



## RVL+

### Radar and Video Common API Software Architecture

RVL+ is the new common API platform that supports Curtiss-Wright Controls Embedded Computing's radar and video product line.

To aid in the system integration and application generation process, RVL+ provides a common API interface to users which reduces the time required for product familiarisation and integration and eases the burden during the generation of software applications.

RVL+ provides a set of C-language libraries that supports the functionality of a range of radar and video products and provides users with the tools to easily integrate radar acquisition, video mixing and radar scan-conversion capabilities into their applications.

Where multiple radar and video building block products are used to provide a complete sub-system solution, RVL+ provides a common interface to the user to expose all the functionality of each of the individual modules and allows easy integration for the control and configuration of each of the individual parts.

RVL+ provides a highly flexible, modular and scalable API architecture that is specifically designed to incorporate new radar and video product designs to ensure software compatibility is maintained from generation to generation of radar and video products, and to safeguard software applications and knowledge through all stages of a program's lifetime.

The client-server architecture allows maximum flexibility across differing system architectures. RVL+ servers can be co-located on a single SBC or distributed across multiple cores, CPUs or hosts. The client-side API supports multi-threaded applications and interaction with X-Windows.

#### Features

- ◆ Common API for radar and video product range
- ◆ RVL+ supports
  - Radar acquisition
  - Video mixing
  - Radar scan-conversion
- ◆ Simplifies software application generation
- ◆ Client-Server architecture
- ◆ Highly flexible, modular and scalable
- ◆ Supports multi-threaded applications
- ◆ X-Windows support

For more information on our broad range of high-integrity computing solutions, please visit our website at [www.cwembedded.com](http://www.cwembedded.com).

**CURTISS  
WRIGHT** **Controls**  
Embedded Computing



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### Specification

#### Functional

- ◆ Software API provided as C-language libraries including demonstration programs
- ◆ Supports multi-threaded applications
- ◆ Supports the following functionality
  - Radar acquisition
  - Video mixing
  - Radar scan-conversion
- ◆ Supports the following hardware modules
  - Osiris, Osiris B
  - Eagle 2
  - Video Mixer PMC
- ◆ Client-server architecture
  - Multiple servers per host CPU
  - Servers can be distributed across multiple hosts
  - Client connection to multiple servers
  - Client-server message and data transport supported over network connection

#### Supports X-Windows

- Xt toolkit
- GTK+ toolkit
- For MS Windows support please consult factory
- ◆ Access to BIT results for all supported modules
- ◆ Porting guide for PARIS to RVL+

#### Software

- ◆ O/S environment support : Linux, VxWorks
- ◆ Host support : x86, PowerPC
- ◆ For other O/S support please consult factory

