

tech assist Training

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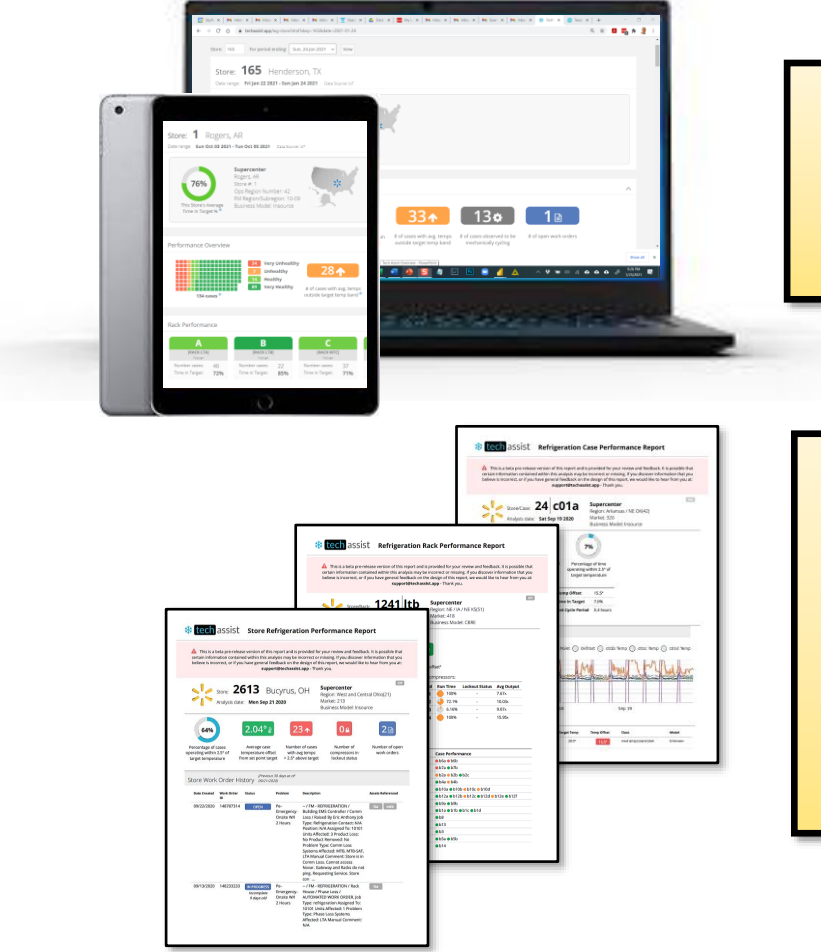
Overview

Tech Assist is a web application designed for Refrigeration Managers, Experts and Technicians that provides a single source to view store, rack, case and work order information from a laptop or tablet.

Single Source of Store, Rack, Case and Work Order Data & Analytics

Web Application

TA Reports (PDFs) attached to Service Channel Work Orders

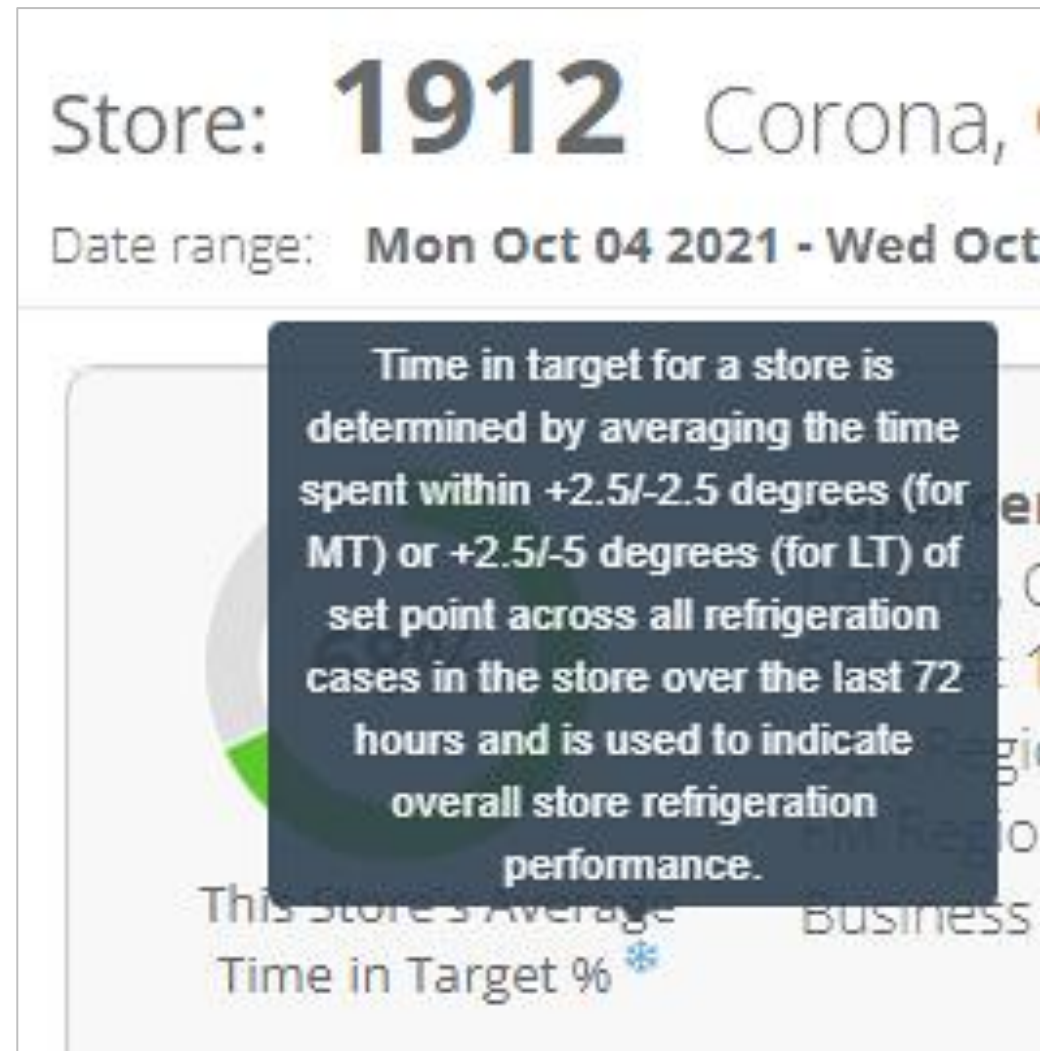
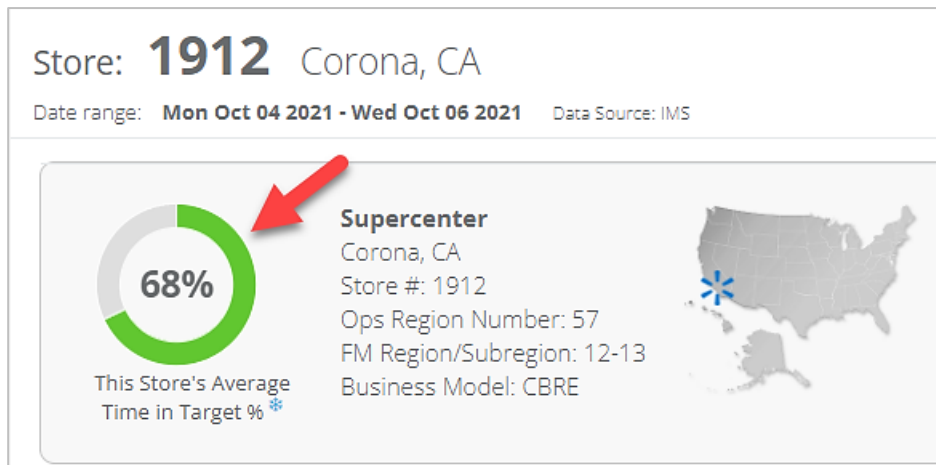


Note: Tech Assist receives data 4 times a day, but it is not a real time monitoring application

Getting Started

- Tech Assist is easy to learn and easy to use – just jump in
 - You can't break anything – Tech Assist is read only
 - Explore. There are a lot of capabilities that can't be covered in one session
 - Tech Assist has a simple Store > Rack > Case hierarchy
- Steps to Get Started
 - Go to techassist.app to gain access.
 - Create your list of stores
 - Go to Store Viewer starting with the lowest performing stores
 - Let the data lead you to Rack and Cases that are impacting performance
 - Use Tech Assist to help isolate the problems and develop resolution plan

Key Measure: % Time in Target



% Time in Target is also provided for Racks, Circuits and Cases.

Note: % Time in Target excludes defrost cycles

For Managers

- **Leaderboard**
 - Focusing on quarterly performance improvement by HVACR Manager
- **Explorer**
 - Access and Filter all Tech Assist Store level Analytics
 - Export for further action and analysis

Service Channel PDF Reports

- Store, Rack, and Case PDF Reports accessed from Service Channel WOs
- Reports are created when the WO is submitted (or an asset is added) and shows data for that point in time. For most recent data, use the Tech Assist app.
- A Store Report is available for all Work Orders. Rack and Case reports available when asset IDs are provided in the Work Order.

The image displays three overlapping screenshots of Tech Assist PDF reports. The top report is a 'Refrigeration Case Performance Report' for Store Case 24 c01a, Supercenter in Arkansas. The middle report is a 'Refrigeration Rack Performance Report' for Store Case 1241 ltb, Supercenter in Nebraska. The bottom report is a 'Store Refrigeration Performance Report' for Store 2613 Bucyrus, OH, Supercenter. This report includes a dashboard with key metrics: 64% of cases operating within 2.5° of target temperature, an average case temperature offset of 2.04°, 23+ cases with avg temps > 2.5° above target, 0 compressors in lockout status, and 2 open work orders. It also features a 'Store Work Order History' table and a 'Case Performance' section with a list of asset IDs.

Date Created	Work Order ID	Status	Problem	Description	Assets Referenced
09/22/2020	148787314	OPEN	Pe-Emergency Onsite Wkt 2 Hours	- FM - REFRIGERATION / Building EMS Controller / Comm Loss / Raised By Eric Anthony job Type: Refrigeration Contact: N/A, Position: N/A Assigned To: 10101 Units Affected: 3 Product Loss: No Product Removed: No Problem Type: Comm Loss Systems Affected: MTB, MTB-SAT, LTA Manual Comment: Store is in Comm Loss. Cannot access Hvac. Gateway and Racks do not ping. Requesting Service. Store con	ita, mbt
09/13/2020	148233233	In Progress 9 days old	Pe-Emergency Onsite Wkt 2 Hours	- FM - REFRIGERATION / Rack House / Phase Loss / AUTOMATED WORK ORDER job Type: refrigeration Assigned To: 10101 Units Affected: 1 Problem Type: Phase Loss Systems Affected: LTA Manual Comment: N/A	ita

Continuous Data Improvement

- Complex, Large Scale Environment
 - 5000+ US Stores, 500K+ Cases plus Controllers, Compressors, Condensers, etc of varying age and data reporting capabilities.
 - Aggregating, cleaning and cross referencing of data using two systems (IMS, IOT)
 - Network dependencies
 - Etc, etc, etc.
- Overall Data Quality is very good and is key to using a data driven method to improve refrigeration, but there are issues
 - Stores not reporting, Setpoint reporting errors, etc.
 - While these issues show up in Tech Assist, they are a result of Walmart data issues
- Data issue reporting
 - Please report data issues to pat@weghorstgroup.com
 - In the future we will have an Issue Reporting Form in the Tech Assist app.

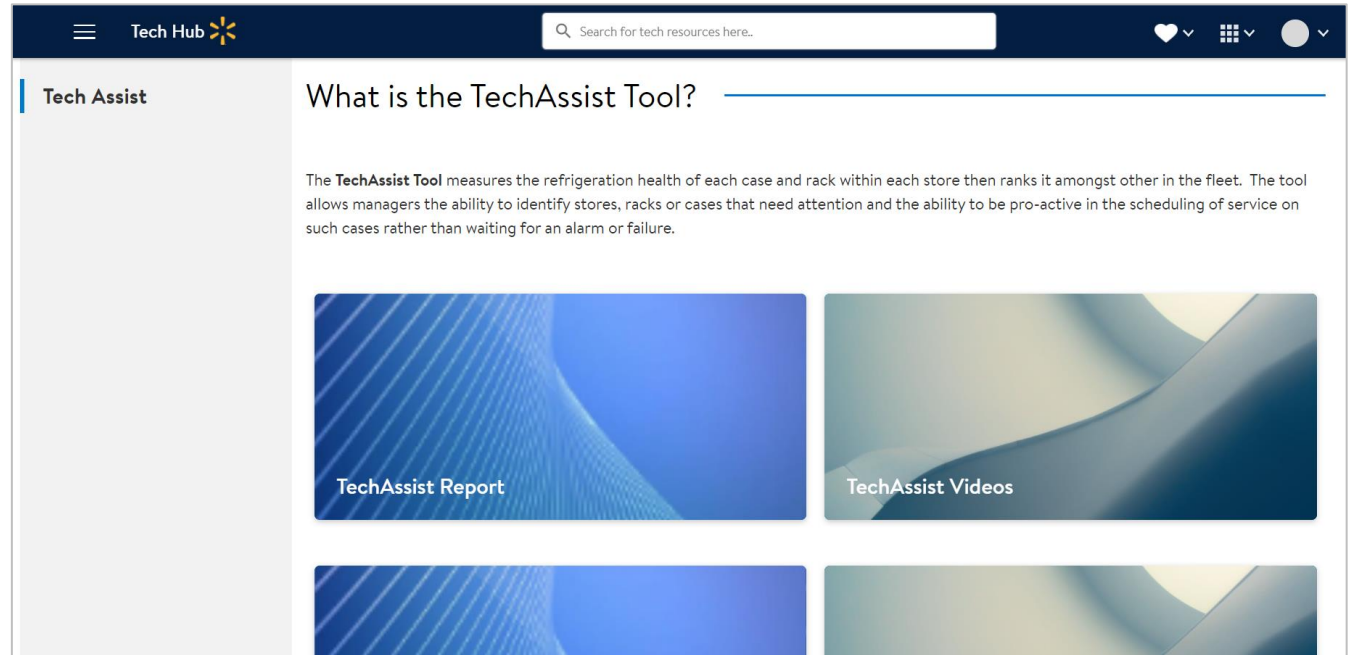
For More Information

- Walmart Tech Hub

- <https://one.walmart.com/content/facilities-management/fm-technician-page/my-role/outsourcing-technicians/tech-assist.html>
- In the process of being updated
- Content Includes videos, data sheets, sample reports.

- Email

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Data Sources and Data Flow

