

RAIDEN RELEASE NOTES

Welcome to the Raiden v2.1 Release Notes. This document provides a summary of all major and minor features included in this release.

Please read this document to find important information on areas of Raiden that may not be covered in the User Guide or the User Help system.

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VERSION HISTORY

VERSION 2.1 – September 2026

WHAT'S NEW

- **Global Tropical Weather Coverage**

When a major storm develops, viewers turn to news outlets to understand what it means for them. Raiden adds tropical cyclone advisories, forecast tracks, and data from NOAA's National Hurricane Center, including Tropical Outlooks and model track plots, giving your team everything needed to relay official advisories and help viewers protect what matters most.

- **Storm Advisories**

- Latest tracking and forecast data sourced for all tropical basins globally.
 - All bulletins are localized to the categories, naming conventions, wind standards, and iconography of the region.

- **Storm Tracking Graphics**

- Full spectrum of layers including storm history, current conditions, and forecast guidance such as cone of uncertainty and forecast positions.
 - Users may place storm-position labels in preferred positions and select whether to show or hide them as desired. First-guess defaults are provided for all storms.
 - Customizable graphic templates and storm icons are provided for your team to differentiate within your markets.

- **National Hurricane Center**

- Official storm bulletins, including Active systems, Potential Tropical Cyclone, Subtropical, Post-/Extra-tropical, and Remnants.
 - Tropical Outlooks (2- and 7-day Forecasts) provide projections of potential areas of formation and investigation areas.
 - "Spaghetti" Model Tracks provide a spectrum of potential forecast paths grouped into convenient categories for easy filtering and display.

WHAT'S IMPROVED

- **3DWorld Web Preview Map**

Users will now see an improved web map that adjusts between low and high resolution basemaps at differing zoom levels.

- **Data Editing**

Parameter names remain fixed outside the scrollbar, allowing for easier navigation while editing multiple days or hours.

- **Adding New Scenes**

- **Scenes from Templates:** Leverage key/favorite scenes from your Story Templates by using the Scenes from Templates filter in the Add Scenes menu.
- **Position:** Adding new scenes will now be placed directly after the currently selected scene.

- **Automatic start on system restart**

For better handling of planned and unplanned system restarts on hosting servers, the Data Aggregator, Local Server, and Story Creator applications now have the option to run automatically as background tasks at system start. Raiden installers provide your system administrator with the option to launch the applications automatically when Windows restarts without requiring a user login (new), or to launch them manually after login (legacy).

- Voyager Raiden Plugin now includes a **configuration tool** and **status indicator** for immediate designer visibility that data connections are healthy.

WHAT'S FIXED

- Story Creator's automatic story cleanup feature failed in the most recent v2.0 release because it was missed during regression testing. This has been corrected.
- Daily Summary Value selections, such as min or max, and forecast edits were not saved on 3DWorld scenes. The Hazard icon on/off setting was also not saved. This occurred when leaving and returning to a scene, duplicating a scene, or using a scene within a Story Template; in each case, the settings reverted to their default values. This has been corrected so that these selections and data edits are retained until the normal cycle expiration.
- Map movements occasionally performed a small hook-like movement at the beginning or end of a point-to-point movement. This has been resolved so that movements follow a straight line with the expected ease-in/ease-out effect.
- Resolved an endpoint issue with the Copernicus Marine Service (Mercator model).

- A general fix was implemented for forecast download tasks in Data Aggregator to improve monitoring when datasets are ready at the source for download. This eliminates a number of partially completed cycles caused by priority ordering.
- Modifying the scene duration button was locked in some situations. This was corrected to allow user changes in all expected situations, with warning pop-ups as necessary if user objects are impacted.
- A general fix was implemented to prevent configuration-file content from being overwritten with default values during version upgrades.
- Story edit mode OFF (i.e. viewing someone else's story) allowed any user to delete scenes. This was corrected so that scenes may be deleted only when edit mode is ON, as is the case with all other settings.
- An issue with European radar reflectivity when using the type parameter was addressed in the processing logic, which caused certain areas to appear empty where there was rainfall.
- Resolved a payout issue that could cause entire weather layers to be missing from map-based scenes and cause the landmask to work intermittently.
- Fixed an issue with the "Replay Story Item" that caused errors during preview and payout.
- Drawn fronts with Property changes to the object were disappearing on payout. This was corrected to ensure fronts are visible at drawing, preview, and payout.

VERSION 2.0 – May 2026

WHAT'S NEW

- **Native Voyager Integration in Story Creator**

- Meteorologists and Weather Presenters can now **build virtual story rundowns** for Voyager directly in Raiden's Story creator. Presenters create immersive virtual weather stories using the same familiar tool already used for traditional weather graphics. Single and multi-engine productions supported. This adds another option to the unique MOS-enabled workflow available from Ross Virtual Solutions and its Lucid control interface. These options give broadcasters flexibility to choose what best fits their production.
- A unified **Story Player** allows both XPression and Voyager stories to be driven from the same interface, with both engine types at the same time if desired. This simplifies playout for Meteorologists enabling them to progress their stories with a single control device while on camera such as the Raiden remote, Dashboard, or a tablet/phone.
- **3D Maps & Weather Layers**
Automatic creation of immersive 3D Terrain Maps for your regions of interest, with numerous visual configurations including geographic and reference overlays. Selection and customization of weather layers.
- **Data Connectors for Point Graphics**
Connect points of interest to graphic elements of your own design or templates available in the plugin. Creativity is unleashed to drive data-driven content of your own design.
- **Event Triggers**
Automatic event creation exposes standard playout triggers (e.g. animations in/out of the scene) for immediate production use, whether being used from Story Creator by a Meteorologist, or within Lucid by an operator.
- **Ultra Dynamic Sky Plugin updates**
Automatic control of outdoor environmental simulations that can be inserted into rundowns and aligned with graphic asset data (e.g. AR forecast element) when desired.

- **New Scene Types: Multi-Location Observation and Forecast**

Users may now generate a single graphic covering multiple locations with forecast or observation data. Maintains the same selection and editing interface as single-location graphics.

- **Precipitation type support** provides a visual composite of all forecast (models) or observed (radar) precipitation with color bands by type (rain, ice, mix, snow), all customizable by the user.
- **MOS Publishing Automation** allows Meteorologists to publish curated graphics from Story Creator for use by Producers/Editorial via their MOS Plugin in the Newsroom Control System (NRCS). This empowers collaborative newsrooms to easily incorporate more weather content across news segments.
- **Data Profiles**
Centrally manage data selections for your Points, Stations, and Regions of interest, allowing changes and future additions (i.e. new data sources) to be easily executed across all your locations with a few clicks. Profiles may be shared between stations for driving best practices.

WHAT'S IMPROVED

- **Video Output Monitor – alternative Preview Option**
XPression content may now be previewed using a virtual output channel, referred to as a Video Output Monitor. This eliminates the need for a dedicated XPression output channel for preview. Users now have flexibility to use this virtual output, continue with NDI Preview, or both. The existing NDI Preview method is recommended for organizations that have Meteorologists working remotely over VPN as it provides better compression and performance over external connections. The Video Output Monitor works best over LAN connections.
- **Daily Summary Forecast Support on Maps**
Maps now support daily forecast values (prior was hourly only) to create summary charts of Highs, Lows, Max. Winds, Predominant Weather, etc.
- **Image Resolution Selection**
Local Server now provides the option for regional imagery to be generated in HD (1080-pixel width) or UHD (2160) resolution. This allows large, continental size regions to have much higher quality weather layers for zoom and pan animations.
- **Categories in XPression**
Each Raiden Story now appears as its own category in XPression, making it easier for graphics operators to locate and manage Raiden content inside XPression.

- **Simplified interface for Geographic Layers**

Quickly add high-res geographic reference layers for your Regions, including country, state, county/district, highways, roads, rivers, and lakes.

- **Automatic Regions Setup**

This is no longer required to be setup manually during commissioning. Users have direct access in Story Creator and DataLinq to all regions established in Local Server for weather and geographic layers.

- **Local Server file optimization**

Improved temporary file management provides storage utilization improvement, expanding a system's capacity to support more regions, more layers, and higher resolution imagery when desired.

- **Auto-Export Scheduler**

Allows operator to create packages of graphics that will routinely generate exported clips from latest data to use for web, social, and other distribution channel needs.

WHAT'S FIXED

- **Delete All Locations** button added to the Story Creator Editor interface.
- **US NWS Alerts** – additions of new or revised zones are now automatically updated on the user's system in real time.
- Daily forecast summary values are now generated based upon the point's local time zone, rather than the host system time.
- Update to AWS end point for the European Centre for Medium-Range Weather Forecasts (ECMWF) Open Data.
- Autofill Days automation issues for Forecast and Observation scenes addressed.
- Weather icons and descriptions would sometimes differ on DataLinq source.

TARGET RELEASE VERSIONS

The following product versions are targeted for the Raiden v2.0 release:

- XPression 12.6 Build 6176
- Voyager 8.0 Build 625

VERSION 1.4 – November 2025

WHAT'S NEW

- **European Radar**

Powerful storytelling data option available from Foreca Ltd. with coverage across all of Western, Northern, and Central Europe. Updates every 5-minutes with 1-km resolution. Includes composite reflectivity, precipitation type, accumulated 24-hour precipitation, and 120-minute future radar.

- **Front Drawing**

Drawing annotations has been significantly expanded to include the ability for users to draw, edit, and animate various frontal boundaries. Front style and design preferences also provided.

WHAT'S IMPROVED

- **New Data Range Settings: Absolute and Relative Time**

The Data Range interface has been updated to allow users to alternatively select Relative Dates and/or Times. For example, Story Templates can now be configured using scenes with Relative Dates (e.g., today +1 = 'tomorrow') and Absolute Times (e.g., 6 AM) to rapidly apply a baseline Story for the day's programming.

- **Alert/Warning Icons**

Users can automatically apply alert type icons for the viewer's situational awareness.

- **Lock and Sort Drawing Objects**

Users can lock graphic objects while drawing annotations and editing animations, allowing easier edits of items in close proximity. Users may also change the vertical order of objects in their scene.

- **Unique Shape and Multi-Polygon Shape Support**

Enables creation of regions based on custom geography, such as outline/border of a broadcast coverage area (e.g., DMA, State, Country). Unique shapes can then be used within the rendering engines for enhanced basemap overlays and map-based augmented reality.

- **Data Source Names and Sorting**

For ease of use in Story Creator, selecting data sources now use simple, client-defined names in Local Server, rather than the full, long-form official name. Admins will also have the option to choose if sources are ordered alphabetically or by processing priority.

- **Data Retention**

Forecast data retention was updated to maximum cycles rather than days. With users now utilizing sources from v1.3+ that update hourly, days was no longer a practical unit.

- **Additional Geographic Layers**

Additional high-res geographic reference layers are available for your Regions including: country, state, county/district, highways, roads, rivers, and lakes.

WHAT'S FIXED

- Location order when applying Groups in a scene was random. This was corrected to use the order the user created, allowing flexibility to place locations in order of a geographic pattern, alphabetical, or any preference.
- User Preferences are now saved on the server, rather than on the browser, allowing settings to follow users as they move to different devices.
- Story Creator: weather condition edits will now automatically update textual weather condition descriptions, if applicable for a graphic.
- XPression crash addressed that occurred during scene duplications with excessively long scene names.
- Wind Gust parameter in ECMWF Open Data issue fixed.
- Autofill Day labels fixed to allow use in "Latest" observational animations and flexibility with Relative or Absolute time selections.
- Minute display options now available for animating short durations (e.g., radar loops).
- Issues with scene renaming that were fixed:
 - Duplicating scenes containing station plots caused a conflict with the original and duplicated scene(s).
 - Names including hyphens caused issues with publishing rundowns.
 - Names with unintended spaces at the end.
- Fixed the Story Template scene order that sometimes would be random.
- Success message now shows for all scene types when sending to the engine.

VERSION 1.3 – August 2025

WHAT'S NEW

- **New Data Source Support**

Leverage a variety of new local and global datasets to provide viewers with greater insight to weather impacts in your areas.

- **US/Canada, Alaska, Hawaii Composite Radar** – updated every 5-10 minutes, 1km resolution, with reflectivity and type.
- **XWeather (a Vaisala Company)** observations, forecast, maritime, and air quality data.
- **High-Resolution Rapid Refresh (HRRR)** – hourly updated model known for its ability to provide detailed forecasts, particularly for short-term, high-impact weather events.
- **National Digital Forecast Database (NDFD)** – official forecast from the US National Weather Service.
- **Global Surface Analysis** for current condition visuals anywhere in the world.
- **Mercator Global Ocean** for sea surface temperatures, anomalies, salinity, sea ice, currents, and tides.
- **Global Forecast System (GFS) Wave** for wave and swell data.

WHAT'S IMPROVED

- **Model Cycle Update Control**

Control whether your Stories or Templates remain fixed on the user-selected model cycle, retaining your data choices and forecast edits, or if they automatically update each time you open a Story. Model cycles now display as available once they have successfully processed.

- **Voyager Raiden Plugin – Design Tools**

Provided as simple drag-and-drop tools, Designers are able to build DataLinq-driven weather assets in Voyager without manual scripting or blueprints. This feature set enables Designers to quickly create and deploy virtual weather productions.

- **Edit Scene Name**

User may edit the name for any scene directly in the interface.

- **Scene Replay**

Users may re-use, or replay, the same scene multiple times in the same Story rundown and only need to configure it once.

- **Autofill Days Option** (for timestamp reference text)
Autofills the days of the week in the optional timestamp text fields. Language choice included. Existing text editing for special days (e.g. holidays) remains.
- **Default Timestamp Format**
Administrator-controlled default format for date and times on timestamps, for consistency across graphics. Unit defaults also aligned in the UI.
- **Additional Geographic Layers**
Add to your regions of interest highways, roads, lakes, and rivers.
- **Default Basemaps**
Now includes NASA Blue Marble and Natural Earth open source basemaps.
- **Performance Improvements**
Includes Local Server improved loading of processing logs to see current processing status, stabilized multi-threaded processing, and faster opening of Stories in Story Creator.

WHAT'S FIXED

- With expansion of datasets supported, "Futurecast" animation control section renamed simply to "Data".
- Improved handling of the Raiden project in XPression when used in conjunction with other active projects.
- Issue on blending mode for severe weather alerts, that obscured other layers from being visible when blending mode was OFF.
- Issue that caused severe weather active alert records to be retained, when revised or cancelled.
- Issue when creating new output styles (color tables) that caused even existing content to be unavailable in Story Creator until the next cycle.
- Animation keyframe logic that caused some keyframes to display beyond the control area.
- Issue that caused a nighttime weather icon to display on a Daily Forecast graphic.
- GMGSI satellite source update

Users should update their XPression version to 12.0 Build 5981

VERSION 1.2 – March 2025

WHAT'S NEW

- **Advisory Data Support**

Display official weather alerts/warnings and advisories in your broadcast area to provide viewers awareness of hazardous weather threats.

- Initial sources include **EUMETNET-MeteoAlarm, US NWS Warnings, and IMO Alerts.**
- New map layer category with controls, including visual style selection and quick filters by alert type and severity level.
- Include within snapshots and historical or forecast animations.

- **Local Video Export**

Directly export video clips of your weather story content for sharing and uploading to social media, web pages, etc.

- **File format choice** provides multiple common formats used for sharing within newsroom workflows and web/social posting.
- Files are exported to a folder that users can monitor and are **downloaded to your local device** for immediate access.

- **MeteoFrance Model Support**

Support for ARPEGE Monde (Global) domain at 0.25deg resolution and Europe domain at 0.1deg resolution.

- **XPression**

Raiden v1.2 is compatible with XPression 12.0.5955 64-bit.

WHAT'S IMPROVED

- **Points of Interest Groups**

Link multiple sets of your Stations and Points of Interest to Groups, for easy addition to graphics and editing.

- **Duplicated scenes** are now placed next to the source scene in your rundown.

WHAT'S FIXED

- Quick navigation between scenes caused some content to be lost.
- Resolved issues with adding and deleting stations from a duplicated scene.
- New bookmark and status tray icons improve differentiation from originals.

VERSION 1.1 – January 2025

WHAT'S NEW

- **Satellite Imagery**

Global satellite imagery, via real-time animation loops, provides compelling situational awareness for broadcasters globally.

- **Included imagery** consists of color-enhanced Infrared, Water Vapor, and Visible imagery.

- **Voyager Raiden Plugin**

This first version of the Voyager Raiden Plugin provides a DataLinq-based workflow for connecting Raiden point-data into the Voyager engine.

- **Voyager DataLinq Plugin Support** to run data-driven weather content and environments for locations of interest, with configuration tools to more easily deploy AR assets.
- **Ultra Dynamic Sky Plugin Support** to immerse talent in virtual weather simulations tailored to specific locations and times of interest.

- **Shared Scenes**

Scenes that can be edited once, and all other Stories that use that Scene will automatically receive the updated content.

- **Visual Icon** added to scene thumbnails for easy recognition.
- **Designed For** users who create numerous shows daily with repeating content.

- **Map Favorites**

Save and readily apply preferred camera views over a region, with option to standardize specific favorites for Station consistency.

- **New Scene Types:**

- **Headlines** to summarize the most important impacts of the Story.
- **Media with Labels** adds custom header or label entry capability to the existing Media scene for image or video import.
- **Next Hours Planner** to present an hourly or multi-hourly forecast for a selected location of interest. Base templates include 1hr and 3hr options in a tabular format.

WHAT'S IMPROVED

- **3DWorld Scene Type**

- **Real-time Imagery and Observations**

- 3DWorld scene upgraded to support real-time and historical imagery with existing animation controls.
 - Data Time Setting allows for automatic loading of latest imagery duration or a defined interval in time.
 - Points of interest using observed and/or analysis data may be plotted for fixed or animated maps.
 - Optional headers, timestamp, and custom text entry.

- **Radar, Satellite, etc. animation settings** include continuous looping or single-play and speed control.

- **Automatic updates on publish for playout**

Scenes using real-time updating datasets (e.g. satellite) will be automatically checked for new imagery and automatically updated when the rundown is Published for playout.

- **Regions Selection** consolidated to single entry per region.

- **Forecast Data Editing**

Singular cycle selection now available for all locations of interest using a common source (e.g. Euro).

- **Color Scale Import/Export**

Weather layer color scales (color maps) available for export for sharing, and to easily replicate as a base for creating additional color scales.

- **Automatic Story Cleanup Maintenance**

Old Stories and their included Scenes are purged automatically on a daily, weekly and/or monthly basis, per admin-defined expiration settings. Story Templates excluded.

- **Data Source Prioritization**

Allows users to prioritize the processing of preferred weather data sources regardless of arrival or cycle time.

- **Duplication Optimization**

Scene and Story duplication more performant resulting in faster copy and load times.

- **Wind Particle Settings**

Added additional support for particle density, velocity, and size control.

- **Improved Installers**

Automated Windows installers enabling quick initial installation and upgrades. Installs now include detailed version and build information.

- **Cloud Parameters**

Added support for some models for additional cloud levels (aggregated and pressure levels).

NOTE: Existing users will need to review for any changes or additions required when conducting the upgrade from 1.0 to 1.1.

WHAT'S FIXED

- Location add/delete activities would sometimes cause failure of weather layers to display on payout.
- Layer opacity settings were sometimes lost when adjusting data time settings.
- Data Layers settings table, under Sources, now only shows sources activated for a given parameter.
- Open Euro animation smoothing addressed when the selected forecast start or end time is on an unavailable sub-3hr timestep.
- Special character support for Points, Stations, Regions, and Story names.
- Map controls ease-in/ease-out transition sometimes defaulted back to linear method.

VERSION 1.0 – July 2024

WHAT'S NEW

The entire Raiden system is new! This includes a brief summary of the features, connections, and content available for the initial release.

- **Web-based Workstation**

User-friendly web interfaces for managing weather data and building weather stories anywhere with internet access.

- **Data Aggregator:** centrally harvests weather data from user-defined sources ensuring compatibility with different forecasting models.
- **Local Server:** processes and visualizes preferred weather data from a wide range of sources for the rendering engine(s).
- **Story Creator:** create or update complete weather stories from anywhere for live production.

- **XPression**

- Real-time graphics rendering powered by XPression
- Seamless integration into existing news station workflows
- NDI® web preview on web-based Story Creator
- *Raiden is compatible with XPression 11.5.5823*

- **Stories & Templates**

- Create, manage, and reuse individual rundowns.
- Scene types: Media, Daily Forecast, Current Conditions, 3D World
- Save recurring shows as story templates.

- **Forecast Editing**

Editing capabilities allow meteorologists to fine-tune predictions from preferred forecast models or sources.

- **Forecast Animations**

Dynamic 3D moving maps with customizable weather layers and drawing annotations for enhanced visual presentation of forecasts.

- **Localization Support**

Language preference provided on each user's workstation, with weather data populated in local units and language. English, Spanish, French initially available, with other languages available on request.

- **Data Sources**

- Includes access to publicly available global datasets to start:
 - Global Forecast System (GFS) model
 - European Centre for Medium-Range Weather Forecasts (Euro) model - Open Data
 - Global METAR observations
- USA sources: RTMA analysis, NWS Warnings, HIRESW, HREF, SREF
- Iceland sources: IMO official forecasts, IG model, DINI model

- **XPression DataLinq™ Integration**

Use existing design and control workflows to build new and unique data-driven weather graphics. For example, MOS (Media Object Server) devices for enhanced workflow efficiency and broader weather content use.

- **Flexible Hosting Options**

Various hosting options available, including on-premise, virtual, hybrid, and cloud hosting, to support different organizational preferences, security requirements, and scalability needs.

- **Web and Mobile Content for Digital Platforms**

Generate weather content for web, mobile, and OTT (Over-the-Top) applications, ensuring that forecasts and weather stories can reach audiences across different digital platforms.

GETTING HELP

- Raiden's User Guide opens directly from the help (question mark) icon in your default web browser.
- Our 24-hour hotline service provides access to technical expertise around the clock. After-sales service and technical support is provided directly by Ross Video personnel.
- During business hours (Eastern Standard Time), technical support personnel are available by telephone.
- After hours and on weekends, emergency technical support is available. A telephone-answering device will provide the names and phone numbers of technical support and field service personnel who are on call. These people are available to react to any problem and to do whatever is necessary to ensure customer satisfaction. For serious issues which need urgent attention and tracking, please ensure you are given a ticket number and refer to this in future communications.
 - **Technical Support: (+1) 613-652-4886**
 - **After Hours Emergency: (+1) 613-349-0006**