

Lucent Technologies
Bell Labs Innovations



EasyView Software for the Galaxy Controller

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Issue 5
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Notice:

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In order to receive support, LICENSEE must sign and return this agreement to
Lucent Technologies Energy Systems Customer Service _ Fax: 214-864-8509
3000 Skyline Drive
Mesquite, Texas 75149 USA

I have read all of the terms and conditions of this license and accept them for the users at my company.

By _____ Date _____

Print Name _____ Title _____

Signature _____ Company _____

Obtain and Install Software

Downloading the Software

To download the current version of EasyView software, go to the Lucent Technologies web site by accessing one of the following addresses:

Internal:

http://ps.web.lucent.com/organizations/product_mgt/

(select "Product Software"; scroll to read instructions; select executable file)

External:

<http://www.lucent.com/networks/power/software.html>

(select executable file)

Installing the Software

1. Start Microsoft Windows™.
2. Insert the diskette in drive A of your computer.
3. From the **File** menu, select **Run**.
4. Type **a:setup** and press **Enter**.

Setup Sites Tutorial

Configuring a Site

Once you start Galaxy EasyView by selecting its icon, you will enter the Default screen. This is where the system alarms, warnings, and site description are displayed. To configure a site, press the **F11** key from this screen, or select **Setup Sites** from the **Options** menu. A site is setup by defining each of the following:

Description

This is the name by which the site will be known. If the first letter of the description is a 1, 2, 3, or 4, the toolbar numbers can be used for quick connection to the site.

Password

A valid password must be used to log into a site. Each site has four passwords:

- **User:** Enter the password to allow regular user login. Once logged in to the Galaxy controller as a regular user, you can only view the state of the system. All alarms, warnings, histories, statistics, channel readings, etc., can be obtained. However, no configuration capability is allowed to a regular user. A regular user can not change any system parameter.
- **Super-User:** Enter the password to allow super-user login. Once logged in to the Galaxy controller as a super-user, you have all the privileges of a regular user and also the capability to configure system parameters except for system passwords.
- **Administrator:** Enter the password to allow administrator login. If you login to the Galaxy controller as an administrator, you have all the privileges available to the regular user and the super-user, along with the capability to change system passwords.
- **TL1:** Although this is not an option in EasyView, this is another system password which allows Transaction Language (TL1) interface to the Galaxy controller through the auxiliary port.

Connect Password

You must select whether to automatically use one of the above passwords or to manually enter a password during the connection process. If you select among ADMINISTRATOR, SUPER-USER, or USER, EasyView will automatically send the corresponding password specified above. However, if you select MANUALLY ENTERED, EasyView will wait for you to enter the password through your keyboard, once the connection with the Galaxy controller has been established and “Enter Password:” prompt has been received.

Site Notes

This is a notepad to write any notes associated with this site.

Phone Number

This field can be used to edit the phone number of the Galaxy controller. When connecting to a site, this number will be prefixed by a Dialing Prefix specified in the serial port setup.

Serial Port Setup

This selection defines the entire connection method except for phone number and password. If you connect to all sites by a modem, a single Serial Port Setup will suffice. If you also connect directly to the local port of a controller, a second Serial Port Setup will define the direct connection.

If a suitable Serial Port Setup choice is not listed, you must define one by:

1. Clicking on **Show Serial Port Setups**.
2. Clicking on **Add**.
3. Clicking on **Modify**.

A Serial Port Setup is configured by defining each of the following:

- **Description:** The name by which the setup will be known.
- **Set Default Modem Values:** This option will set all fields except for the **Description** field to preset values suitable for a modem connection.
- **Set Default for Datakit:** When selected, this will set all fields except for the **Description** field to preset values suitable for a Datakit connection.

- **Inter Character Delay:** This is the delay (in milliseconds) between each character transmitted through the comm port. This delay may be necessary when making a connection through Datakit.
- **Login Inter Character Delay:** This is the delay (in milliseconds) between each character transmitted through the comm port during the login procedure only. This delay may be necessary when making a connection through Datakit.
- **Status Update Rate:** This is the interval (in seconds) at which EasyView updates voltage, current, alarms, and warnings on the default screen and on the status bar. 30 seconds is adequate.
- **Receive Time-out:** This period (in seconds) indicates that the comm port will time-out if no characters are received from the controller within the specified time limit after sending a command. This value should always be greater than the status update rate. 45 seconds will usually work properly.
- **Communication Port Parameters:** This box allows you to select the parameters for the communication port of your PC that is going to make connection with the Galaxy controller. The following selections are to be made:
 - **Comm Port:** This is the serial port of your host PC that will be used to communicate with the Galaxy controller. Refer to your PC manual for an appropriate number for this port. Select from **COM4 to COM9**.
 - **Port Type:** This will be the type of connection you will be making with the controller. Select the port type of **MODEM** if you will be dialing in to the controller using a modem. If you have a Datakit connection, select **DATAKIT** and if you will be connecting directly to the controller using its Local port, select **DIRECT**.
 - **Baud Rate:** This will be the speed at which you will be communicating with the Galaxy controller. High speed modems (9600 baud and up) require settings higher than their stated rate (up to a maximum of 57600). For instance, if your modem supports 9600 or 14400, you should select **38400**. The modem will automatically autobaud for a proper connection. If you are using direct connection, select up to **9600**.
 - **Data Bits, Parity, Stop Bits:** These are the data transmission parameters. To communicate with Galaxy controller, select **8** data bits, parity of **NONE**, and **1** stop bit.

- **Handshaking:** This is set for the flow control of data. This will normally be set to none. If data overruns occur, try **HW** first and then **SW**. Backup and restore will not work with SW (software) handshaking.
- **Data Carrier Detect:** Check this box to enable EasyView to detect a dropped connection. Normally, this box should be checked. If telephone lines are noisy and EasyView reports “Galaxy Logged off” unexpectedly, uncheck this box.
- **Dialing Prefix:** Specifies character string that EasyView will send to the modem to instruct it to dial subsequent digits specified in the phone number field of Site setup. For Hayes compatible modems, this string is ATDTW for dial tone lines and ATDPW for dial pulse lines. This is also a good place for entering access codes. For instance, if your local access code is 9, enter ATDTW 9. If your long distance access code is #7, enter ATDTW #7. Once you have entered the local access code here, do not include it with your phone number in the Site Configuration screen.
- **Redial on Busy:** Check this box if you want EasyView to call the controller again once it detects a busy tone.
- **Connect Strings:** This box allows commands, responses, time-out, and pause values for up to 5 connect strings. This enables you to set up a login sequence, since all 5 commands are sent to the comm port in order. Each of the entry fields are described below:
 - **Command:** Specifies the character string that EasyView will send to the comm port. If port type is modem, refer to your modem manual for its recommended initialization strings. Compression will be turned off. Normally, software (control-s) handshaking will be disabled. Each line of command is to be terminated by ^M (Shift 6, Shift M), which is a sequence code for carriage return. There are some macros built in to EasyView that you can use to enter as a command. They are:
 - **AUTOBAUD:** Sends repeated carriage returns to the port until the response is received or time-out is exceeded.
 - **BREAK:** Sends a break to the port.
 - **PHONENUM:** Sends the phone number of the site.
 - **TERMINALMODE:** Enters terminal mode, enabling you to manually send commands to the Galaxy controller.

- **Response:** Specifies the character string expected to be received through the comm port in response to the command. Typically, your response strings will be:
 - **“OK ^M^J”** from a modem in response to an initialization command.
 - **“CONNECT”** from a modem when phone number is dialed and connection is established. See your modem manual.
 - **“PASSWORD:”** when carriage returns are sent to the Galaxy controller. This response is valid for all port types.
 - **“DESTINATION”** when carriage returns are sent to datakit.
 - **“:”** when dialout ^M command is sent to datakit.
 - **“Connected”** when connection is established with Galaxy controller through datakit.

- **Timeout:** This is the time period (in seconds) EasyView waits for a response after sending the command. If the specified response is not received, the operation is aborted. It is recommended that you configure the timeout to be 3 seconds if your command is an initialization string for your modem. If the command is your dial string ATDTW followed by the phone number or if it is the substitution string PHONENUM, your recommended timeout is 45 seconds. If you are connecting to the controller through the local port, i.e., your command is AUTOBAUD or some carriage returns (^M^M), your recommended timeout is 2 seconds.

- **Pause:** This is the time period (in seconds) EasyView waits after receiving a response and before sending the next command. This is necessary if your configured response is only a part of the response received from the port. For instance, if your response string is CONNECT and your modem actually sends a CONNECT 14400, you need to pause at least two seconds so that you have enough time to receive complete response before you send another command.

Connect to Site

Connection Process

Before you connect to any site, the site setup must be completed as described previously. From the default screen, select **F12** or from the **Connect** menu, select the **Connect to Site** option. You may now select one of the listed sites. EasyView will start the connect process and display the commands it is sending to the Galaxy controller and responses it is getting back. When the connection process is completed, EasyView will obtain the site description, alarms, and warnings of the Galaxy controller and display them on the default screen.

Troubleshooting

Common Difficulties and Remedies

The following are common difficulties and possible remedies when trying to connect to a site using EasyView:

Selected communication port not responding, i.e., you do not see any response from the port when EasyView is sending the connect strings.

- Wrong Comm Port selected in the **Serial Port Setup** screen. Select correct port.
- Not enough pause between commands. Commands are being transmitted too fast before any response could be checked. Enter the complete response that is received from the port or increase pause in the **Serial Port Setup** screen.
- Your modem does not recognize these connect strings. Refer to your modem manual and enter appropriate connect strings.
- Close other applications using the same port.

The connection to the site cannot be completed.

- Wrong phone number in the **Site setup** screen.
- Missing access code, such as 9, #7, etc., with the Dial Prefix in the **Serial Port Setup** screen.
- Double access codes. The access code is included with the phone number and with the Dial Prefix.
- Not enough time for connection to establish. Increase the timeout in the connect string of the Serial Port Setup screen.

Password is not recognized by the Galaxy controller.

- Check the password you have entered and the **Connect Password** field in the **Site setup** screen.
- The Parity is not set as **NONE** in the **Serial Port Setup** screen.
- In case of super-user or administrator login, another user is logged in with same security level.

EasyView disconnects from the Galaxy controller even before the Default screen is updated.

- The **Receive Timeout** value is greater than the Timeout value set on the Modem Port Configuration window for the controller.

Unrecognizable characters are received after the connection is made with the Galaxy controller.

- Check your baud rate. The entered baud rate should be higher than the baud rate supported by your modem. For example, if your modem supports 9600 or 14400, enter **38400** as your baud rate.