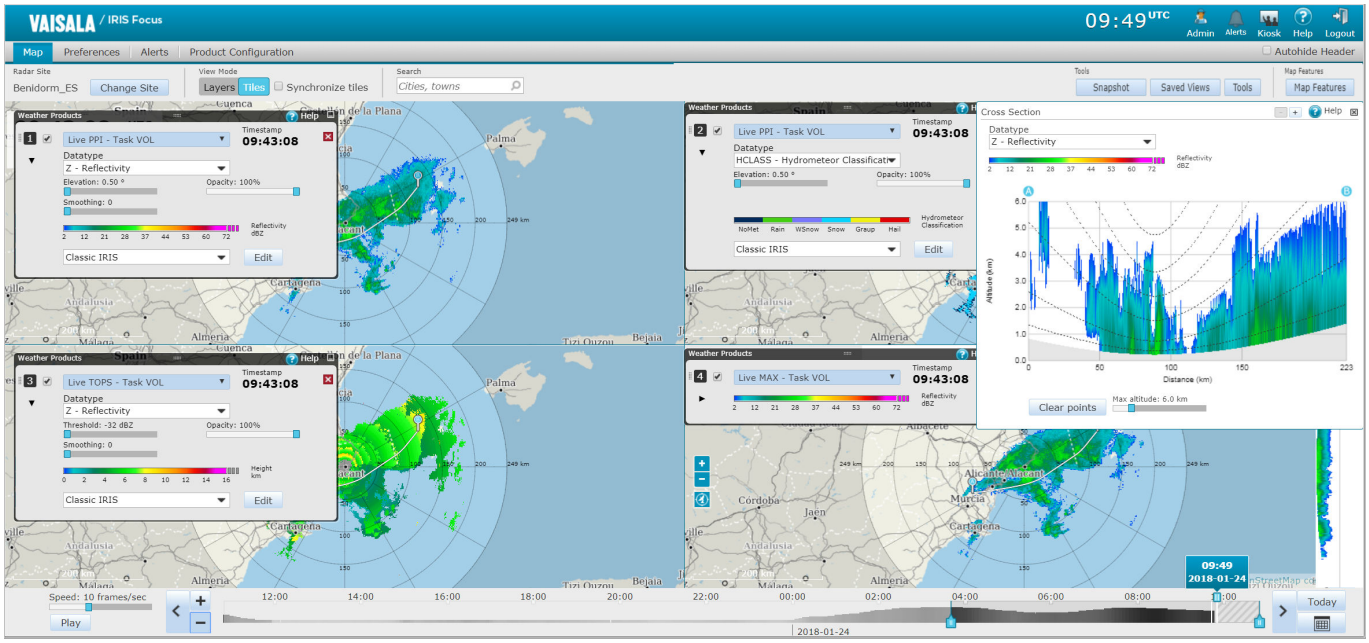
IRIS Focus

Weather Radar Software



Features

- Web-based application
- Easy-to-configure warnings and alerts
- On-demand data regeneration at high resolution
- Tested and audited with the latest security standards

IRIS Focus Weather Radar Software provides a rich set of unique tools for viewing and analyzing your weather radar data. IRIS Focus helps you better understand storms for quicker decisions and more accurate precipitation classification.

IRIS Focus Radar Products

Radar products are raw signal data from a radar receiver processed to provide information about current weather conditions.

On-demand products provide control over the presentation of weather data in the IRIS Focus user interface. For example, users can change the reflectivity threshold of a selected radar product on the fly.

On-demand products are based on raw data from the IRIS back-end. IRIS Focus reads raw volume data and generates radar products in real time.

IRIS Analysis radar products are configured and produced in IRIS Analysis and displayed by IRIS Focus on request.

Composites

Radar product composites combine data from many radars to provide an expanded area of coverage.

Nowcasting

Nowcasting performs advection calculations on motion data from radar products to predict weather movement and severity up to 2 hours in the future.

Nowcasting can be used by, for example, road, energy, or airport organizations to provide real-time decision making support.

Events and Alerts

IRIS Focus can provide alerts for weather phenomena, such as the approach of a severe storm, turbulence, lightning hazard, or flood potential for user-defined areas of interest.

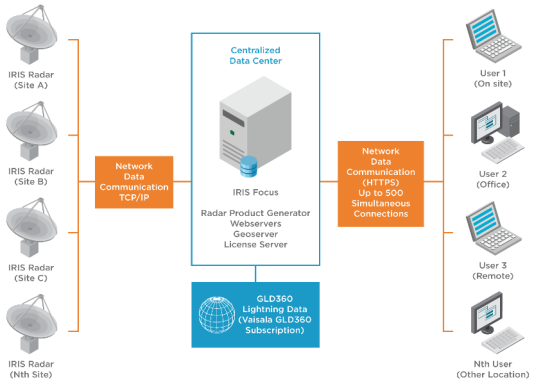
Customizable Map View

The map view can be customized by adding WMS layers from external sources, such as satellite images or radar data from external radar networks.

Technical Data

Network Requirements

Communication from IRIS Analysis to IRIS Focus		
Network data transfer	>100 Mbit/s (1000 Mbit/s recommended)	
Communication from IRIS Focus to IRIS Analysis		
Single user (1 seat)	Network data transfer	> 450 kbit/s
	Latency	~150 ms
Multiple simultaneous users	5 seats	> 2.5 Mbit/s
	10 seats	> 5 Mbit/s
	20 seats	> 10 Mbit/s



IRIS Focus in a Radar Network

Hardware Requirements

Minimum	Recommended[1)]
• Modern 4-core CPU (Intel Xeon E5 series or similar) • 16GB RAM • 1 TB HDD • 1400 x 1050 minimum screen resolution	• Modern 8-core CPU (Intel Xeon E5 series or similar) • 32GB RAM • 2x 1 SAS TB HDD in RAID 1 configuration • 1920 x 1200 screen resolution

1) *The pre-installed IRIS Focus system delivery option uses the Dell PowerEdge R440 rack server unit, which meets the recommended hardware setup.*

Software Requirements

Browser	IRIS Focus supports current Internet Explorer®, Mozilla Firefox®, and Google Chrome™ browsers.
Operating system	CentOS 7.1 or later
IRIS Analysis	IRIS 8.13.6 or later. IRIS Analysis provides radar products through a proprietary socket server connection.

On-Demand and IRIS Analysis Radar Products

On-Demand Product	Radar Product
✓	**BASE** Echo Base
	BEAM Antenna Beam Pattern
✓	**CAPPI** Constant Altitude PPI
	HMAX Height of Maximum Intensity Product
	LAYER
✓	**MAX** Maximum Data
	MLHGT Melting Level Height
	MVF Motion Vector Field
✓	**PPI** Plan Position Indicator
	RAIN1 Hourly Rain Accumulation
	RAIN-N N-Hour Rain Accumulation
	RHI Range Height Indicator
	RTI Range Time Indicator
	SRI Surface Rainfall Intensity
	SHEAR Wind Shear
	SLINE Shear Line (frontal boundary)
✓	**THICK** Echo Thickness
✓	**TOPS** Echo Tops Map
	VAD Velocity Azimuth Display
	VIL Vertically Integrated Liquid
	VVP Velocity Volume Processing
	WARN Warning/Centroid
	WIND Wind Speed and Direction

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Published by Vaisala | B211811EN-A © Vaisala 2019