

## Distributed Monitoring Requests thru Dispatch Server

The availability of Center V2 servers may be threatened by network overload. Thru Dispatch Server, the concern can be settled by arranging and distributing subscribers' requests to the least busy Center V2 servers. With Dispatch Server, a central monitor station can run several Center V2 servers and serve a large number of subscribers with the fastest responding time. If any of the servers needs maintenance, Dispatch Server can automatically redistribute subscribers' requests to other Center V2 within a server farm or to servers in another location.

### Installing Dispatch Server

The Dispatch Server application comes with the system software. Before the installation, make sure that your computer meets the following minimum requirements:

OS	Windows 2000, Windows XP, Server 2003
CPU	Pentium 4, 2.6 GHz, 800 MHz FSB
Memory	2 x 256MB dual DDR400 SDRAM
Hard Disk	60GB
VGA	NVIDIA GeForce II 32MB, 1024 x 768 screen resolution
Network	TCP/IP

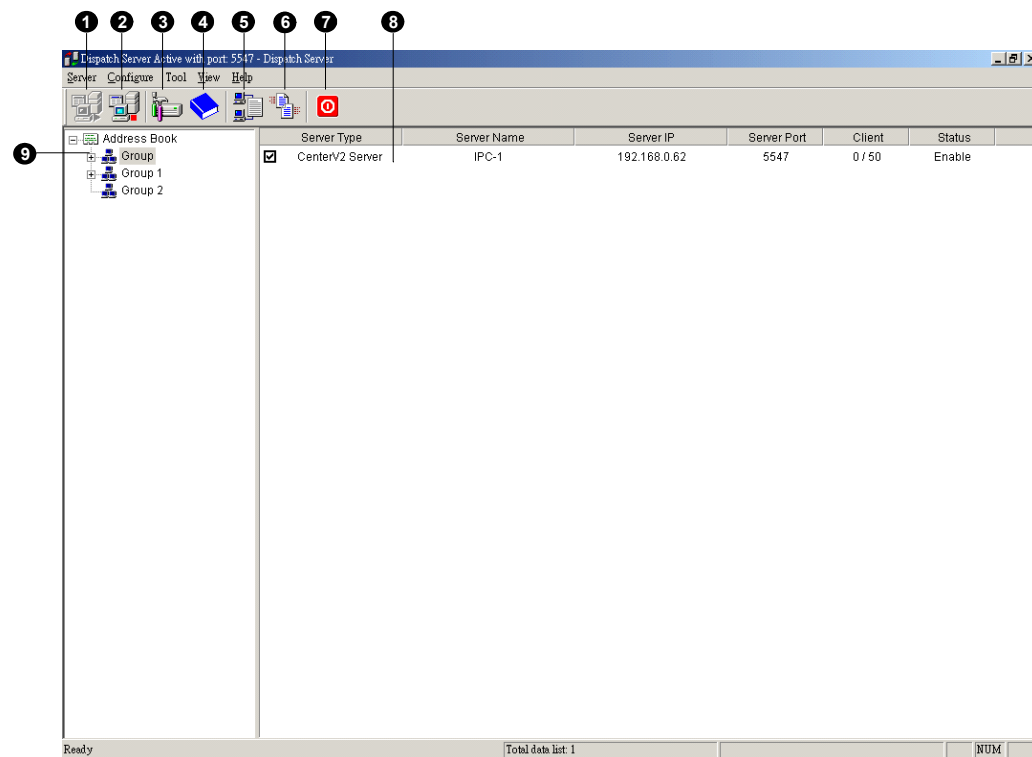
To install Dispatch Server, follow these steps:

1. Insert the installation CD to your PC. It will run automatically and pop up a window.
2. Select the item of Install Version 7.0 system.
3. Select Dispatch Server and follow the on-screen instructions. Refer to Figure 1-15.

**Note:** The Dispatch Server application is provided with a USB dongle. Make sure the dongle is tightly connected to the PC.

## The Dispatch Sever Window

After the installation, start the application from the Windows Start menu to display the following window.



**Figure 10-1** The Dispatch Server Window

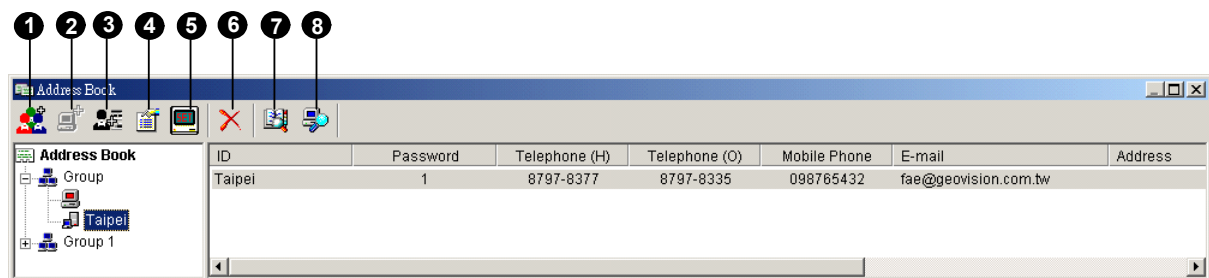
The controls in the Dispatch Server window:

No.	Name	Description
1	Start Server	Click to start Dispatch Sever.
2	Stop Server	Click to stop Dispatch Sever.
3	Setting	Click to configure Dispatch Sever.
4	Account	Click to create, edit and delete the accounts of Center V2 servers and subscribers.
5	Stop/Start Query Center V2 Event	Click to specify an event query.
6	Real-time CenterV2 Event	Click to view real-time events occurring on Center V2 servers.
7	Exit	Click to close the dispatch server window.
8	Center V2 Status	The window displays the status of Center V2 servers. A check appearing in the check box indicates the Center V2 server is allowed to connect to Dispatch Server. Unchecking will disable the connection.
9	Tree View	The list displays all created group folders, servers and subscribers.

You can right click any online subscriber to call up Subscriber Address Book (Refer to Figure 9-3) and Camera/Audio Control Panel (Refer to Figure 9-19).

## Creating a Subscriber Account

Dispatch Server can serve up to **500** Center V2 servers and **25,000** subscribers at the same time. Before starting the services, create at least one subscriber on the Dispatch Server. To create an account, click the Account button to bring up the following Address Book window.



**Figure 10-2** Address Book

The toolbar of the Address Book window:

No.	Button	Description
1	Add A Group	Click to add a group folder.
2	Add A Server	Click to add a server.
3	Add A Subscriber	Click to add a subscriber.
4	View/Edit Subscriber Address Book	Click to open Subscriber Address Book for viewing and editing.
5	Subscriber Setting	Click to configure video and file formats from subscribers.
6	Delete A Group/Subscriber	Click to delete a created subscriber, server and/or group folder.
7	Find A Subscriber	Click to search a subscriber account.
8	Find A Server	Click to search a server account.

The creation of a subscriber account is similar to that in Center V2. Refer to *Creating a Subscriber Account* in Chapter 9 on page 188.

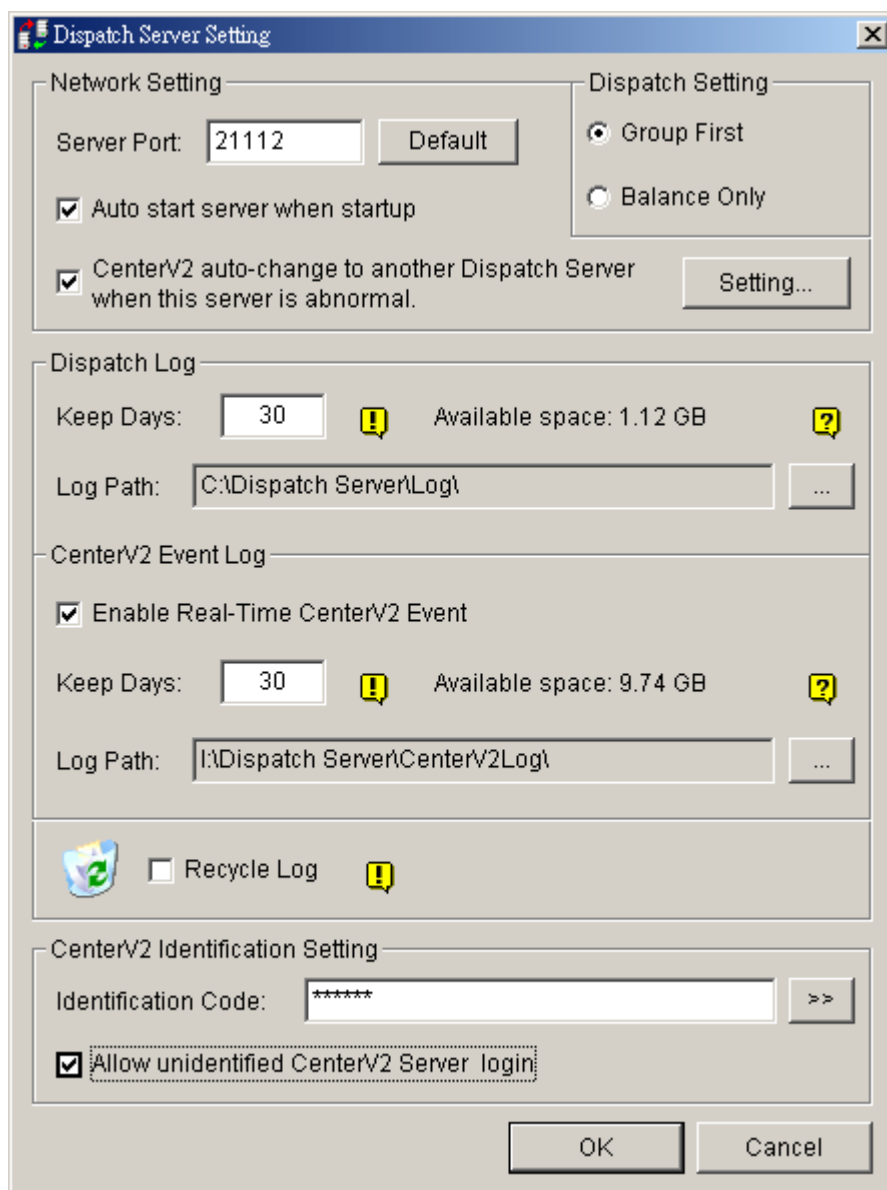
### Note:

1. You can create sub-groups beneath a group; every sub-group can only include one server; every server can include up to **50** subscribers.

2. When one server stops running, its own subscribers will be distributed to available servers at the same or higher level of the hierarchical file system.
3. If you don't arrange servers and subscribers into groups, they will be distributed to the least busy servers randomly.

## Advanced Settings

To configure the Dispatch Server, click the Setting button on the toolbar to display the following dialog box.



**Figure 10-3** Dispatch Server Settings

**[Network Setting]**

- **Server Port:** The port should match with the Center Port of the Subscriber (Figure 9-11) and Dispatch Server Port of Center V2 (Figure 10-4) (All the three ports should match with each other). Or, keep the port setting as default.
- **Auto start server when startup:** Automatically starts the Dispatch service when its program starts.
- **Center V2 Auto-change to another Dispatch Server when this server is abnormal:** Distributes subscribers (Center V2s) to another Dispatch Server when the serving Dispatch Server breaks down. Enabling this item, you will be prompted to enter the IP address and port of another Dispatch Server.

**[Dispatch Setting]**

- **Group First:** Distributes subscribers (DVRs) to the Center V2 servers according to the assigned groups and servers.
- **Balance Only:** Distributes subscribers (DVRs) to the Center V2 servers with fewer subscribers randomly.

**[Dispatch Log]**

- **Keep Days:** Specify the days of the Dispatch log kept in the HDD from 1 to 999 days.
- **Log Path:** Click the button next to the item to assign a storage path.

**[CenterV2 Event Log]**

- **Enable Real-Time CenterV2 Event:** Allows real-time event messages coming from Center V2 servers.
- **Keep Days:** Specify the days of the Center V2 event log kept in the HDD from 1 to 999 days.
- **Log Path:** Click the button next to the item to assign a storage path.

**[Recycle Log]** Enable the program to delete the files of the oldest days when storage space is lower than 500MB.

**[CenterV2 Identification Setting]**

- **Identification Code:** The code protects Dispatch Server against unauthorized Internet access. Center V2 will need the code to log in the Dispatch Server.
- **Allow unidentified CenterV2 Server login:** Allows Center V2 to access Dispatch Server without entering the Identification Code.

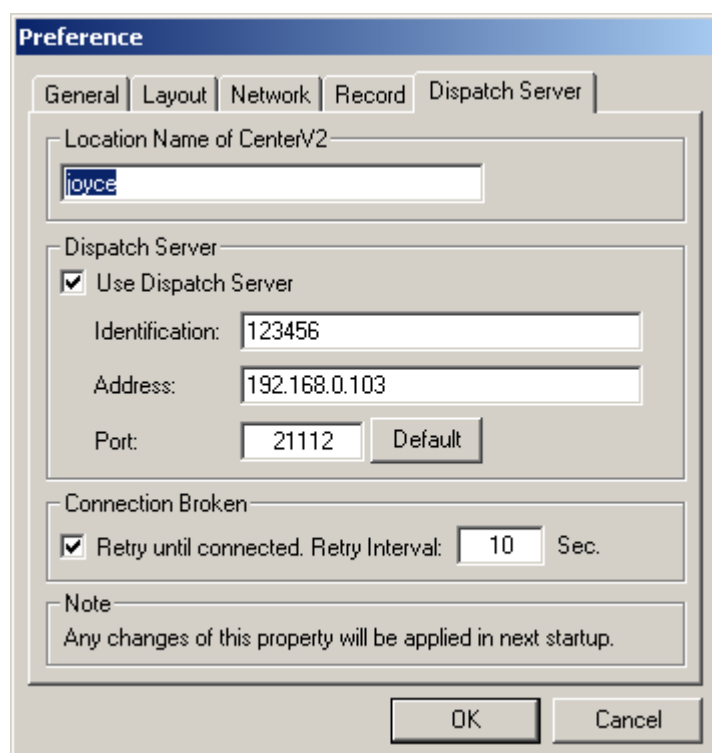
## Starting Dispatch Server

After subscriber accounts are created and Dispatch Server is configured, the Dispatch Server is ready to provide services. Click the Start Server button in the main window to start the Server.

## Connecting Center V2 to Dispatch Server

Follow these steps to connect Center V2 to Dispatch Server:

1. Start the Dispatch Server service.
2. In Center V2, click the Preference Settings button, select System Configure to display the Preference window, and then click the Dispatch Server tab to display the following window.



**Figure 10-4** Preference-Dispatch Server

**[Location name of Center V2]** Enter a name to identify the Center V2 server. The name should match the one created in the Dispatch server. Refer to Figure 10-2.

**[Dispatch Server]** Check the Use Dispatch Server item to make other settings available. Enter the identification code, IP address, and port of the Dispatch Server. Refer to Figure 10-3.

**[Connection Broken]** Enable and specify the interval between connection retries.

3. After above settings, click OK and restart the Center V2.

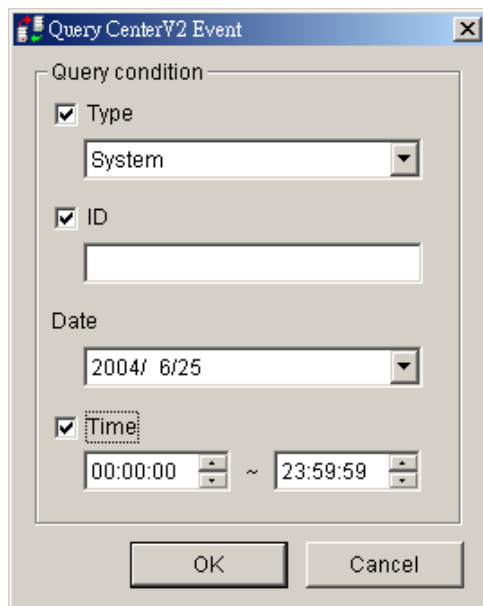
## Connecting GV-System to Dispatch Server

By default, GV-system is set to connect to Center V2. You have to reset GV-system so that it can connect to Dispatch Server. Follow these steps to connect GV-system to Dispatch server:

1. In the main screen of GV-system, click the Network button, and then select Connect to Center V2(V). This displays the Connect to Center V2 dialog box. Refer to Figure 9-10.
2. Type the IP address of the Dispatch Server in the Center IP field.
3. Type a valid user ID and password created in the Dispatch Server.
4. Select Normal Mode, and then click the Advance button. This displays the Advance Settings dialog box. Refer to Figure 9-11.
5. In the Center Port field, type the port of Dispatch Server (default at 21112), and then click OK.
6. Click the Connect button in the Connect to CenterV2 dialog box for the connection.

## Querying an Event on Center V2

This feature lets you locate a desired event by posing a query on Center V2 servers. Click the Stop/Start Query Center V2 Event button on the toolbar to display the following Query dialog box. Check the desired query items (Type, ID, Date and/or Time), define your query condition under each item, and then click OK to display the query results.

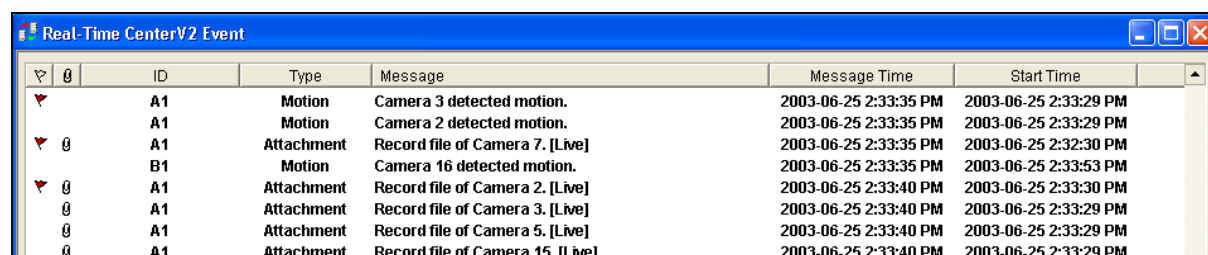


**Figure 10-5** Query CenterV2 Event

The Query feature supports the remote playback when file sharing on the Center V2 server is enabled. Double clicking any found event with video attachment can play it back on Dispatch Server.

## Displaying Real-Time Events of Center V2

The feature lets you view the real-time events occurred on Center V2 servers. For the application, make sure the option of Enable Real-Time CenterV2 Event is enabled; see the section of Advanced Settings. Then click the Real-Time Event button on the toolbar to display the following window.



	ID	Type	Message	Message Time	Start Time
▼	A1	Motion	Camera 3 detected motion.	2003-06-25 2:33:35 PM	2003-06-25 2:33:29 PM
▼	A1	Motion	Camera 2 detected motion.	2003-06-25 2:33:35 PM	2003-06-25 2:33:29 PM
▼	A1	Attachment	Record file of Camera 7. [Live]	2003-06-25 2:33:35 PM	2003-06-25 2:32:30 PM
▼	B1	Motion	Camera 16 detected motion.	2003-06-25 2:33:35 PM	2003-06-25 2:33:53 PM
▼	A1	Attachment	Record file of Camera 2. [Live]	2003-06-25 2:33:40 PM	2003-06-25 2:33:30 PM
▼	A1	Attachment	Record file of Camera 3. [Live]	2003-06-25 2:33:40 PM	2003-06-25 2:33:29 PM
▼	A1	Attachment	Record file of Camera 5. [Live]	2003-06-25 2:33:40 PM	2003-06-25 2:33:29 PM
▼	A1	Attachment	Record file of Camera 15. [Live]	2003-06-25 2:33:40 PM	2003-06-25 2:33:29 PM

The controls in the Real-Time Center V2 Event window:

1. The window supports the remote playback when file sharing on the Center V2 server is enabled. Double clicking any event with video attachment can play it back on Dispatch Server.
2. You can flag an incoming event for later reference. Click in the flag column to flag an event. Click the flag icon to remove it.

A list of Types and Messages from Center V2 will be displayed:

Type	Message
Motion	Camera detected motion
Trigger	I/O Trigger; Module xx Trigger Resume; Video of Camera xx (By: Module xx)
Connection	Video Lost; Module Lost; The network connection is lost; The connection of (client xx) is abnormal; Camera cannot be controlled; Ping Timeout; Failed to establish the connection; Video signal of Camera xx has resume; Module xx has returned to normal; Failed to Login SMS Server; Failed to send short message; SMS Server is shutdown.
Alarm	There isn't enough space for recording; There isn't enough space for recording; The storage for Event Log is low, Event Log will not take any new entries; An unexpected error occurred in Multicam Surveillance System (Error Code: 1 or 2); There is an intruder; Object Missing; Unattended Object; Alert Message of POS.
Attachment	Record file of Camera xx [Live, Attachment or offline].
System	Start Recycle; Recycle Event Log; Status change of monitoring cameras. On: (camera no.) Off: (camera no. ) /(By Schedule); Stop all cameras monitoring; Start all cameras monitoring; Start I/O Monitoring. /(By Schedule); Stop I/O Monitoring. /(By Schedule); Schedule Start; Schedule Stop. All monitoring devices are stop too.

**Note:** Error Code 1 indicates a codec error; Error Code 2 indicates that users can't write or record any data due to HD failure or user privilege.

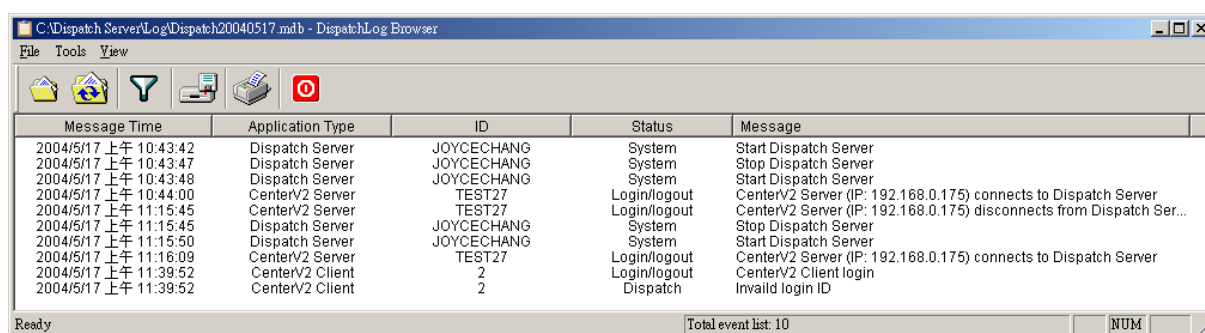


## Launching the Log Browser

The following two log browsers let you locate the events of Dispatch Server and Center V2 servers easily.

### Dispatch Log Browser

The browser lets you view and locate the system status of Dispatch Server, the login/out status of Center V2 servers. Click View on the window menu and then select Dispatch Log to display the following log browser. For the applications of the browser, refer to *Incoming Events to Center V2* in Chapter 9 on page 200.



The screenshot shows a window titled "C:\DispatchServer\Log\Dispatch20040517.mdb - DispatchLog Browser". It has a menu bar with "File", "Tools", and "View". Below the menu bar is a toolbar with icons for file operations and a status bar at the bottom showing "Ready" and "Total event list: 10". The main area contains a table with the following data:

Message Time	Application Type	ID	Status	Message
2004/5/17 上午 10:43:42	Dispatch Server	JOYCECHANG	System	Start Dispatch Server
2004/5/17 上午 10:43:47	Dispatch Server	JOYCECHANG	System	Stop Dispatch Server
2004/5/17 上午 10:43:48	Dispatch Server	JOYCECHANG	System	Start Dispatch Server
2004/5/17 上午 10:44:00	CenterV2 Server	TEST27	Login/logout	CenterV2 Server (IP: 192.168.0.175) connects to Dispatch Server
2004/5/17 上午 11:15:45	CenterV2 Server	TEST27	Login/logout	CenterV2 Server (IP: 192.168.0.175) disconnects from Dispatch Ser...
2004/5/17 上午 11:15:45	Dispatch Server	JOYCECHANG	System	Stop Dispatch Server
2004/5/17 上午 11:15:50	Dispatch Server	JOYCECHANG	System	Start Dispatch Server
2004/5/17 上午 11:16:09	CenterV2 Server	TEST27	Login/logout	CenterV2 Server (IP: 192.168.0.175) connects to Dispatch Server
2004/5/17 上午 11:39:52	CenterV2 Client	2	Login/logout	CenterV2 Client login
2004/5/17 上午 11:39:52	CenterV2 Client	2	Dispatch	Invalid login ID

A list of Status and Messages will be displayed:

Status	Message
System	Start Dispatch Server; Failed to start Dispatch Server; Stop Dispatch Server; Can't find KeyPro; Start to recycle the Dispatch Server; Start to recycle the CenterV2 Event Log.
Login/logout	CenterV2 Server (IP: CS_IP) connects to Dispatch Server; CenterV2 Server (IP: CS_IP) disconnects from Dispatch Server; CenterV2 Server (IP: CS_IP) disconnects from Dispatch Server abnormally; CenterV2 Client login; CenterV2 Client logout
Connection	CenterV2 Server (IP: CS_IP) is disconnected by Dispatch Server; CenterV2 Server changes IP from (CS_old_IP) to (CS_new_IP); CenterV2 Server (IP: CS_IP) is transferred to another Dispatch Server (DS_IP:DS_Port).
Control	CenterV2 Server [CS_Name] is enabled; CenterV2 Server [CS_Name] is disabled.
Dispatch	ID: login_ID is dispatched to [CS_Name] (IP: CS_IP); Invalid login ID; Invalid login Password; This account has already logged in; There is no server online for CenterV2 Client; All online CenterV2 Servers have utmost service.

### Event Log Browser

The browser lets you view and locate the real-time events from Center V2 servers. Click View on the window menu, and then select Event log to display Event Log Browser. For the applications of the browser, refer to *Incoming Events to Center V2* in Chapter 9, on page 200.

