supplies
- One or more DeltaV controllers (optionally redundant) that perform local control and manage data and communications between the I/O subsystem and the control network
- At least one I/O subsystem per controller that processes information from field devices
- System Identifier

The System Identifier, shipped in the License Pack, is a connector that plugs into the parallel printer port or Universal Serial Bus (USB) on the ProfessionalPLUS workstation. It gives each DeltaV system a unique identification that allows you to download changes to the system. Install the System Identifier on the ProfessionalPLUS workstation before you power up your system.

DeltaV System Concepts

The DeltaV system helps users create process control systems that are easy to set up, easy to operate, consistent, and secure. To accomplish these goals, the DeltaV system uses the following:

- Plug-and-play technology for hardware configuration
- A library of reusable control modules to simplify the initial configuration effort
- Techniques like drag-and-drop to simplify system configuration and modification
- Consistent graphical interface similar to that of the Microsoft Windows operating environment
- Integrated, context-sensitive help and online documentation
- Hardware and software approaches to ensure system security and integrity
- A Configuration Assistant that steps you through the configuration process, configuring the system while teaching you the fundamentals