



VR-TheWorld 4.15.1 Release Notes

This release note contains release-specific information for VR-TheWorld 4.15.1.

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System Requirements

VR-TheWorld 4.15.1 supports:

- Ubuntu 24.04 or later
- Red Hat Enterprise Linux (RHEL) 8 or later
- Windows 10 or later. The OS must support Windows Subsystem for Linux 2 (WSL2)

 CentOS Linux was an open-source enterprise operating system designed to be completely compatible with Red Hat Enterprise Linux. However, it has now transitioned to CentOS Stream, which acts as an upstream source for RHEL. New features will be introduced into CentOS Stream, where the bugs are worked out, and ultimately the new updates trickle down to RHEL. Since it is no longer essentially RHEL without the cost of a subscription, CentOS Stream is not a supported operating system.

New Features and Major Updates

VR-TheWorld 4.15.1 supports:

- Ubuntu 24.04 or later
- Red Hat Enterprise Linux (RHEL) 8 or later
- Windows 10 or later. The OS must support Windows Subsystem for Linux 2 (WSL2)

This release of VR-TheWorld includes feature improvements:

- Updated versions for Tile Server GL, Dozzle, and PostGIS.
- Updated MAK Topographic Map GL Style.
- Layers now have an option to store the tiles in their cache as metatiles, which are 8x8 tiles packed into a single object. This increases the throughput of performing export jobs and caching jobs when using S3 as a storage backend because the number of network transfers are significantly reduced.
- Added metrics for tracking the cache hit/miss rate, S3 read rate and MBTiles write rate.
- Integrated Redis cache as a shared memory cache across all processes within the container.

Data Additions and Updates

VR-TheWorld 4.15.1 includes minor data updates:

- Updated Guam 1 m elevation to 2020 Cloud Optimized Geotiff (COG) dataset.
- Updated USGS National Land Cover Database (NLCD) from 2012 to 2024 version.
- Updated the MAK OSM Topo GL Style to better align with the USGS Topo style guide. Also fixed a few sprite mappings.

- Updated the 115 m European Bathymetry (EMOD) to the 2024 version.
- Updated Airport data used in Feature Layers to X-Plane 12.4.
- Updated Oahu Buildings dataset to a Flat GeoBuf (.fgb) and updated Feature Layers.
- Updated OSM datasets to latest versions.

Fixed Bugs

- Fixed bug in feature layers where the EPSG code of the table created in PostGIS is not EPSG:4326.
- Bug fixes for elevation backfilling when resampling method is min, max, and average to improve edge matching between tiles.
- Bug fix for elevation backfilling with sparse datasets.
- Added speedups for metatile caching and exporting.
- Fixed issue where collection layers containing sublayers with min levels could bleed the higher level layers into lower level tiles outside of the min level range.
- Increased WebP quality from 75 to 90 to fix issues with single color layers.
- Fixed bug in collection layer display in the layer properties page.
- Refactored UI to use Tanstack Query.
- Other minor UI fixes and updates.

