

Telos Zephyr iPort v1.6.1g Update Instructions

1 January, 2012

From time to time, software updates are issued for Telos products which include feature enhancements, refinements and operational fixes. This document will guide the reader through installing updates to the Zephyr iPort MPEG Gateway.

Software Upgrade

Since VX components are administered via LAN connection, your first step in upgrading is to note the IP address assigned to your VX Engine. This is easily obtained by observing the front-panel display of your Engine. You may execute the upgrade using a Web browser on any computer residing on the LAN your VX is attached to.

1. Since Zephyr iPort is administered via LAN connection, your first step in upgrading is to note the IP address assigned. This is easily obtained by observing the front-panel display of your Engine. You will then execute the upgrade using a Web browser on any computer residing on the LAN your iPort is attached to.
2. If you have not already done so, download the latest software package for the iPort MPEG Gateway from the Telos Systems website. You will find two software files inside the archive:
 - a. If your iPort is already running version 1.6.0 or later, this is a one-step update. You will only use **1601-00505-010(iPort_1-6-1g_upgrade).tar**.
 - b. If your iPort is running a version older than 1.6.0, you will need to apply both of the included update files in subsequent steps. First, **1601-00505-009(iPort_1-6-0r_upgrade).tbz2** will be applied, followed by **1601-00505-010(iPort_1-6-1g_upgrade).tar**.
3. Connect to the iPort's user interface by pointing your web browser to the unit's IP address. On the *System* page, go to the *Hardware and Firmware* section.

Important: The update can only be installed into Bank 1, and the unit must be running from Bank 0 in order to install the update.

4. Click on the **Browse** button to locate the upgrade file you have downloaded and then click **Upload**. Once successfully uploaded, select Bank 1 by pressing the radio button next to it. Click the Apply Selected Bank button to activate the new firmware.

If you have questions or require assistance, please contact Telos Support using the Web form at TelosAlliance.com/contact/ , or by phone at +1-216-622-0247.

Release Notes:

Version 1.6.1g

Released January 1, 2012

- Improvement: Support for fanless hardware platform
- Improvement: Completed iProbe support - source info, software updates, configuration backup/restore
- Improvement: GPIO bridging - GPIO snake, Element to GPIO, WAN transportation using LWRP
- Improvement: Codec options - uncompressed audio, 384kbps for MPEG1 Layer2
- Improvement: Built-in MPEG stream replication server
- Improvement: Option to change the default buffer size for Livewire standard streams
- Improvement: New buffering amount options for MPEG receiver: 10, 15, 20, 30, 40, 50, 60 ms
- Improvement: Increased the number of VMIX/VMODE blocks to 8/8
- Fixed: iProbe interface
- Fixed: Linux task scheduling - occasional latency peaks of 60-100ms eliminated
- Fixed: Updating LW Source names would update also the receiving multicast address with the last setting applied on another codec channel
- Fixed: Receive problems in loopback mode using UDP protocol
- Fixed: Long TCP recovery time after WAN cable unplugged
- Fixed: Problem with software bank corruption persistent after software update

Version 1.5.2

Released Dec 23, 2010

- Improvement: Shoutcast interface allows longer source name – max 64 characters
- Improvement: Opened the whole TCP port number range for audio streaming to Shoutcast
- Fixes: Non-functional apply button in Global Options
- Fixes: Typo in the execution trace log file name

Version 1.5.1b

Released Nov 13, 2010

- Improvement: MPEG1 layer 2 encoding/decoding
- Improvement: Operation mode with 16 decoders, no encoders
- Improvement: Configurable Ethernet and IP COS priority tag value for the MPEG stream outputs
- Improvement: Local loopback for MPEG streams
- Improvement: Sending GPIO states in the ancillary data fields of MPEG audio packets, control via LWRP GPI/O
- Improvement: Integrated small-capacity stream distribution server. This can also serve as an interim interface for WOWZA.
- Improvement: Complete Shoutcast interface support
- Improvement: Extended syslog reporting to include connection errors with streaming servers and decoder misbehavior
- Fixes: Network error handling enhancements to improve non-QoS performance - keep MPEG connection alive on congestion
- Fixes: Vmix subsection gain is not maintained after reboot
- Fixes: Web: Encoder cannot be enabled or disabled if the source name of its Livewire stream begins with a,A,b,B
- Fixes: If a duplicate LWCH# was assigned to an output, removing the duplicate from the output may disconnect a valid input stream
- Fixes: A tone sounds after disconnecting a local stream loopback
- Fixes: Web: RFC incompliant hostnames
- Fixes: Web: Codec Configuration: occasionally indicating wrong source IP for the received encoded stream

- Fixes: Web: Codec Configuration: in 16-encoders mode, the local side IP is displayed only on the encoder channel #1
- Fixes: Web: stream statistics: incorrect counting of lost packets - counts more than actually are lost
- Fixes: LWCP: VMODE: non-existing In_Select value would reset the state to "none" and cause silence in audio
- Fixes: LWCP: if LOGIN was not sent as the first command, it may not work afterwards
- Fixes: LWCP: some attribute values are enclosed in double quotes
- Fixes: LWCP: outgoing messages - in-compliant use of character cases
- Fixes: Insufficient buffer amount between network driver and standard Linux, may cause crashing in very big systems
- Fixes: Unit stops responding to PING, HTTP, LWCP, LWRP, no ADV, but LW audio multicast is working - temporary workaround to increase the time to failure
- Fixes: Improved CPU loading measurement accuracy and CPU resource allocation supervision

Version 1.2.0

Released Feb 4, 2010

- Improvement: Standard multicast/IGMP on the WAN interface.
- Improvement: Livewire Routing Protocol - MPEG stream routing.
- Improvement: AAC-LC 16kHz sampling option - extends the x-Stream compatibility.
- Improvement: CPU loading measurement accuracy.
- Fixes: Fixed wrong response text associated with Livewire Control Protocol supervision status monitoring.
- Fixes: Updating of network status and link speed.
- Fixes: Errors in accounting of lost packets and samples in UDP mode.
- Fixes: Multicast membership handling for Livewire and WAN interfaces.

Version 1.08a

Released Oct 9, 2009

- Improvement: New bitrate options for stereo and mono codecs added.
- Improvement: Added information in the RTP header.
- Improvement: Improved buffering logic - reduced the delay variation.
- Improvement: Allow using <space> in the Source Name.
- Fixes: Audio distortion at AAC bitrates 24 & 32 kbps.
- Fixes: LW channel numbers cannot be changed on inactive decoders.
- Fixes: Source name changes do not get into source advertisement.
- Fixes: Channel numbers of disabled VMIX outputs were lost after a restart.
- Fixes: In the 16 encoder mode, non-existent decoder sources with blank multicast IP appeared on Port 93.
- Fixes: Shoutcast server occasionally lost the track name.
- Fixes: Minor and cosmetic fixes of the web config interface.

Version 1.06

Released May 20, 2009

- Initial Release