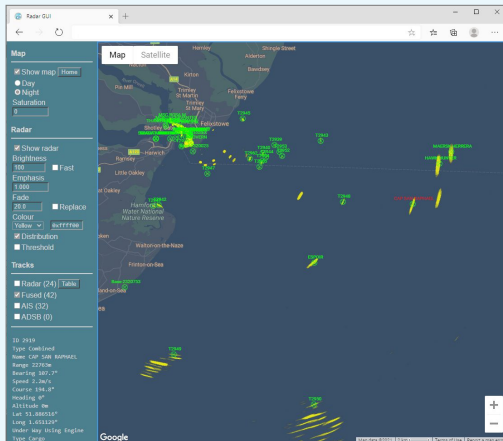


SPx Radar Web Server

Radar Video in a Browser



Features:

- Radar display in a standard web browser
- Runs on a Windows or Linux PC
- Per-client radar presentation
- GeoJSON Track/AIS/ADS-B data
- High quality radar scan conversion
- Selectable radar colours
- History trails
- Radar overlay on ENC charts and maps
- Target overlays
- Secure protocols
- Scan conversion on remote server or in cloud
- Moving platforms supported using NMEA navigation data
- Sample client display showing:
 - Radar video
 - Track table
 - Maps
 - Track symbols
- Full API support for custom development
- Remote control of SPx Server from web client

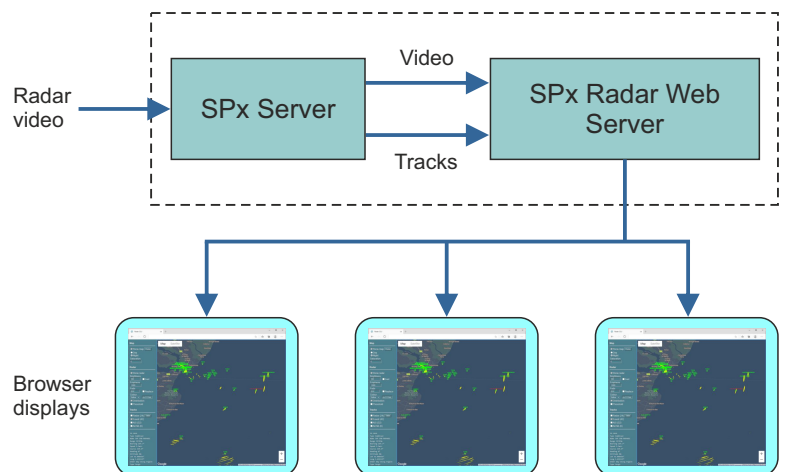
Cambridge Pixel's SPx Radar Web Server is designed to support the display of radar video in standard browser windows. The solution permits the widest possible range of devices to all have access to high-quality radar imagery, with the radar processing burden being offloaded to a dedicated server.

By cleverly requiring only a standard web browser for radar display, display devices from smart phones through to tablets and PC workstations can be deployed simultaneously, with no special requirements beyond the support for a web browser. This is attractive when information needs to be shared with a wide range of users. For example, tablet devices using Wi-Fi or 4G/5G data links would be an ideal solution for displays that need to be portable.

SPx Radar Web Server converts radar video into a sequence of scan-converted images that can be served to a web browser for display with maps, charts, tracks and other related symbology. A typical system architecture will have Cambridge Pixel's SPx Server co-located with the radar to receive and preprocess the radar video and SPx Radar Web Server to scan-convert and serve images to any number of connected browsers.

Each browser can have its own unique view of the radar picture, effectively having its own dedicated scan converter running in SPx Radar Web Server. This allows the operator to change scale and position and see the radar video at full resolution. In a cloud-based solution, a lightweight SPx Server (or HPx-346 unit) will receive the radar video and distribute it to a cloud-based SPx Radar Web Server. The client browsers then simply connect to the cloud-based server to request specific areas of radar data.

SPx Radar Web Server also handles track data (primary radar tracks, fused tracks, AIS, ADS-B), providing these in an extended GeoJSON format to connected browsers for rendering. SPx Radar Web Server is available for Windows and Linux.



A typical system configuration, with SPx Server providing the radar access and SPx Radar Web Server providing the web server for clients to connect to.

DATASHEET



Radar Input

- Analogue radars using HPx cards and SPx Server or HPx-346 directly into SPx Radar Web Server.
- Network radars (Simrad, Furuno, Raymarine, ASTERIX CAT-240) using SPx Server.

Scan Conversion

- Fully configurable scale and off-centre for radar image.
- Configurable radar colour and persistence.
- Radar history trails.
- Any number of connected clients (licence and server resource limited).
- Static or moving platform radar.

Browsers

- Edge, Firefox, Safari, Chrome.
- Number of simultaneously connected clients: licence controlled.

Up to 2, Up to 5, Up to 10, Up to 25, Up to 100.

(For a larger number of connected clients, the performance of the server hardware running SPx Radar Web Server needs to be considered. Having several servers handling fewer clients may be a preferred architecture.)

ID	Type	Name	Range	Alt	Speed	Course	Hdg	Lat	Long	Alt
220020	AS	Boat 220020	1800	218.0	0.0	0.0	0.0	51.53381	-1.15183	0
220019	AS	Boat 220019	1700	207.0	0.0	0.0	0.0	51.53381	-1.15175	0
220018	AS	Boat 220018	6200	207.0	0.0	0.0	0.0	51.54825	-1.16028	0
220017	AS	Boat 220017	200	207.0	0.0	0.0	0.0	51.54825	-1.16028	0
220016	AS	Boat 220016	200	207.0	0.0	0.0	0.0	51.54825	-1.16028	0
220015	AS	Boat 220015	200	207.0	0.0	0.0	0.0	51.54825	-1.16028	0
220014	AS	Boat 220014	200	207.0	0.0	0.0	0.0	51.54825	-1.16028	0
220013	AS	Boat 220013	200	207.0	0.0	0.0	0.0	51.54825	-1.16028	0
220012	AS	Boat 220012	200	207.0	0.0	0.0	0.0	51.54825	-1.16028	0
220011	AS	Boat 220011	200	207.0	0.0	0.0	0.0	51.54825	-1.16028	0
220010	AS	Boat 220010	200	207.0	0.0	0.0	0.0	51.54825	-1.16028	0
220009	AS	Boat 220009	200	207.0	0.0	0.0	0.0	51.54825	-1.16028	0
220008	AS	Boat 220008	200	207.0	0.0	0.0	0.0	51.54825	-1.16028	0
220007	AS	Boat 220007	200	207.0	0.0	0.0	0.0	51.54825	-1.16028	0
220006	AS	Boat 220006	200	207.0	0.0	0.0	0.0	51.54825	-1.16028	0
220005	AS	Boat 220005	200	207.0	0.0	0.0	0.0	51.54825	-1.16028	0
220004	AS	Boat 220004	200	207.0	0.0	0.0	0.0	51.54825	-1.16028	0
220003	AS	Boat 220003	200	207.0	0.0	0.0	0.0	51.54825	-1.16028	0
220002	AS	Boat 220002	200	207.0	0.0	0.0	0.0	51.54825	-1.16028	0
220001	AS	Boat 220001	200	207.0	0.0	0.0	0.0	51.54825	-1.16028	0
220000	AS	Boat 220000	200	207.0	0.0	0.0	0.0	51.54825	-1.16028	0

For more information, please contact:



Cambridge Pixel Ltd
 New Cambridge House
 Litlington, Royston
 Herts SG8 0SS

+44 (0) 1763 852749
 enquiries@cambridgepixel.com
 www.cambridgepixel.com