



# Logitek Application Note vGuestIP For Software Developers

*Applies to Audio Engine (Supervisor) and JetStream Server.  
Last updated 14 June 2011.*



In this document, references to Supervisor (on the Audio Engine platform) are equivalent to the JetStream Server application. This feature has been directly ported to JetStream Server from Supervisor.

Review the LP2 Protocol document along with this guide to learn how to properly format commands.

## General

Any vGuest program connect to Supervisor's TCP/IP socket must be properly registered in order to have Supervisor process commands from vGuest. A vGuest program may be connected to the Primary Supervisor and the Backup Supervisor at the same time. Registration requires the proper user name, password, vGuest permission, and profile number in System Administrator section of Supervisor.

All connected vGuests can be seen in the Network vGuest display in the vClient State section in Supervisor. This display shows the Windows socket connection number, IP address and port number, user name, profile number and status of all vGuests. All communications to and from a vGuest are displayed on the Network Client Log. Commands that are sent to or received from the Audio Engine are displayed on the Audio Engine Log. These logs can be automatically written to a file for later review.

Supervisor sends and expects to receive commands as buffers or groups of bytes. The commands should not be sent as ASCII strings.

## Log In to Supervisor

When Supervisor establishes a socket connection to the vGuest program, Supervisor will send a three byte **F9** user name and password query command. All commands are shown in Hex byte notation.

### 02 01 F9

This command consists of three bytes. The first byte has the value 2, the second has the value 1, and the last byte has the value 249. This is not a string of six bytes.

The vGuest should reply with the full thirty six byte **F9** user name and password command

**02 22 F9 0C 75 73 65 72 6E 61 6D 65 20 20 20 20 20 20 20 20 70 61 73 73 77 6F 72 64 20 20 20 20 20 20 20 20**

where	<b>02H</b>	2	Start byte
	<b>22H</b>	34	Command length
	<b>F9H</b>	249	Command number
	<b>0CH</b>	12	vGuest ID ( fixed at 12 )
	<b>75H</b>	117	"u"
	..	..	
	<b>20H</b>	32	16 bytes with "username" left justified and right blank filled
	<b>70H</b>	112	"p"
	..	..	
	<b>20H</b>	32	16 bytes with "password" left justified and right blank filled

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Supervisor will then reply with a variable length **F0** connect status command. The length of the command varies with the number of Audio Engines connected to the Supervisor program. (For the JetStream: only one JetStream connects to each JetStream Server. Therefore, even if there are multiple JetStreams in a facility, as far as the program is concerned, this number will always be 1.)

**02 07 F0 0A 04 01 00 00 00**

where	<b>02H</b>	2	Start byte
	<b>07H</b>	7	Command length ( 3 + Number of Engines )
	<b>F0H</b>	240	Command number
	<b>0AH</b>	10	Connect Status ( See below )
	<b>04H</b>	4	Number of Engines connected to Supervisor
	<b>01H</b>	1	Status of first Engine 1 = On line
	<b>00H</b>	0	Status of second Engine 0 = Off line
	<b>00H</b>	0	Status of third Engine
	<b>00H</b>	0	Status of fourth Engine

The Primary Supervisor will use the following connect status bytes in the **F0** command:

<b>0AH</b>	10	Valid connection
<b>0BH</b>	11	Invalid user name
<b>0CH</b>	12	Invalid password
<b>0DH</b>	13	No vGuest permission
<b>0EH</b>	14	No profile assigned

The Backup Supervisor will use with the following connect status bytes in the **F0** command:

<b>14H</b>	20	Valid connection
<b>15H</b>	21	Invalid user name
<b>16H</b>	22	Invalid password
<b>17H</b>	23	No vGuest permission
<b>18H</b>	24	No profile assigned

(Note: Backup Supervisor is not applicable to JetStream Server.)

**Available Commands**

Supervisor will process only the following subset of Logitek Protocol 2 commands for vGuests:

<b>51H</b>	81	Momentary Relay Closure
<b>52H</b>	82	Turn On
<b>53H</b>	83	Turn Off
<b>54H</b>	84	Input Assign
<b>55H</b>	85	Input Mode
<b>56H</b>	86	Fader Level
<b>5CH</b>	92	Write Text

Any communications from non-registered vGuests are ignored by Supervisor. All allowed commands must follow the LP2 command structure exactly.

Commands from registered vGuests will be processed only if their Destination Device number is in the sending vGuest profile. Destination Device numbers greater than or equal to **0100H** must be one of the Device numbers in the Allowed Source Devices list. The location of these Device numbers can be limited to a specified surface if that Surface number is given in the command. Using Surface number equal to 0 will cause all surfaces to be checked for the Device number. Destination Devices less than **0100H** must be one of the DSP channels in the Allowed Destination Devices list.

Commands from the Engine or triggers from Supervisor will be sent to a vGuest only if the command's Destination Device number is in that vGuest profile.