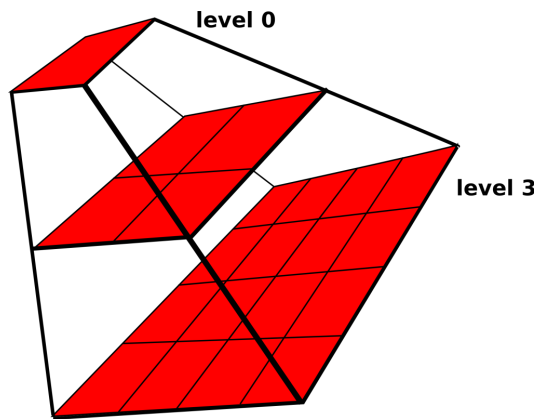


EasyCore and EasyDB

Image Handling



What is tiling?



EasyCore and EasyDB

1. handles images through a process called tiling, which involves breaking down large images into smaller, more manageable pieces called tiles.
2. These tiles are then loaded and displayed dynamically as needed, allowing for efficient rendering and smooth navigation.

EasyDB stores images in 8 resolutions

Highest (native quality) could be 100.000 by 100.000 pixels

Very high resolution: tiles of 2048*2048

High resolution: tiles of 1024*1024

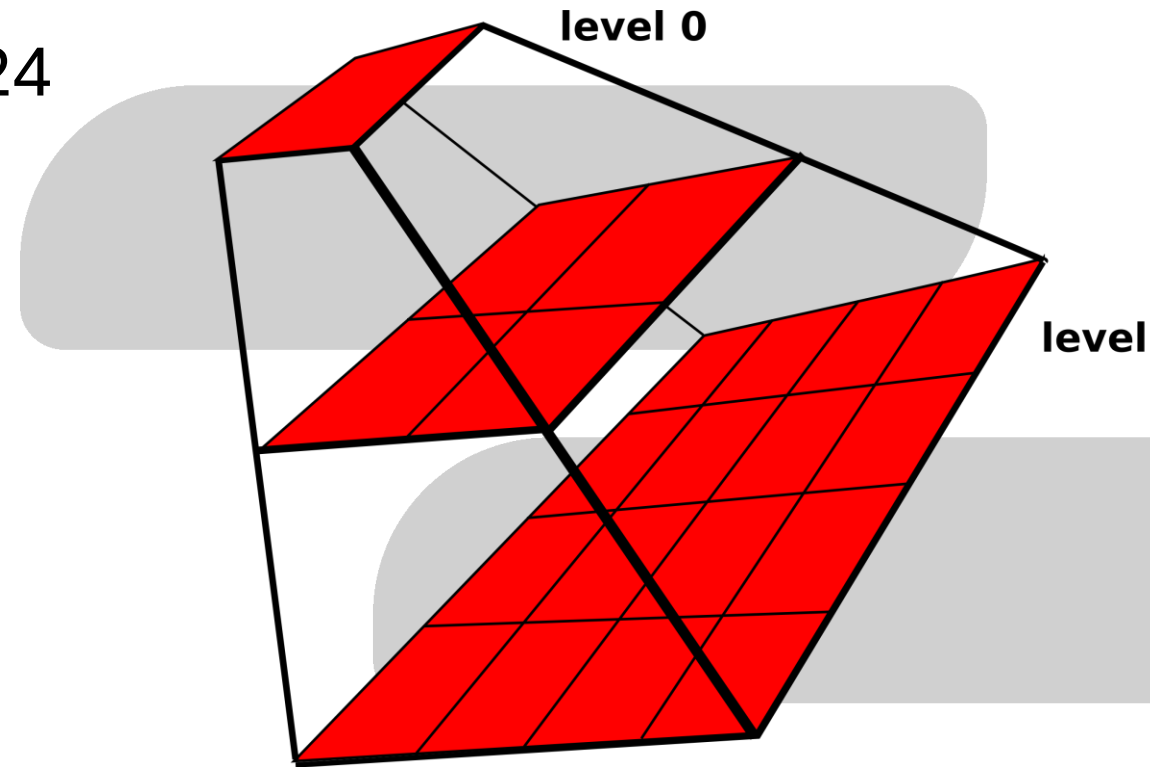
Medium resolution: tiles of 512*512

Low resolution: tiles of 256*256

Very low resolution: tiles of 128*128

Thumb nail resolution: tiles of 64*64

Birds eye resolution: tiles of 32*32



Tiling and storing images in EasyDB offers several advantages

Efficient Retrieval: By breaking large images into smaller tiles, only the necessary tiles need to be retrieved when a user requests a specific area. This reduces the amount of data transferred and speeds up image retrieval, especially for large datasets.

Bandwidth Optimization: Tiling allows for on-demand loading of images, which minimizes bandwidth usage. Instead of loading the entire image, only the tiles needed for the current view are fetched, conserving bandwidth for both the user and the server.

Scalability: Tiling enables scalable image delivery, allowing for seamless browsing of high-resolution imagery across different zoom levels. As users zoom in or out, the appropriate tiles are fetched, ensuring a smooth and responsive user experience.

Caching: Tiled images can be cached locally on the user's device, reducing the need for repeated downloads. This improves performance by minimizing network latency and load times, particularly for frequently accessed areas.

Optimized Storage: Storing images as tiles in a database optimizes storage space by eliminating redundancy. Tiles can be efficiently indexed and compressed, reducing storage requirements while maintaining image quality.

Flexibility: Tiling offers flexibility in managing and updating image data. New imagery can be seamlessly integrated into the existing tile set, and updates can be applied incrementally without disrupting the user experience.

Overall, tiling images and storing them in a database provides a scalable, efficient, and flexible solution for managing and delivering large volumes of imagery, making it an ideal approach for platforms like EasyDB and EasyCore.

