

Verizon Status Update

Technical Achievements For 2020

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## Verizon Portal

We created a Verizon only version of our Web portal, located at https:\\viewer.vzwsmart.com.

The site, the backend SQL server database, all photos and documents, and the web API are located in the cloud hosted on AWS servers.

The portal is mainly designed from a contractor’s point of view to manage Mounts, Inspections and Construction jobs. Verizon users can monitor status, percent utilization and locate design artifacts.

## PMI Portal

We created the PMI web portal https:\\pmi.vzwsmart.com to allow users to download PMI forms and upload photos and completed PMI documents.

The initial demo release went live on 3/31/2020. The general availability was 4/15/2020.

To date we have had 125 contractors create user accounts.

## Verizon API

The Verizon API was created on 08/18/2020 and is located at https:\\api.vzwsmart.com.

It has three main API functions.

1. The first allows authenticated user access to a summary of all jobs in the TES database. There are several filters and criteria that can be applied to limit the returned dataset.
2. The second API simplifies the dataset to return PMI jobs in a Hold status with Hold reason ‘Pending Construction Complete’.
3. The third API returns only PMI jobs that have both PMI documents uploaded and Photos upload. These jobs are considered complete from a PMI upload perspective.

## Ground Based Assessment Mobile App

An initial prototype of the Ground Based Assessment app was completed on 10/17/2020. The application built for both Android and iOS devices allows a user to quickly take photos of a tower and submit an initial assessment. The application guides a user through the required and optional photos and allows them to make comments or notes for each photo or the site in general. There are example photos and help descriptions to aid the user in taking the correct photos.

Once completed the photos and site information are used to generate a pdf and post to the TES-Verizon web portal. https:\\viewer.vzwsmart.com.

## Admin Site

The admin site is under continuous development to automate the management of user accounts and all settings and configuration of the applications and web portals.

# SMART Tool Enhancements Since January 2020

* We started with SMART Tool version 1.0.22 and are currently on version 2.5.19. We’ve had a total of 91 total SMART Tool releases.
* Added business logic state checking logic when user tries to change project Status
* Separated Documents page from the application into its own window and added more advanced document management features to this page
* Added document file synchronization logic to sync local files to a controlled file area on our server
* Added project status history
* Added loading of OnMember and Fix Kit Delta Node selections from RISA input file
* Added Status and Validation Date fields to Appurtenance user interface and forced user to set status prior to Write Loads or Write RISA
* Made multiple updates to the Documents page to make it more user-friendly
* Added antenna placement A&E diagrams
* Added PMI comments
* Added projects export to Excel in Projects page
* Added Wind Speed table selection loading and link to ASCE 7 Hazard Tool
* Multiple changes to Write RISA/Loads logic to handle additional error handling and validation
* Added paged/asynchronous loading of projects list to Projects page
* Added paged/asynchronous loading of mount analysis models list to Mount Analysis page
* Added Days Since Last Change view parameter to Projects page
* Made changes in the tool to accommodate Paul J. Ford contractor
* Added feature to recover previous versions of mount analysis models in the Mount Analysis page (Undo From Job History)
* Updated Write Loads logic to pick up PMI project number
* Added members database management tool for Admin users
* Added several service types (CD, CD-As Built, CD-Prelim, Site-Walk, DBACTIVE, CD-Revision, Analysis-R, Mount ReAnalysis-PMI, Mount Fix-PMI)
* Added user role (BlockMAToolAccess) that allows us to to deny access to MA Tool from the Projects page
* Updated the Map control to show terrain/street view
* Added the ability to save mount loading arrays as a saved template that can be appended to another mount analysis model
* Added validation logic to ensure project image files are present prior to allowing project status to be set to COMPLETED
* Added redundancy to cloud-based API instances
* Added logic to validate presence of required files for Mount Fix projects when the Status is changed to Pending CAD
* Added MCU/MRU selections in Antenna Selection control
* Added MS App Center API calls to capture live app analytics
* Added script-driven SMART Report tool to automate final deliverable report generation
* Added Batch Status change feature to allow changing multiple project status at the same time