Spectra Radio Services & Devices

The Spectra Radio Services and Devices package includes a series of standard SCA compliant components that implement the Application Programming Interfaces API's published by the Joint Tactical Networking Center (JTNC). These, together with the SCA Core Framework control components, provide radio platforms such as the Spectra DTP4700 with an SCA compliant platform offering software radio application providers the opportunity to develop and test portable waveforms that rely on a wide range of functionality supporting audio and data networking capable radios.

The Spectra Radio Services and Devices package is an optional extension to the Spectra DTP4700 platform. The implementations were designed to be portable across platforms and are not exclusive to the Spectra DTP4700. For additional information about the availability of Spectra Radio Services and Devices package on your specific platform then please contact ADLINK.

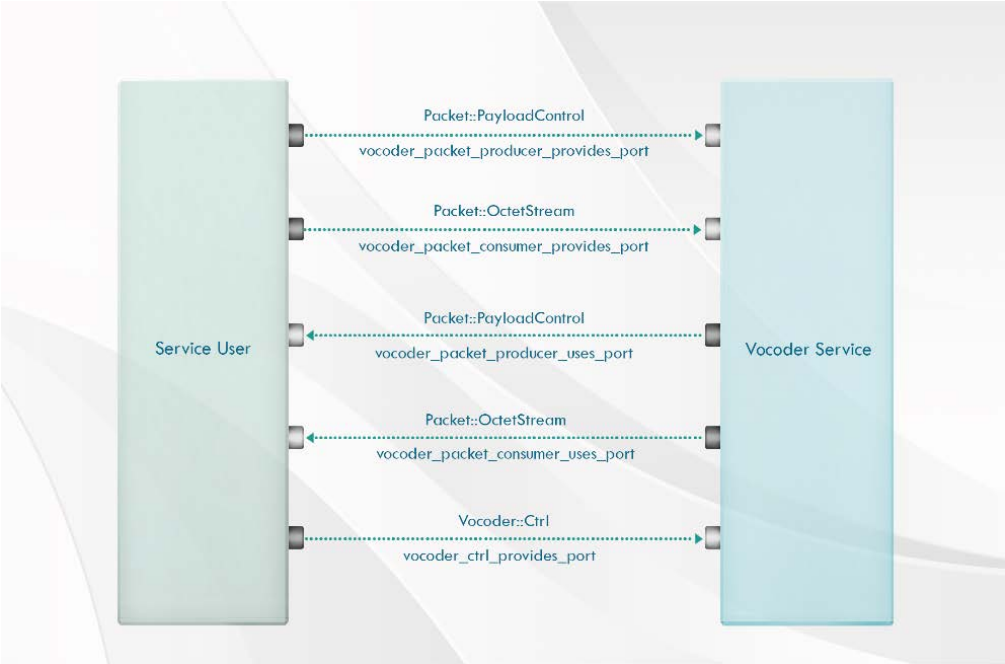
Audio Port Device

The Audio Port Device can be used by waveform components to send and receive audio packets to and from the audio hardware interfaces available on the Spectra DTP4700 and other radio platforms. The device implements the Audio Sample Stream extension of the JTNC Audio Port Device specification for the control of audio samples and offers a range of control parameters including sample rate, capture gain, playback volume, and push-to-talk.



Vocoder Service

The Vocoder Service encapsulates vocoding capabilities for use by waveform components and provides a common mechanism for the selection and use of algorithms for coding/decoding (synthesizing) data for transfer to and from the Audio Port Device running on the Spectra DTP4700 and other radio platforms.



Serial Port Device

The Serial Port Device offers an implementation of the Asynchronous extension of the JTNC Serial Port Device specification providing configuration control of the serial port and provides a mechanism used by waveform components to access the serial hardware interfaces available on the Spectra DTP4700 and other radio platforms. The device can be used as a serial terminal interface or to control external devices over RS-232.

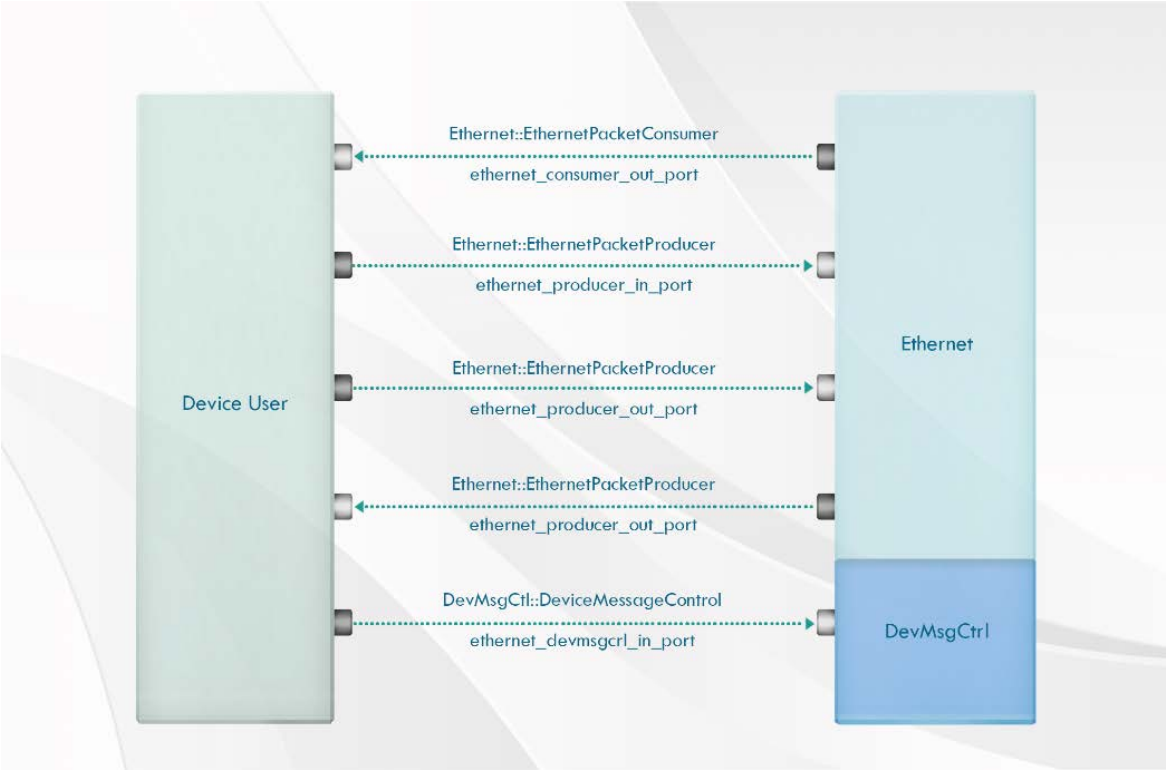


ADLINK
Leading EDGE COMPUTING

LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

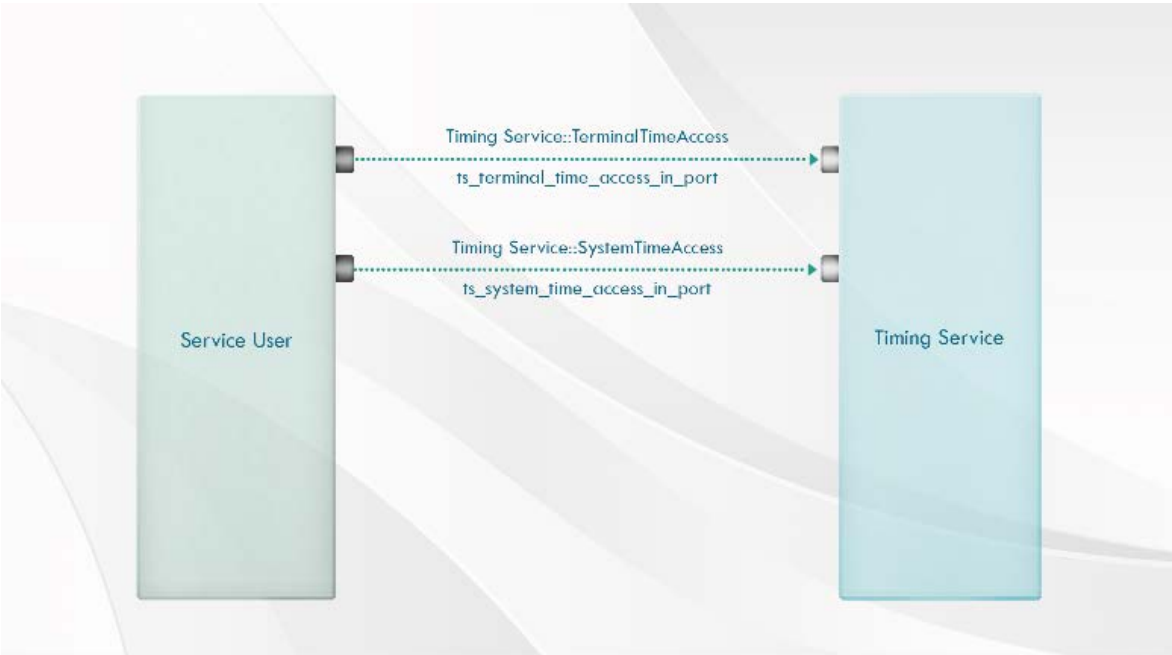
Ethernet Device

The Ethernet Device allows waveform components to send and receive network packets (including flow control) to and from the Ethernet hardware interfaces available on the Spectra DTP4700 and other radio platforms. The Ethernet Device therefore supports waveform applications requiring data networking capabilities such as Ethernet switching and IP-routing.



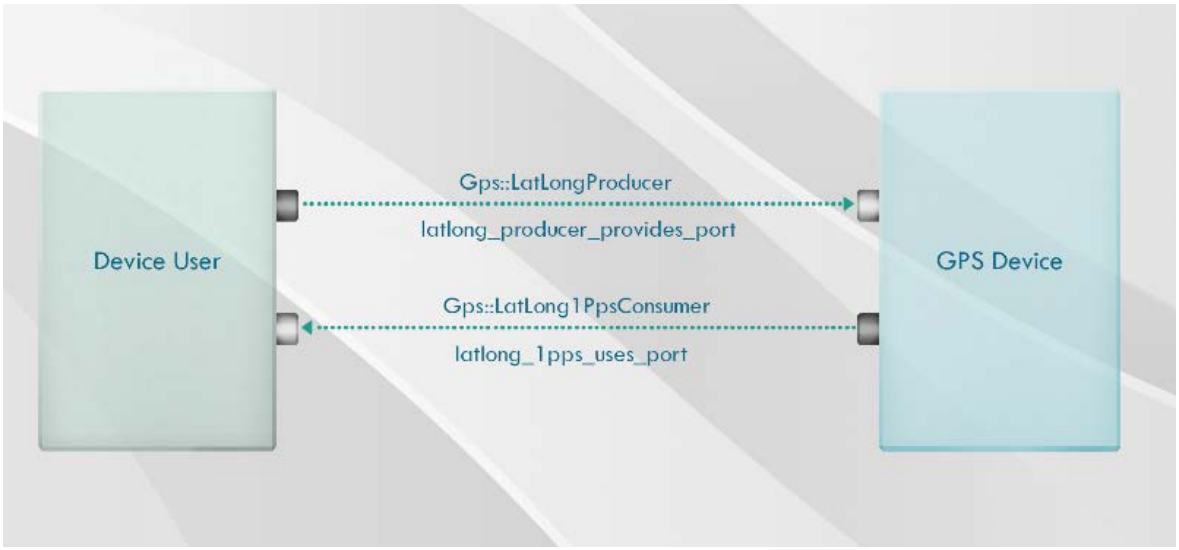
Timing Service

The Timing Service provides a common time source to waveform components running on the Spectra DTP4700 and other radio platforms including absolute elapsed (monotonic) time, Coordinated Universal Time (UTC) time, and time relative to the local waveform that can be maintained by waveform components supplying time data samples periodically to the Timing Service.



GPS Device

The GPS Device can be used by waveform components to access to the Global Positioning System (GPS) receiver of the Spectra DTP4700 and other radio platforms. The GPS Device provides GPS navigation and/or GPS-based timing capabilities, and presents position data to waveform components expressed as latitude/longitude and according to the Military Grid Reference System (MGRS) specification.



Frequency Reference Device

The Frequency Reference Device provides the ability for waveform components to set the Time Figure of Merit (TFOM) value used by the GPS Device running on the Spectra DTP4700 and other radio platforms.



Packet Service

The Packet Service is a ADLINK proprietary service which implements a data source/sink over the network stack of the Spectra DTP4700 thus allowing waveform components to send and receive network packets to and from a virtual network interface abstracting the Ethernet hardware available on the Spectra DTP4700 and other radio platforms.

For More Information

For further information regarding Spectra Radio Services & Devices, please e-mail: ist_info@adlinktech.com or visit: ist.adlinktech.com

ADLINK
Leading EDGE COMPUTING
All products and company name listed are trademarks or trade names of their respective companies.
Updated Nov. 6, 2017 ©2017 ADLINK Technology, Inc. All Rights Reserved. All specifications are subject to change without further notice.
LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000