**CitiusTech** | Case Study

HEALTHCARE
LIMITLESS

# Digital Pathology WSI Solution

Our vision is to inspire new possibilities for the health ecosystem with technology and human ingenuity. At CitiusTech, we constantly strive to solve the industry's greatest challenges with technology, creativity, and agility. Together with the world's leading Healthcare and Lifesciences organizations and our partners, we aim to accelerate the transition to a human-first, sustainable, and digital healthcare ecosystem.
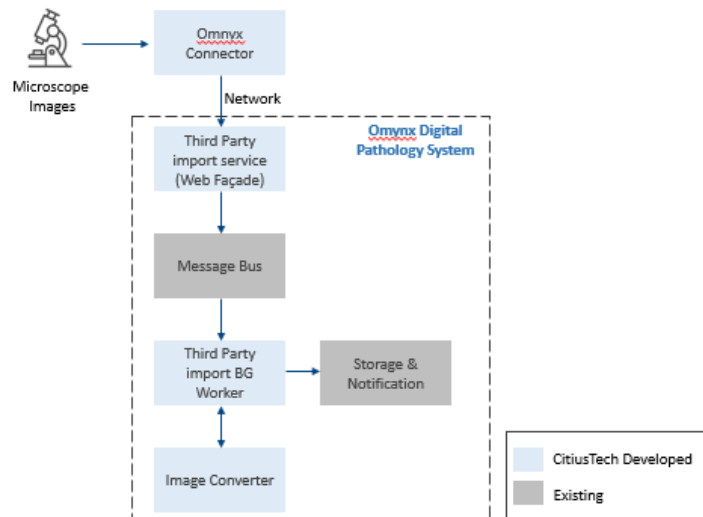
**Get in touch: info@citiustech.com**

## Client Requirements

- Customer was a joint venture between a large IDN and health IT ISV to provide digital pathology solution
- Client was looking to build a standards compliant solution for ingesting pathology data across multiple scanners
- Also, Client wanted to develop a solution for transferring high resolution pathology images scanned using microscopic camera to the archive.
- CitiusTech was selected to design this solution owing to its expertise in medical imaging domain, corresponding standards and toolset.

### Solution Schematic



## CitiusTech Solution

- Monitoring the scanner for incoming scans. Once the scan is defined as complete, initiating secure transfer by requesting token to server
- Authenticating the received token.
- Transferring tiled images and stitching of tiles in parallel
- Compressing the reconstructed image and archived with corresponding meta data

**Value Delivered:**

- Supported the scanners from different vendors generating scans in varied formats (e.g. Hamamatsu, Leica, Aperio, etc.)
- Ensured reconstruction and compression was done in JPEG format to conform with DICOM Standard
- Provided easy Integration of third-party scanners generating images