



## Attachment A06: Software Information

The information provided as part of this attachment serves as a reference to existing software only. Any software provided by Marin Transit may be changed throughout the scope of the proposed contract.

Any software provided by the Contractor must meet or exceed the minimum features outlined in the Scope of Services and any relevant Attachments. Any software provided by the Contractor must meet all legal requirements for the work to be performed, including requirements surrounding the protection of sensitive rider data and all personally identifying information, and the appropriate accessibility requirements for users and passengers.

### Project Contract Software

#### Item 1: TransTrack Reporting Software

The information provided contains a brief overview of the software. A more detailed overview regarding administrative training will be provided upon contract award.

#### Item 2: SEON SafeFleet Security Systems

The information provided contains a brief overview of the software. A more detailed overview regarding administrative and customer service training and maintenance of hardware will be provided upon contract award.

### Marin Transit Demand Response Software

#### Item 3: Scheduling and Dispatch Systems

The information provided reflects the current scheduling and dispatch software provided by Trapeze. Contractor should provide a system that can meet the software, hardware, and reporting needs of the service as described in this Request for Proposals.

#### Item 4: Call Management Platform

The information provided reflects the current call center management platform in use. The CX1 version of the platform is managed and maintained by the current contractor for demand response service. Contractor should provide a comparable system that maintains existing features and can meet the requirements of the service as described in this Request for Proposals.

### Item 5: Clipper Integration for Fare Payment

The information provided describes the goals and requirements of the integration of the Clipper purse to the Paratransit payment options. As stated, if the Contractor elects to use either of the software providers that are already developing this integration in partnership with the Metropolitan Transportation Commission, separate integration is not required.

## Marin Transit Fixed Route Software

### Item 6: EQUANS Navineo CAD/AVL Software

The information provided contains a brief overview of the software. A more detailed overview regarding operator and dispatcher training and maintenance of hardware will be provided upon contract award.

### Item 7: Cradlepoint Hardware

The information provided contains a brief overview of the hardware. A more detailed overview regarding hardware maintenance information will be provided upon contract award.



# *TransTrack Manager*

## Basic Training

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# System Requirements

- TransTrack Manager is compatible with the **latest versions** of the following internet browsers.
- TransTrack Manager can be accessed from any device with an internet browser.



**Microsoft Edge**



**Chrome**



**Safari**



**Firefox**

# New User Account

## When your account is set-up you will receive:

- An email with your username
- Link to the TransTrack Manager Login page

### TransTrack Manager - New User Account

**From:** DoNotReply@transtrack.net

**To:**

**Date:** Thu, 20 Feb 2020 00:47:04 -0500 (02/19/2020 10:47:04 PM)

DO NOT REPLY TO THIS MESSAGE

---

Hello Brent,

Welcome to TransTrack Manager®. Atwood Township Transit Authority (Sample) has created a user account for you.

Your new username is: BPS@Atwood

To start using the TransTrack Manager®, follow these steps below to validate your account:

1. Copy & paste the following link into your browser:  
<https://www.transtrack.net/NewAccount.aspx>.
2. Once the page has loaded, enter the username (listed above) into the form, and follow the on-screen instructions.

---

DO NOT REPLY TO THIS MESSAGE

- Enter your username – shown in the email you received
- Click “Request Verification Code”



Transit ● NTD ● Reporting ● Analytics

How can we improve your operations?

HOME

OUR SUCCESS STORIES

OUR SERVICES

ABOUT US

OUR SOLUTIONS

CONTACT US

CLIENT LOGIN

New Account

To receive your password, input your Username.

Username

Request Verification Code

- You will be taken to a new screen – leave this window open



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CONTACT US

CLIENT LOGIN

New Account

## Verification Code Sent

A verification code was sent to the email address we have on file for the specified username. Please enter the verification code below.

Verification Code Required!

Submit Code

- You will receive an email with a verification code

**TransTrack Manager - New User Account**

**From:** DO NOT REPLY <DoNotReply@transtrack.net>

**To:**

**Date:** Thu, 20 Feb 2020 00:52:08 -0500 (02/19/2020 10:52:08 PM)

DO NOT REPLY TO THIS MESSAGE

---

Brent,

A request has been submitted to retrieve the password for your new TransTrack Manager user account.

Please enter the following verification code on the New Account page. The verification code is valid for only 1 Hour from the time the request was made.

**10598209**

If you experience any issues with retrieving your password, please reset your password by navigating to <https://www.transtrack.net/ForgotPassword.aspx>.

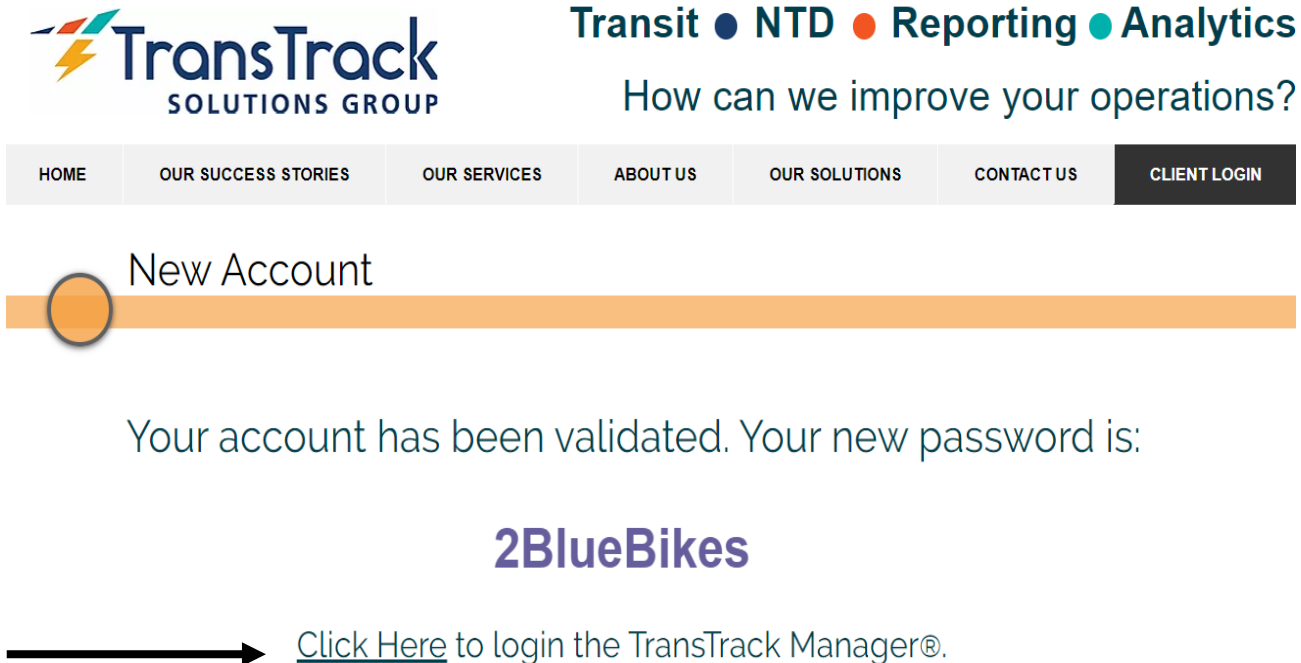
---

DO NOT REPLY TO THIS MESSAGE

---

- Enter the verification code in the window on the previous slide
- Click “Submit Code”

- Your new password will be shown
- Click the link to login



The screenshot shows the TransTrack Solutions Group website. The header includes the company logo, navigation links for Transit, NTD, Reporting, and Analytics, and a tagline. A navigation bar contains links for Home, Success Stories, Services, About Us, Solutions, Contact Us, and Client Login. The main content area features a 'New Account' section with a progress bar and a message stating the account has been validated and a new password, '2BlueBikes', has been generated. A link to login the TransTrack Manager is provided with an arrow pointing to it.

**TransTrack**  
SOLUTIONS GROUP

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New Account

Your account has been validated. Your new password is:

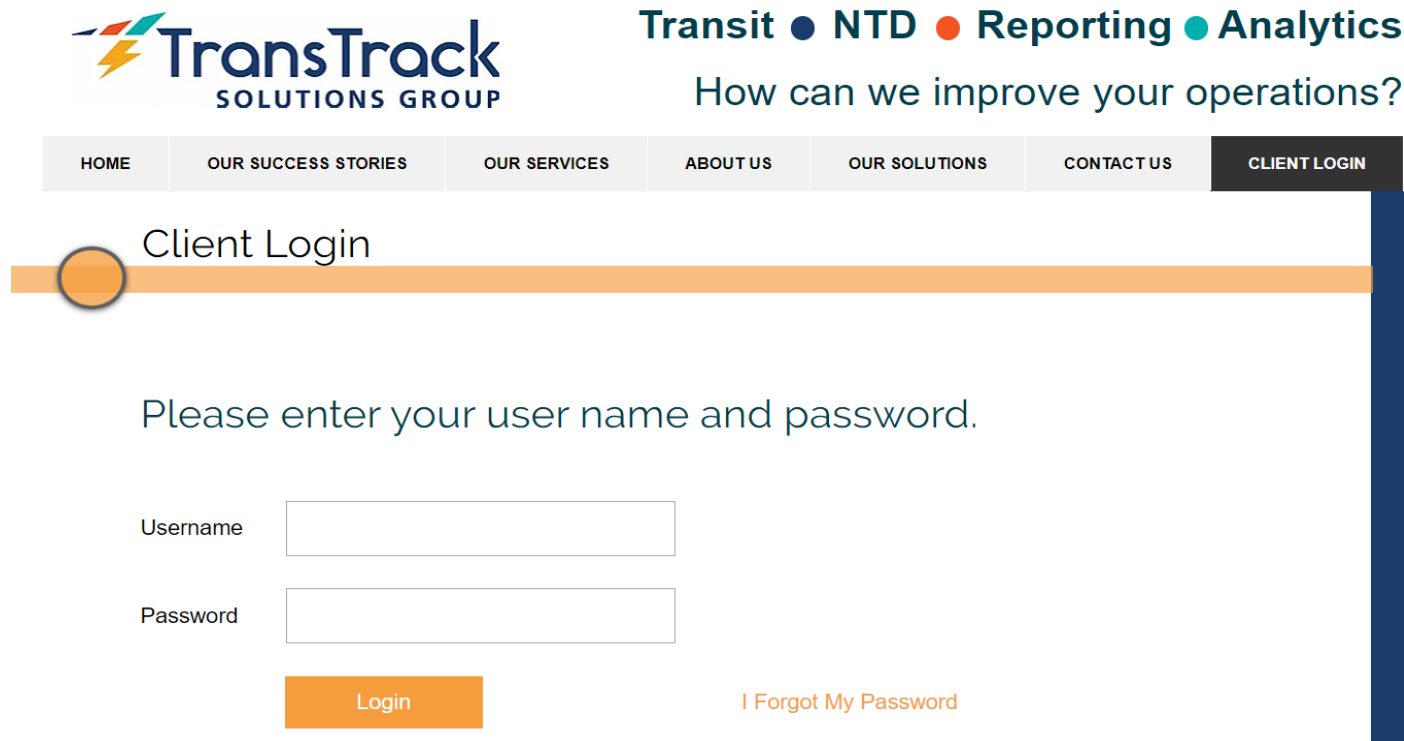
**2BlueBikes**

→ [Click Here](#) to login the TransTrack Manager®.

# Logging In

To open TransTrack after your account is set-up:

- Visit [www.transtrack.net/login.aspx](http://www.transtrack.net/login.aspx)
- Enter your username and password
- Click “Login”



The screenshot shows the TransTrack Solutions Group website. The header includes the company logo, navigation links (HOME, OUR SUCCESS STORIES, OUR SERVICES, ABOUT US, OUR SOLUTIONS, CONTACT US, CLIENT LOGIN), and a tagline: "Transit ● NTD ● Reporting ● Analytics" and "How can we improve your operations?". The main content area is titled "Client Login" and contains a message: "Please enter your user name and password." Below this are two input fields for "Username" and "Password". A blue "Login" button is positioned below the password field, and a link "I Forgot My Password" is to its right.

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How can we improve your operations?

HOME OUR SUCCESS STORIES OUR SERVICES ABOUT US OUR SOLUTIONS CONTACT US **CLIENT LOGIN**

## Client Login

Please enter your user name and password.

Username

Password

**Login** [I Forgot My Password](#)

# Forgotten Password

# If you have forgotten your password:

- On the login screen
  - Enter your username
  - Click “I Forgot My Password”
- A new window will open

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### Client Login

Please enter your user name and password.

Username

Password

Login

[I Forgot My Password](#)

- Click “Request Verification Code”

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### Forgot Password

To reset your password by email, input your Username.

Username

[Request Verification Code](#)

- You will be taken to a new screen – leave this window open



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How can we improve your operations?

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OUR SERVICES

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CLIENT LOGIN

New Account

## Verification Code Sent

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Verification Code Required!

Submit Code

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**To:**

**Date:** Thu, 20 Feb 2020 00:52:08 -0500 (02/19/2020 10:52:08 PM)

DO NOT REPLY TO THIS MESSAGE

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**10598209**

If you experience any issues with retrieving your password, please reset your password by navigating to <https://www.transtrack.net/ForgotPassword.aspx>.

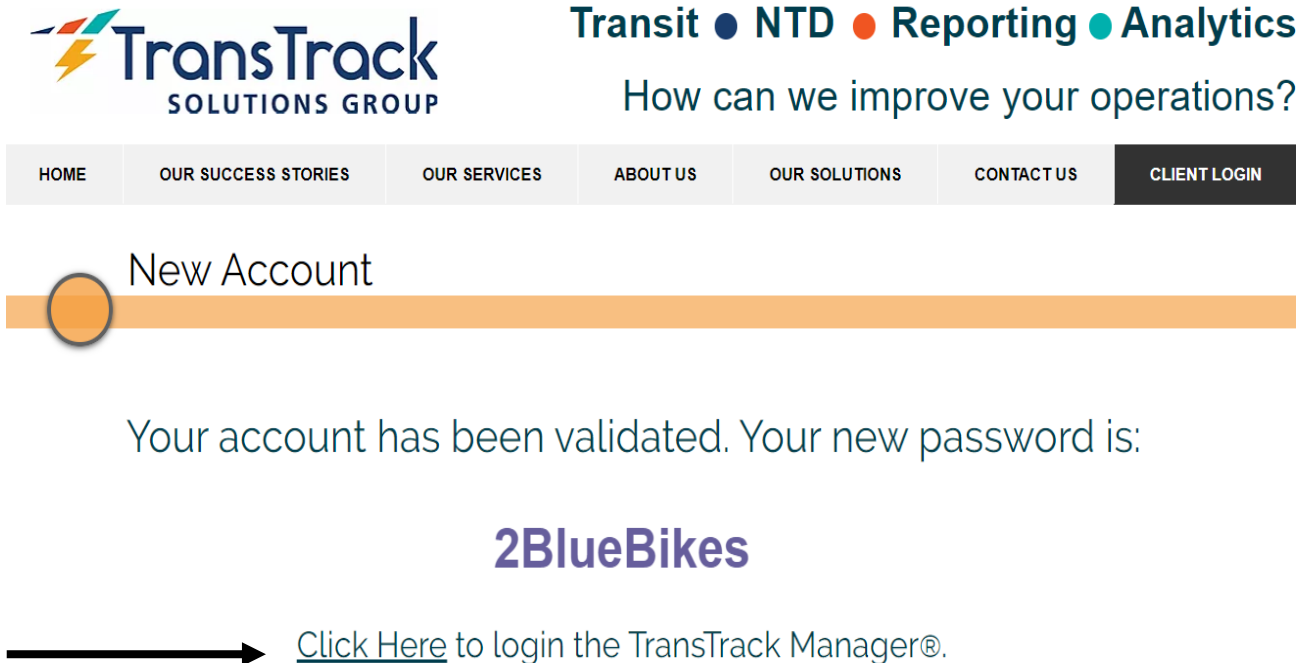
---

DO NOT REPLY TO THIS MESSAGE

---

- Enter the verification code in the window on the previous slide
- Click “Submit Code”

- Your new password will be shown
- Click the link to login



The screenshot shows the TransTrack Solutions Group website. The header includes the company logo and navigation links for Transit, NTD, Reporting, and Analytics. Below the header is a navigation bar with links for Home, Our Success Stories, Our Services, About Us, Our Solutions, Contact Us, and Client Login. The Client Login section is highlighted, showing a progress bar and the text 'New Account'. Below this, a message states 'Your account has been validated. Your new password is: 2BlueBikes'. An arrow points to a link that says 'Click Here to login the TransTrack Manager®'.

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How can we improve your operations?

HOME OUR SUCCESS STORIES OUR SERVICES ABOUT US OUR SOLUTIONS CONTACT US CLIENT LOGIN

New Account

Your account has been validated. Your new password is:

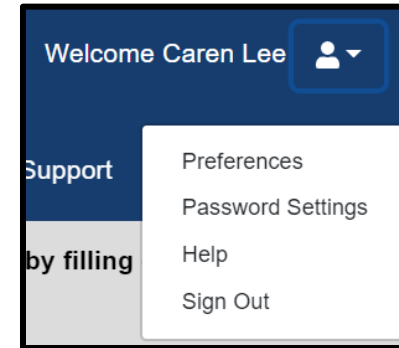
**2BlueBikes**

→ [Click Here](#) to login the TransTrack Manager®.

# Changing Your Password

You can change your password to anything you like by following these steps:

- Click “Password Settings” in the drop-down menu by your name in the upper right corner



- A pop-up window will open
- Enter your current password
- Enter your new password and confirm
- Click save

A screenshot of a "Password Settings" form. The form has a title bar with "Password Settings" and a close button. Inside the form, there are two columns of input fields. The left column has "Enter Current Password:" followed by a text input field. The right column has "Enter New Password:" followed by a text input field, and "Confirm New Password:" followed by another text input field. A "Save" button is located at the bottom right of the form.

# TransTrack Layout

- All your data is stored in views
- The views are organized into modules and further classified into sub-categories within the modules

**TransTrack** TransTrack Systems, Inc. ▾

All ▾ Search

Welcome Caren Lee ▾

Organization Routes Farebox Operations Safety Fleet Finance Plan SRTP Personnel Feedback Support Utilities TAM PT Contracts Reports Import Security

**BUSINESS DEVELOPMENT**

- BD - Agency Look-Up
- BD - Agency VOMS by Mode & Service Type
- BD - Campaign Groups
- BD - Contact Log for Sales & Client Retention
- BD - Contact Look-Up
- BD - Contact Type Look-Up
- BD - Contract Type Look up
- BD - Interaction Type Look-Up
- BD - Lead Type Look-up
- BD - Price List Size Groupings
- BD - Priority Rating Look-Up
- BD - Relationship Look-Up

**CLIENT ASSISTANCE**

- Customer Support Contacts
- Documentation
- Email Log
- How-To Guides
- Training Materials

**HELPDESK**

- Online Help Category Look-up
- On-Line Help Log (System Set-Up)
- Password Reset Requests (System Set-Up)
- Service Type Look-up (System Set-Up)
- Status Look-Up

**TIME MANAGEMENT**

- Time Management
- Weekly Time Management

**TTS EMPLOYEES**

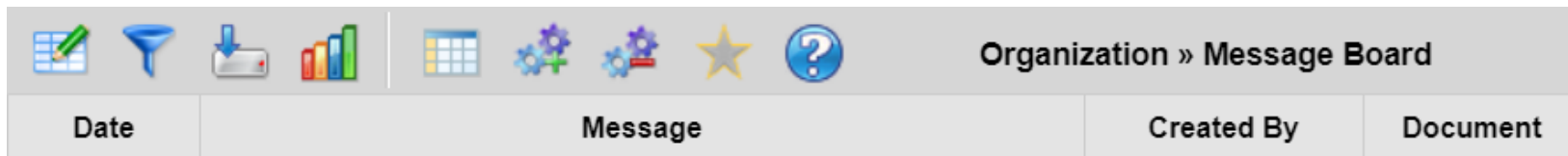
- Browser Statistics (Agency Set-Up)
- Database Documentation (System Set-Up)
- Database Management System Look-Up (System Set-Up)
- Document Library
- Document Type Look up
- Documents, Training, & How-Tos (Agency Set-Up)
- Documents, Training, & How-Tos (All Agencies) (System Set-Up)
- Improvement - Category Look-Up

Module Names

Views

Sub-categories

- Each view has the same toolbar across the top
- Top left of the tool bar indicates the Module and View you are in



- Above the data grid is the column headers
  - The names will be different in each view

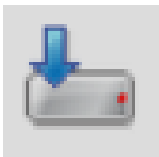
|         |         |  |  | Organization » Message Board |          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|--|--|------------------------------|----------|
| Date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Message |  |  | Created By                   | Document |



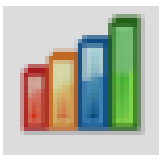
Edit window – used to create or update records



Filter – allows you to look at specific records in the view, using a variety of filters



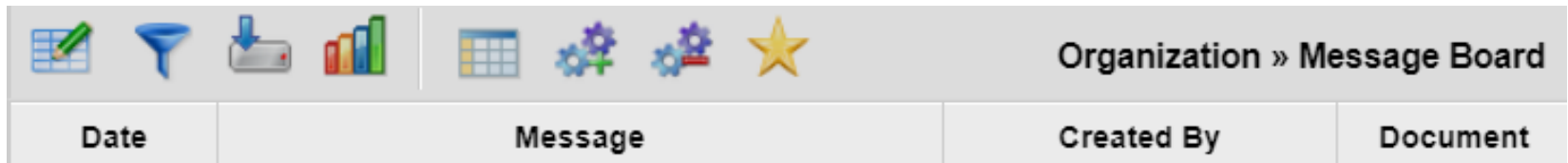
Export – downloads the information in the data grid to Excel



Report – provides a report of the information in the data grid, is impacted by the Filter Function

# Customizing Views

TransTrack Manager allows you to customize the view you are in and save your settings.



- Adjust column header widths
  - position cursor between column headers
  - hold and drag to desired width
- Adjust column header order
  - click on the column header you wish to move
  - hold the mouse button down
  - drag into desired place and release mouse button

|   <span>Organization » Message Board</span> |         |            |          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|------------|----------|
| Date                                                                                                                                                                                                          | Message | Created By | Document |



**Hide/Show Columns**

- ☒ Date
- ☒ Message
- ☒ Created By
- ☒ Document
- ☐ Active?

Show/Hide Columns – allows user to hide columns by unchecking the box and show them by checking the box

## Want to keep your changes?



Save settings – lets you save your customized settings



Reset settings – resets view settings to default

# Favorite Views

|  <span>Organization » Message Board</span> |         |            |          |
|-----------------------------------------------------------------------------------------------------------------------------|---------|------------|----------|
| Date                                                                                                                        | Message | Created By | Document |

## Have a Favorite View?

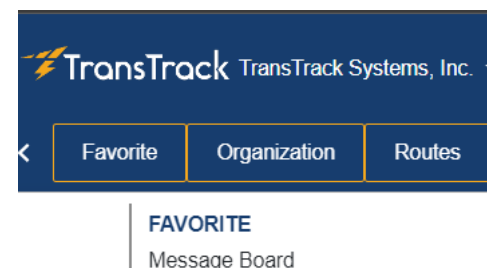
- Click the Star icon to save it to your favorites



- After clicking, the Star icon will change to



- Your favorites will be in their own module
- Shown before the Organization module



# Page Navigation within Views

# Across the bottom of each view you will find the page navigation tools



Number of records you wish to see per page



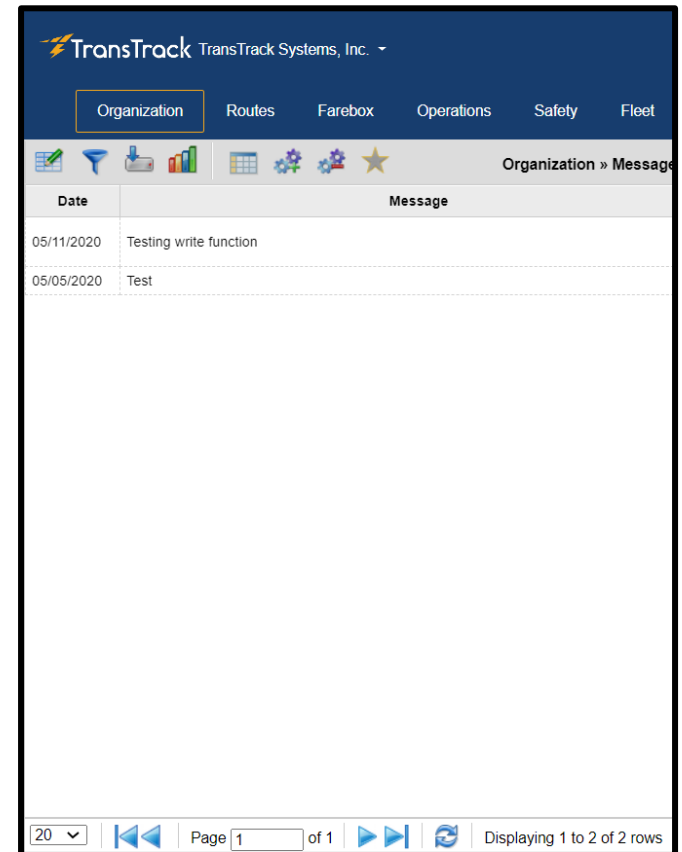
Takes you to the first page of records



Takes you to the previous page of records

Page 1 of 1

Tells you which page of records you are on and how many pages there are



# Across the bottom of each view you will find the page navigation tools

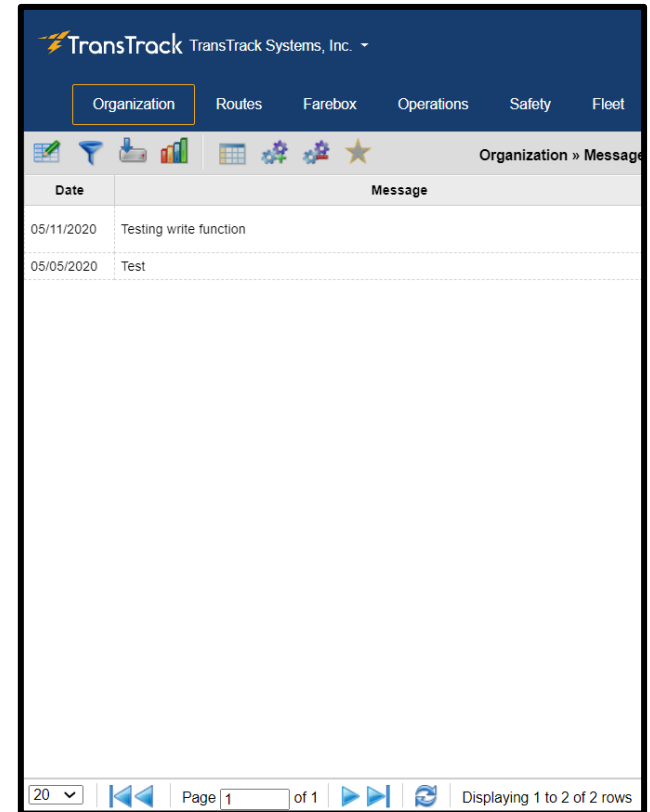
 Takes you to the next page

 Takes you to the last page of records

 Refreshes the view

Displaying 1 to 2 of 2 rows

Number of rows of data you are looking at and how many total there are



The screenshot shows the TransTrack web application interface. At the top, there is a navigation bar with the TransTrack logo and the text "TransTrack Systems, Inc.". Below this, there are several tabs: "Organization", "Routes", "Farebox", "Operations", "Safety", and "Fleet". The "Organization" tab is currently selected. Below the tabs, there is a sub-header "Organization » Message". The main content area displays a table with two columns: "Date" and "Message". The table contains two rows of data:

| Date       | Message                |
|------------|------------------------|
| 05/11/2020 | Testing write function |
| 05/05/2020 | Test                   |

At the bottom of the interface, there is a pagination bar. It includes a dropdown menu showing "20", a "Page 1 of 1" indicator, and a "Displaying 1 to 2 of 2 rows" message.

# Module Contents

Favorite

Organization

Reports

Analytics

## Favorite Module

- Stores your favorite views
- Stores your favorite reports

## Reports Module

- Links to all report menus

## Organization Module

- Basic agency information
- Message board
- Purchased Transportation

## Analytics

- Interactive Dashboards by Functional Area
- Self-Serve Analytics

Ridership

Routes

Operations

Safety

## **Ridership**

- Passenger data
- Farebox data
- Fare types
- Fare structure

## **Routes Module**

- Route set-up
- Service set-up

## **Operations Module**

- Hours and miles
- Dispatch incident log
- AVL and on-time performance data
- Paratransit data

## **Safety**

- Safety and security information
- Agency and NTD classification of incidents

Fleet

TAM

Feedback

Personnel

## Fleet

- Vehicle inventory
- Asset inventory
- Vehicle miles and Fueling
- Maintenance data

## TAM

- Plan for rolling stock replacement
- Plan for facility improvements
- Includes budgeting tools for projects

## Feedback

- Record customer feedback
- Track feedback investigation
- Track resolution of complaints

## Personnel

- Basic employee information
- Employee certifications, training, performance reviews, disciplinary actions
- Recognition program results

Finance

Plan

Import

Support

## Finance

- Reporting allocation of expenses and revenues
- Farebox revenue reconciliation
- Ridership count

## Plan

- Performance targets
- Summarized data tables
- Month and Year-to-Date close actions
- Annual data locking

## Import

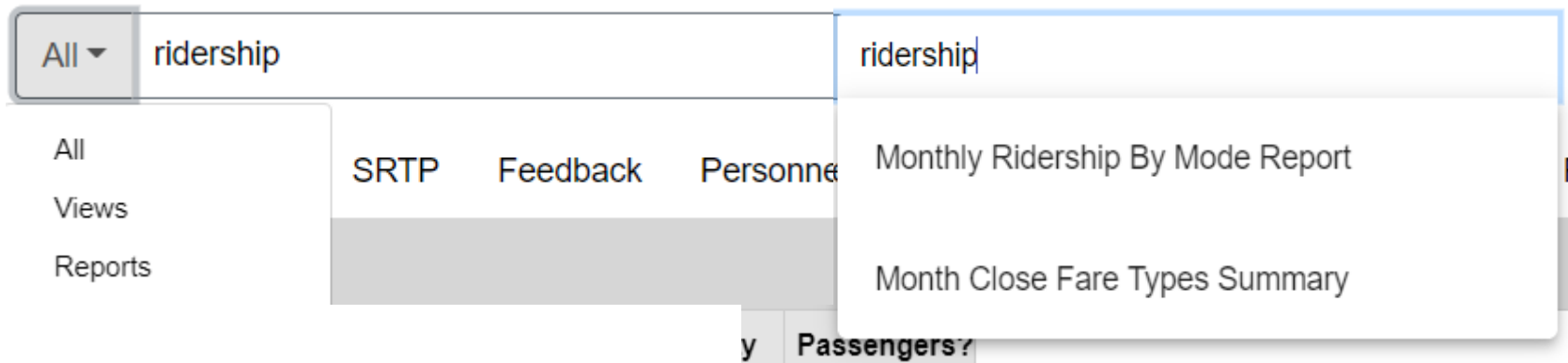
- Listing of Agency Imports
- Import actions
- Crosswalking views
- Uncorrelated data views

## Support

- Technical support contact information
- Training documents
- Process checklists

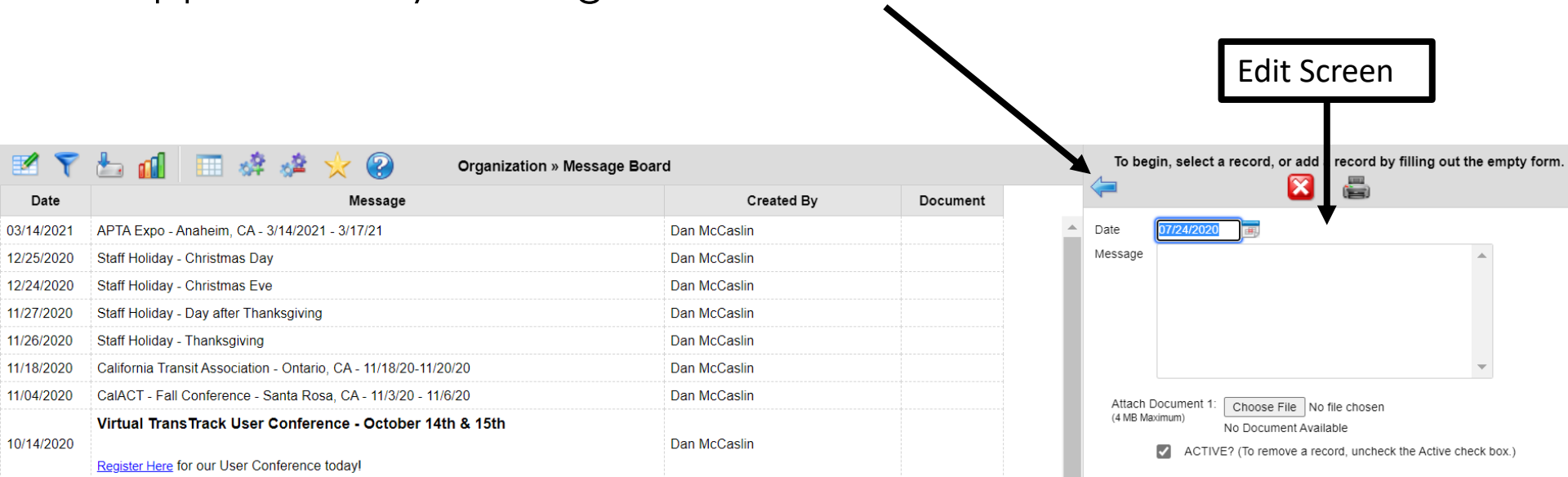
# Search Function

- At the top of your screen is a search bar
- You can search “All”, which is views and reports
- You can search just views
- You can search just reports
- Results will display as you type



# Add/Edit Records

- Click the Edit Records icon – edit screen will open
- New record – enter requested information
- Field you are entering information in is outlined in blue
- You can toggle which side of the screen the edit window appears on by clicking the blue arrow



Organization » Message Board

| Date       | Message                                                                                                                             | Created By   | Document |
|------------|-------------------------------------------------------------------------------------------------------------------------------------|--------------|----------|
| 03/14/2021 | APTA Expo - Anaheim, CA - 3/14/2021 - 3/17/21                                                                                       | Dan McCaslin |          |
| 12/25/2020 | Staff Holiday - Christmas Day                                                                                                       | Dan McCaslin |          |
| 12/24/2020 | Staff Holiday - Christmas Eve                                                                                                       | Dan McCaslin |          |
| 11/27/2020 | Staff Holiday - Day after Thanksgiving                                                                                              | Dan McCaslin |          |
| 11/26/2020 | Staff Holiday - Thanksgiving                                                                                                        | Dan McCaslin |          |
| 11/18/2020 | California Transit Association - Ontario, CA - 11/18/20-11/20/20                                                                    | Dan McCaslin |          |
| 11/04/2020 | CalACT - Fall Conference - Santa Rosa, CA - 11/3/20 - 11/6/20                                                                       | Dan McCaslin |          |
| 10/14/2020 | <b>Virtual TransTrack User Conference - October 14th &amp; 15th</b><br><a href="#">Register Here</a> for our User Conference today! | Dan McCaslin |          |

To begin, select a record, or add record by filling out the empty form.

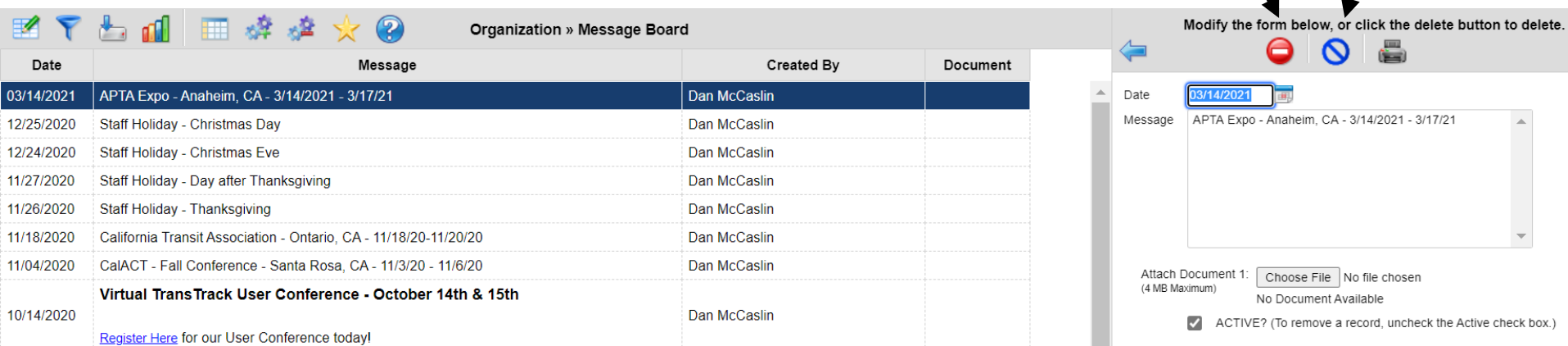
Date: 07/24/2020

Message:

Attach Document 1: (4 MB Maximum)  No file chosen  
No Document Available

☒ ACTIVE? (To remove a record, uncheck the Active check box.)

- Edit record – select an existing record by clicking on it, information will auto-populate in edit window, update as needed
- Before entering information, you can cancel or delete the selected record
  - Do NOT delete records (unless it is truly a data input error)
  - Records can be removed from view by un-checking the ACTIVE? box
    - Use filter options to view inactive records



| Date       | Message                                                                                                                             | Created By   | Document |
|------------|-------------------------------------------------------------------------------------------------------------------------------------|--------------|----------|
| 03/14/2021 | APTA Expo - Anaheim, CA - 3/14/2021 - 3/17/21                                                                                       | Dan McCaslin |          |
| 12/25/2020 | Staff Holiday - Christmas Day                                                                                                       | Dan McCaslin |          |
| 12/24/2020 | Staff Holiday - Christmas Eve                                                                                                       | Dan McCaslin |          |
| 11/27/2020 | Staff Holiday - Day after Thanksgiving                                                                                              | Dan McCaslin |          |
| 11/26/2020 | Staff Holiday - Thanksgiving                                                                                                        | Dan McCaslin |          |
| 11/18/2020 | California Transit Association - Ontario, CA - 11/18/20-11/20/20                                                                    | Dan McCaslin |          |
| 11/04/2020 | CalACT - Fall Conference - Santa Rosa, CA - 11/3/20 - 11/6/20                                                                       | Dan McCaslin |          |
| 10/14/2020 | <b>Virtual TransTrack User Conference - October 14th &amp; 15th</b><br><a href="#">Register Here</a> for our User Conference today! | Dan McCaslin |          |

Organization » Message Board

Modify the form below, or click the delete button to delete.

Delete
Cancel

Date

Message

APTA Expo - Anaheim, CA - 3/14/2021 - 3/17/21

Attach Document 1: Choose File No file chosen  
(4 MB Maximum)  
 No Document Available

☒ ACTIVE? (To remove a record, uncheck the Active check box.)

- After entering the record information:
- Clicking save closes the edit window, saving any changes made to the record
- Clicking cancel closes the edit window without saving changes
- Clicking print opens a print window to print the record information

Save

Cancel

Print

After filling out the form, press the save button to save your work.

| Date       | Message                                                                                                                             | Created By   | Document |
|------------|-------------------------------------------------------------------------------------------------------------------------------------|--------------|----------|
| 03/14/2021 | APTA Expo - Anaheim, CA - 3/14/2021 - 3/17/21                                                                                       | Dan McCaslin |          |
| 12/25/2020 | Staff Holiday - Christmas Day                                                                                                       | Dan McCaslin |          |
| 12/24/2020 | Staff Holiday - Christmas Eve                                                                                                       | Dan McCaslin |          |
| 11/27/2020 | Staff Holiday - Day after Thanksgiving                                                                                              | Dan McCaslin |          |
| 11/26/2020 | Staff Holiday - Thanksgiving                                                                                                        | Dan McCaslin |          |
| 11/18/2020 | California Transit Association - Ontario, CA - 11/18/20-11/20/20                                                                    | Dan McCaslin |          |
| 11/04/2020 | CalACT - Fall Conference - Santa Rosa, CA - 11/3/20 - 11/6/20                                                                       | Dan McCaslin |          |
| 10/14/2020 | <b>Virtual TransTrack User Conference - October 14th &amp; 15th</b><br><a href="#">Register Here</a> for our User Conference today! | Dan McCaslin |          |

←

Date: 07/24/2020

Message: Hi Everyone  
789 Char(s) Remaining

Attach Document 1: Choose File No file chosen  
(4 MB Maximum) No Document Available

☒ ACTIVE? (To remove a record, uncheck the Active check box.)

If you are entering multiple records with some of the same information, TransTrack has a “sticky” button feature in the edit window, which automatically carries the selection to the next records until you turn it off.

- Clicking any “button style” label will carry forward the information you enter to the next record
- The label will turn blue when it is selected
- To de-select the label, click it again

To begin, select a record, or add a record by filling out the empty form.

← [Close] [Print]

|                                            |                             |
|--------------------------------------------|-----------------------------|
| GL Account                                 | -- Please Select One --     |
| Function                                   | General Administration (GA) |
| Function %: (enter as percentage; ex.: 1%) | 100                         |
| Allocation Pool                            | All Programs                |
| Allocation Pool Basis                      | Revenue Hours               |
| Fixed %: (enter as percentage; ex.: 1%)    |                             |
| Route Allocation Basis                     | Revenue Hours               |
| Fixed %: (enter as percentage; ex.: 1%)    |                             |

☒ Active Flag? (To remove expense allocation method from view without deleting, uncheck the Active check box.)

**Fiscal Period Assignments**

Starting:

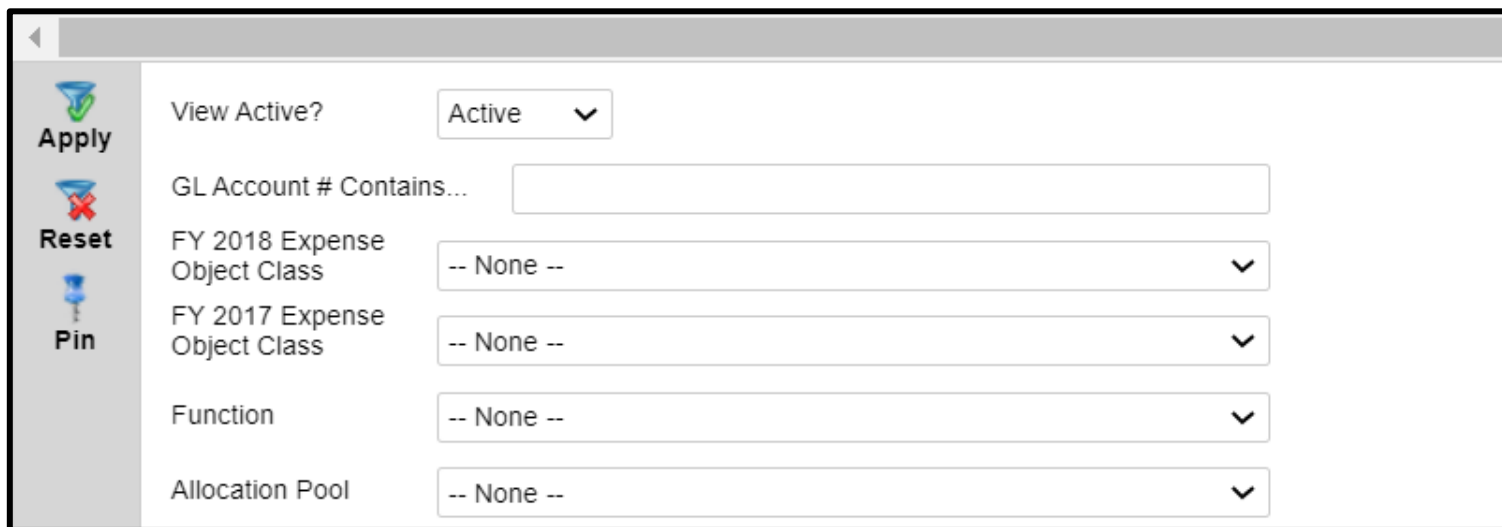
|             |         |       |      |
|-------------|---------|-------|------|
| Fiscal Year | FY 2020 | Month | July |
|-------------|---------|-------|------|

Ending:

|             |                         |       |                         |
|-------------|-------------------------|-------|-------------------------|
| Fiscal Year | -- Please Select One -- | Month | -- Please Select One -- |
|-------------|-------------------------|-------|-------------------------|

# Data Filters

- Click Filter button
- Filter window opens below data set
- Select desired filters
  - Keep date ranges to a minimum to reduce load time
- Click Apply to run filters – filter window closes automatically
  - To keep the filter window open, click Pin
- To clear applied filters, click Reset



The screenshot shows a filter window with a sidebar on the left containing three buttons: 'Apply' (with a green checkmark icon), 'Reset' (with a red X icon), and 'Pin' (with a blue pin icon). The main area of the window contains the following controls:

- View Active?** A dropdown menu currently set to 'Active'.
- GL Account # Contains...** A text input field.
- FY 2018 Expense Object Class** A dropdown menu set to '-- None --'.
- FY 2017 Expense Object Class** A dropdown menu set to '-- None --'.
- Function** A dropdown menu set to '-- None --'.
- Allocation Pool** A dropdown menu set to '-- None --'.

# Data Export

When working in data views, the information can be exported to Excel or a working report.

- Click the Excel Export button
- Depending on your browser:
  - The file will automatically download, or
  - A pop-up window will open asking you to save or open the file – choose open
- The file will open in Excel as a .csv or Unicode file
- Use the “save as” function to save the file in Excel format

Excel Export

| Fiscal Year | Month | Day Type | Route Assignment | Total Miles |
|-------------|-------|----------|------------------|-------------|
| FY 2018     | Apr   | Weekday  | ADA-Taxi         | (283.40)    |
| FY 2018     | Apr   | Weekday  | Non-ADA-Taxi     | (19.80)     |
| FY 2018     | Apr   | Saturday | ADA-Taxi         | (52.70)     |
| FY 2018     | Apr   | Saturday | Non-ADA-Taxi     | (13.90)     |
| FY 2018     | Mar   | Weekday  | ADA-Taxi         | (175.40)    |
| FY 2018     | Mar   | Weekday  | Non-ADA-Taxi     | (6.20)      |

|   | A           | B     | C        | D         | E          |
|---|-------------|-------|----------|-----------|------------|
| 1 | Fiscal Year | Month | Day Type | Route Ass | Total Mile |
| 2 | FY 2018     | Apr   | Weekday  | ADA-Taxi  | -283.4     |
| 3 | FY 2018     | Apr   | Weekday  | Non-ADA-  | -19.8      |
| 4 | FY 2018     | Apr   | Saturday | ADA-Taxi  | -52.7      |
| 5 | FY 2018     | Apr   | Saturday | Non-ADA-  | -13.9      |
| 6 | FY 2018     | Mar   | Weekday  | ADA-Taxi  | -175.4     |
| 7 | FY 2018     | Mar   | Weekday  | Non-ADA-  | -6.2       |
| 8 | FY 2018     | Mar   | Saturday | ADA-Taxi  | -11.8      |
| 9 | FY 2018     | Feb   | Weekday  | ADA-Taxi  | -217.7     |

## Working Report

- Click on *Report* button
  - A message will display if the view does not have a Report
- The report will reflect the current data set, including any applied filters

| Fiscal Year | Month | Day Type | Route Assignment | Total Miles |
|-------------|-------|----------|------------------|-------------|
| FY 2018     | Apr   | Weekday  | ADA-Taxi         | (283.40)    |
| FY 2018     | Apr   | Weekday  | Non-ADA-Taxi     | (19.80)     |
| FY 2018     | Apr   | Saturday | ADA-Taxi         | (52.70)     |
| FY 2018     | Apr   | Saturday | Non-ADA-Taxi     | (13.90)     |
| FY 2018     | Mar   | Weekday  | ADA-Taxi         | (175.40)    |
| FY 2018     | Mar   | Weekday  | Non-ADA-Taxi     | (6.20)      |

- A separate window will open, displaying the report information

| Monthly Hours, Miles & Passengers |       |          |              |             |               |             |               |            |               |
|-----------------------------------|-------|----------|--------------|-------------|---------------|-------------|---------------|------------|---------------|
| Fiscal Year                       | Month | Day Type | Route #      | Total Miles | Revenue Miles | Total Hours | Revenue Hours | Passengers | Farebox Count |
| FY 2018                           | Apr   | Weekday  | ADA-Taxi     | (283.4)     |               | (19.1)      |               |            |               |
| FY 2018                           | Apr   | Weekday  | Non-ADA-Taxi | (19.8)      |               | (1.6)       |               |            |               |
| FY 2018                           | Apr   | Saturday | ADA-Taxi     | (52.7)      |               | (8.2)       |               |            |               |
| FY 2018                           | Apr   | Saturday | Non-ADA-Taxi | (13.9)      |               | (3.0)       |               |            |               |
| FY 2018                           | Mar   | Weekday  | ADA-Taxi     | (175.4)     |               | (10.1)      |               |            |               |
| FY 2018                           | Mar   | Weekday  | Non-ADA-Taxi | (6.2)       |               | (0.6)       |               |            |               |

# Reports

- TransTrack Systems has many built-in reports, links to the report categories are in *Reports* module
  - At the top of the menu, the last year-to-date plan action close is listed
- After clicking a category, a list and description of the available reports will be displayed

Year-To-Date has been closed through December, FY 2020

#### APC REPORTS

APC & Passenger Mile Survey Reports

#### CUSTOMER FEEDBACK REPORTS

Customer Feedback Detailed Report (CT)

Customer Feedback Reports (CT)

Customer Service Reports

#### FAREBOX DATA

Farebox Maintenance Report

#### FAVORITE REPORTS

Favorite Reports

Favorite Reports - Agency

#### FINANCE REPORTS

Finance Reports

Monthly Financial Reports

#### FLEET REPORTS

Fleet Reports

#### MANAGEMENT REPORTS

Executive Management Reports

#### NTD REPORTS

NTD Report Information

#### OPERATIONS REPORTS

Operations Reports

#### PLAN REPORTS

Plan Reports

Report Testing (Agency Set-Up)

#### RIDERSHIP REPORTS

Ridership Reports

#### SAFETY REPORTS

Safety Reports

#### SERVICE PROVIDER REPORTS

Service Provider Reports

#### TAM REPORTS

TAM Reports

- When a report link is clicked, a separate window will open
- Choose the desired filters
- Click *Display Report*, it will be displayed in the same window
  - The report can be exported or saved
  - Clicking *Display Filters* will take you back to the filter screen

Reports » NTD Report Information

| Report Name                                       | Description                                                                                                                                                                      |
|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A-30 - Revenue Vehicle Inventory                  | Revenue vehicles summarized by series for use in preparing NTD Mode/Service (A-30) forms version accounts for the Support Mode/Service Types                                     |
| B-10 - Identification                             | Displays basic transit service and organizational information.                                                                                                                   |
| B-20 - Contacts                                   | Displays key personnel at the transit agency responsible for NTD reporting.                                                                                                      |
| B-30 - Contractual Relationship Form - FY 2018    | Contractual Relationship Form (B-30). Requires the completion of the FY 2018 Expense Object Classes and FY 2018 Funding Source Categories within the GL Account Crosswalk views. |
| B-30 - Contractual Relationship Form (Historical) | Contractual Relationship Form (B-30) - For FY 2017 and Prior.                                                                                                                    |

Display Report

Reset Filters

Save Report

Help

Fiscal Year: FY 2020

Level: Mode & Service Type

Level Item: -- None --

Display Filters
-- Export --
Save Report
Help

1 of 3

-- + ↺ ↻ A) Read aloud ▾ Draw ▾ Erase

***FY 2020 -- Revenue Vehicle Inventory (A-30)***  
**Mode & Service Type: Bus (Motorbus) / Purchased Transportation**

| RV1 ID | Subfleet            | # of Vehicles in Total Series | Dedicated Series | Vehicle Type Code | Ownership Code | Funding Source | Year of Mfg. | Year of Rebuild | Mfg. Code | Model #       | # of Active Vehicles in Series | # with ADA Access | # of Emergency Contingency Vehicles | Fuel Type Code | Vehicle Length (in Feet) | Seating Capacity | Standing Capacity | Total Miles on Active Vehicles During the Period | Average Lifetime Miles per Active Vehicle | Supports Another Mode |
|--------|---------------------|-------------------------------|------------------|-------------------|----------------|----------------|--------------|-----------------|-----------|---------------|--------------------------------|-------------------|-------------------------------------|----------------|--------------------------|------------------|-------------------|--------------------------------------------------|-------------------------------------------|-----------------------|
|        |                     |                               |                  |                   |                |                |              |                 |           |               |                                |                   |                                     |                |                          |                  |                   |                                                  |                                           |                       |
| 349040 | 2016 Gillig (MB/PT) | 28                            | Yes              | BU                | OOPA           | UA             | 2016         |                 | GIL       | Low Floor 40' | 28                             | 28                | 0                                   | DF             | 40.0                     | 38               | 28                | 686,871                                          | 176,353                                   |                       |
| 370427 | 2018 Gillig (MB/PT) | 5                             | Yes              | BU                | OOPA           | UA             | 2018         |                 | GIL       | Low Floor 40' | 5                              | 5                 | 0                                   | DF             | 40.0                     | 38               | 28                | 141,542                                          | 121,639                                   |                       |
|        | 2019 Gillig (MB/PT) | 2                             | Yes              | BU                | OOPA           | UA             | 2019         |                 | GIL       | Low Floor 40' | 2                              | 2                 | 0                                   | DF             | 49.0                     | 38               | 28                | 0                                                | 52                                        |                       |
| Total  |                     | 35                            |                  |                   |                |                |              |                 |           |               | 35                             | 35                | 0                                   |                |                          |                  |                   | 828,413                                          |                                           |                       |

- In the report window you have three options:
  - View report in window

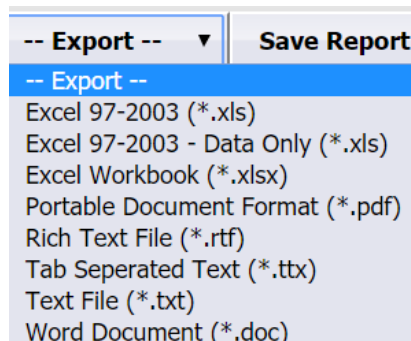
Display Filters -- Export -- Save Report Help

1 of 3

*FY 2020 -- Revenue Vehicle Inventory (A-30)*  
Mode & Service Type: Bus (Motorbus) / Purchased Transportation

| RVI ID | Subfleet           | # of Vehicles in Total Series | Dedicated Series | Vehicle Type Code | Ownership Code | Funding Source | Year of Mfg. | Year of Rebuild | Mfg. Code | Model #       | # of Active Vehicles in Series | # with ADA Access | # of Emergency Contingency Vehicles | Fuel Type Code | Vehicle Length (in Feet) | Seating Capacity | Standing Capacity | Total Miles on Active Vehicles During the Period | Average Lifetime Miles per Active Vehicle | Supports Another Mode |
|--------|--------------------|-------------------------------|------------------|-------------------|----------------|----------------|--------------|-----------------|-----------|---------------|--------------------------------|-------------------|-------------------------------------|----------------|--------------------------|------------------|-------------------|--------------------------------------------------|-------------------------------------------|-----------------------|
| 349040 | 2016 Gilly (MB/PT) | 28                            | Yes              | BU                | OOPA           | UA             | 2016         |                 | GIL       | Low Floor 40' | 28                             | 28                | 0                                   | DF             | 40.0                     | 38               | 28                | 686,871                                          | 176,353                                   |                       |
| 370427 | 2018 Gilly (MB/PT) | 5                             | Yes              | BU                | OOPA           | UA             | 2018         |                 | GIL       | Low Floor 40' | 5                              | 5                 | 0                                   | DF             | 40.0                     | 38               | 28                | 141,542                                          | 121,639                                   |                       |
|        | 2019 Gilly (MB/PT) | 2                             | Yes              | BU                | OOPA           | UA             | 2019         |                 | GIL       | Low Floor 40' | 2                              | 2                 | 0                                   | DF             | 49.0                     | 38               | 28                | 0                                                | 52                                        |                       |
| Total  |                    | 35                            |                  |                   |                |                |              |                 |           |               | 35                             | 35                | 0                                   |                |                          |                  |                   | 828,413                                          |                                           |                       |

- Export



- Save to Favorite Reports

**Note:** Favorites-Agency is for System Administrators to save reports for all users to see

**Save Report As**

Save Report To: Favorite Reports

Save Report As: A-30 - Revenue Vehicle Inventory

☒ Include Current Filters When Saving?

Notes (Optional):

Save Cancel

# Technical Support

# If you are having an issue while using TranTrack

- Click the *Help* Button in toolbar



- Provide as many details as you can about the issue you are experiencing
- This is the preferred method

## Other options for submitting a help request

- Create a ticket in FreshService at [www.trantracksolutionsgroup.freshservice.com](http://www.trantracksolutionsgroup.freshservice.com)
- Via email, [techsupport@trantrack.net](mailto:techsupport@trantrack.net)
  - This will automatically create a ticket for you in FreshService

- Agency training documentation is available in the *Support Module/Training Materials*
  - Click the Show Documentation link to view the PDF

| Support » Training Materials                                                                                                                                        |                                    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
| Description                                                                                                                                                         | Training Materials                 |
| * 2020 Basic Training --<br>Use the link below to view a short video highlighting features of the TransTrack Manager Application.<br><a href="#">Basic Training</a> | <a href="#">Show Documentation</a> |
| * GCT - BI Manager Training (June 2017)                                                                                                                             | <a href="#">Show Documentation</a> |
| * GCT - Customer Feedback Training (Mar 2018)                                                                                                                       | <a href="#">Show Documentation</a> |
| * GCT - Customer Service - Summary Level (June 2017)                                                                                                                | <a href="#">Show Documentation</a> |
| * GCT - Farebox Module Training (June 2017)                                                                                                                         | <a href="#">Show Documentation</a> |
| * GCT - Finance Module Training (June 2017)                                                                                                                         | <a href="#">Show Documentation</a> |
| * GCT - Fleet Module Training (June 2017) - OUTDATED                                                                                                                | <a href="#">Show Documentation</a> |
| * GCT - Fleet Module Training (Sept 2018)                                                                                                                           | <a href="#">Show Documentation</a> |

- Detailed How To's are available in the Support Module/How-To Guides
  - Click the Show Documentation link to view the PDF

| Support » How-To Guides                                     |                                    |
|-------------------------------------------------------------|------------------------------------|
| Description                                                 | How-To Guides                      |
| How to check imports                                        | <a href="#">Show Documentation</a> |
| How to deactivate a route                                   | <a href="#">Show Documentation</a> |
| How to enter service changes                                | <a href="#">Show Documentation</a> |
| How to modify a route                                       | <a href="#">Show Documentation</a> |
| How to restart import client                                | <a href="#">Show Documentation</a> |
| How to set-up a route                                       | <a href="#">Show Documentation</a> |
| How to set-up on-time performance exceptions                | <a href="#">Show Documentation</a> |
| How to set-up or modify a purchased transportation contract | <a href="#">Show Documentation</a> |
| How to set-up or modify vehicles                            | <a href="#">Show Documentation</a> |
| How to set-up, modify or remove a TransTrack user           | <a href="#">Show Documentation</a> |



# NH16V2 NVR Hybrid

## 16 Channel Network Video Recorder with Hybrid Technology

Record up to 16 IP channels or mix with High-Definition analog or standard resolution cameras.

Meet today's coverage demands with high quality images and valuable extras such as built-in GPS with antenna, automatic capture of speed, acceleration, and geo-fencing alarm events, and remote health monitoring via hardware and software options.



### Highest Resolution with Full Frame Rate

Supports resolutions up to 3Mpx at 30 FPS on each IP camera channel and uplift to 4K resolution on up to 4 channels.

### Flexible Hybrid Technology

Supports IP plus full high-definition (1080p), high-definition (720p), and standard definition analog cameras.

### Remote Diagnostics

Remote diagnostic indicator provides DVR status (includes video loss) to the vehicle operator and advanced DVR health diagnostics are available on VMS software.

### Media Options

Up to 8TB SSD primary storage (4TB HDD) with optional solid state backup storage options up to 1TB.

### Companion Network Switch

16-Port PoE switch auto-assigns addresses, manages power, detects wire faults, and reports status to recorder.

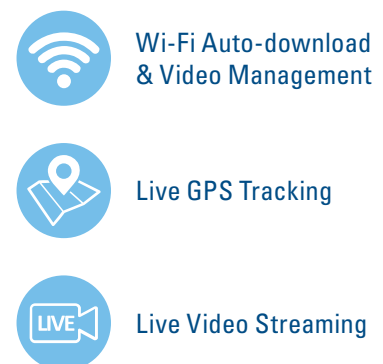
### Tested Tough for Road & Rail Vehicles

SAE-J1455, MIL-STD-810, EN50155, & EN50121 tested for electronics used in heavy duty road and rail vehicles (includes shock, vibration, voltage fluctuations, and more).

### Recommended Cameras:



### Optional Add-ons:



### Accessories:



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# NH16V2 NVR Hybrid

## 16 Channel Network Video Recorder with Hybrid Technology

| Video                    |                                                                                                                                             |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Recording Channels       | 16 Active Channels Max, 16 IP via Switch, 8 Analog Hi-Def Built-In, One audio per active video channel                                      |
| Analog Video             | Main: Up to 720p at 30 FPS<br>Main: Up to 1080p at 30 FPS (120 FPS Max, Shared)<br>Second: Up to 5 FPS all channels                         |
| IP Video                 | Up to 2048x1536 (3Mpx) at 30 FPS on each channel                                                                                            |
| 4K Support               | Up to 4 IP channels at 3840x2160 (8Mpx)                                                                                                     |
| Quality Settings         | Adjustable, 4 levels                                                                                                                        |
| Codec                    | H.264                                                                                                                                       |
| Auto Overwrite           | Selectable On/Off                                                                                                                           |
| Display Modes            | 1UP, 9UP, or 16UP                                                                                                                           |
| User Interface           | Web UI: Config & Live View<br>Local UI: Config, Live View, Playback, Export, Search                                                         |
| Delay On/Off             | Record On Delay ≤1 hr., Record Off Delay ≤1 hr., Power Off Delay ≤4 hr.                                                                     |
| On-Screen Display        | Main title, time & date, record & system status                                                                                             |
| Dual Stream Transmission | Transmit main or second stream live video with audio over optional broadband (cellular) network                                             |
| Storage                  |                                                                                                                                             |
| Primary                  | Removable Single or Dual Drive Storage Cartridge<br>Capacity up to 8TB SSD (4TB HDD)                                                        |
| Backup                   | Up to 1TB SD Card (Optional)                                                                                                                |
| Inputs & Outputs         |                                                                                                                                             |
| Network Ports            | Front: 1 at 1Gbps, unpowered<br>Rear: 3 at 100Mbps, 48V PoE (802.3af)<br>Rear: 1 at 1Gbps, 48V PoE (802.3af)<br>Rear: 2 at 1Gbps, unpowered |
| Monitored Inputs         | 11 (7 Signals + 1 Wake + 3 Alarm)                                                                                                           |
| Video Out                | 1 Front with Audio, 1 Rear Video Only                                                                                                       |
| Status Indicators        | 3 LED on DVR + Optional Diagnostic Indicator                                                                                                |
| Signal Out               | 1 at 12V, 100ma max                                                                                                                         |
| Wireless                 |                                                                                                                                             |
| GPS                      | GPS module built-in with RF antenna included                                                                                                |
| Wi-Fi                    | Optional, external wireless device connects to dedicated 1Gbps network port                                                                 |
| Smart Features           |                                                                                                                                             |
| Smart-Temp™              | Ensures the DVR stays at its optimal operational temperature                                                                                |
| Smart-Start™             | Vehicle startup voltage protection safeguards DVR from electrical spikes                                                                    |
| Smart Stop™              | Shuts down DVR if download activity is complete (requires Commander)                                                                        |
| Temp Power               | Turns on DVR for short duration maintenance activities                                                                                      |
| Inertia Sensor           | 3 axis external G-sensor option                                                                                                             |
| Electrical               |                                                                                                                                             |
| Voltage Range            | 9 to 36 VDC Operating                                                                                                                       |
| Transient Protection     | 600 W for power input, 400 W per signal input                                                                                               |
| Configuration Backup     | Time & programmed info (retained up to 7 years)                                                                                             |

| Mechanical/General             |                                                                        |
|--------------------------------|------------------------------------------------------------------------|
| Dimensions                     | (H x W x D) 2.8x 11.6x 10.5 in (72 x 294 x 267 mm)                     |
| DVR Weight                     | 6.6 lbs. (3 Kg) with front door and rear shroud                        |
| Locking Front Door             | Restricts access to user interface ports and media                     |
| Rear Shroud                    | Added protection for rear ports and connectors                         |
| Primary Storage Lock           | Restricts access to media removal                                      |
| Electrical                     |                                                                        |
| Voltage Range                  | 9 to 36 VDC Operating (20A Max draw)                                   |
| Standby Power                  | 60mW                                                                   |
| PoE Port Rating                | 802.3at (12.95W at powered device)<br>30W shared across all PoE ports  |
| Environmental                  |                                                                        |
| Operating Temperature          | HDD: -30 to 50°C (-22 to 122°F)<br>SSD: -40 to 60°C (-40 to 140°F)     |
| Approvals                      |                                                                        |
| Emissions                      | FCC (Title 47, Part 15, 47 CFR 15) and EN50155                         |
| Shock, Vibration, & Electrical | SAE-J1455, MIL-STD-810G, EN50155 for Heavy Duty and Rail Vehicles      |
| Environmental                  | RoHS, WEEE                                                             |
| Specifications – Plus System   |                                                                        |
| Signals                        | 7 external signal inputs + 3 internal signals                          |
| Alarms                         | 4 actions triggered by a signal or alarm input                         |
| Wake                           | Starts DVR directly into record mode                                   |
| Diagnostic Indicator           | Remote DVR status display                                              |
| Event Button                   | 2 alarm inputs, each adds an event mark to video                       |
| Location, Speed, Time          | Sync time and record vehicle location and speed (GPS antenna required) |
| Geo-fencing                    | Trigger alarm if vehicle exits geo-boundary                            |
| SuperCaps                      | Protects against video loss in case of sudden power loss               |

### Network Switch Specifications

| Ethernet              |                                                                                                          |
|-----------------------|----------------------------------------------------------------------------------------------------------|
| Ports                 | 2 Gbps Uplink Ports, unpowered<br>16 100Mbps Ports, 48V PoE,<br>802.3at (subject to output power limits) |
| Technology & Protocol | Store and Forward, CSMA/CD                                                                               |
| Switch Capacity       | 16 Port @ 100Mbps + 2 Port @ 1Gbps                                                                       |
| Electrical            |                                                                                                          |
| Voltage Range         | 9 to 36 VDC Operating (12A Max draw)                                                                     |
| PoE Port Rating       | 802.3at (12.95W at powered device)                                                                       |
| Output Power Limits   | 86W with 12V Source, 112W with 24V Source                                                                |
| Control Input         | 0 - 4VDC = OFF / 4.1V - 33.6VDC = ON                                                                     |
| Mechanical/General    |                                                                                                          |
| Dimensions            | (H x W x D) 2.8x 11.6x 10.5 in (72 x 294 x 267 mm)                                                       |
| Weight                | 5.1 lbs. (2.3 kg)                                                                                        |
| Environmental         |                                                                                                          |
| Operating Temperature | HDD: -30°C to 50°C (-22°F to 122°F)<br>SSD: -40°C to 60°C (-40°F to 140°F)                               |
| Approvals             |                                                                                                          |
| Emissions             | FCC (Title 47, Part 15, 47 CFR 15) and EN50155                                                           |
| Shock & Vibration     | SAE-J1455, MIL-STD-810G, EN50155 for Heavy Duty and Rail Vehicles                                        |
| Environmental         | RoHS, WEEE                                                                                               |

Information is subject to change at any time without notice.

1330-NH16V2-HYBRID-NVR-SS-020326

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# TH8

## 12 Channel High-Definition Hybrid DVR

Record up to twelve high-definition camera views, while offering the flexibility to support existing standard resolution (analog) cameras.

Get solid image quality plus a few extras to ensure event capture, like DVR Health Check, and geo fencing. HYBRID technology also allows you to upgrade to HD at your own pace while preserving your initial camera investment.



### Full High-definition Surveillance

Record up to twelve high-definition camera views up to 30 FPS per channel with audio.

### Hybrid Technology

Support your existing cameras while upgrading to HD with your choice of recording resolution from D1 to 1080p.

### Video Loss Protection

Supercap technology ensures your DVR continues to record even after a sudden power loss during an accident.

### Dual Media Options

Up to 4TB of on-board storage (8TB capable), increasing video retention capacity.

### Compatible Cameras:

#### Analog Options:



HD2Q Interior Dome



HD3Q Interior Dome



HD3U Interior Camera



HD3W Outdoor Wedge

#### IP Options:



C3Q9 Interior Mini Dome



C3W9 Outdoor Wedge

### Accessories:



Event/Diagnostic Button



Hard Drive Dock III



GPS



G-Force Sensor

### Optional Add-ons:



Wi-Fi auto-download & Video management



Live GPS Tracking



Live Video Streaming

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# TH8

## 12-Channel High-definition Hybrid DVR



| Video                     |                                                                                                  |
|---------------------------|--------------------------------------------------------------------------------------------------|
| <b>Recording Channels</b> | 8 channels (HD or Std Res), 4 IP channels, one audio per active video                            |
| <b>Video Resolution</b>   | Analog: Up to 1920x1080 (1080p)<br>IP: Up to 2048x1536 (3Mpx)                                    |
| <b>Record Stream Rate</b> | Main: 30 FPS max per active channel<br>Second: 5 FPS max per active channel                      |
| <b>4K Support</b>         | Up to 4 IP channels at 3840x2160 (8Mpx)                                                          |
| <b>Quality Settings</b>   | Adjustable, 4 levels                                                                             |
| <b>Auto Overwrite</b>     | Selectable On/Off                                                                                |
| <b>Display Modes</b>      | 1-Up or 9-Up (1-9 Channels)<br>1-Up or 16-Up (10+ Channels)                                      |
| <b>Playback Rate</b>      | Frame advance, FFD and REV playback up to 32x                                                    |
| <b>Search Function</b>    | Segment, alarm, date/time, event                                                                 |
| <b>User Interface</b>     | OSD on local video out with mouse or vMax Web using web browser                                  |
| <b>Delay On/Off</b>       | Record On Delay ≤ 1 Hour<br>Record Off Delay ≤ 1 Hour<br>Power Off Delay ≤ 4 Hour                |
| <b>On-Screen Display</b>  | Main title, time & date, record status                                                           |
| <b>Dual Streaming</b>     | Capable of sending low-bandwidth video images live over an optional broadband (cellular) network |
| Storage                   |                                                                                                  |
| <b>Primary</b>            | Hard Drive                                                                                       |
| <b>Secondary</b>          | SDHC/SDXC Media (Optional)                                                                       |
| <b>Primary Capacity</b>   | Removable cartridge supports single or dual drives with capacities up to 4TB (HDD or SSD)        |
| <b>Secondary Capacity</b> | Up to 1TB                                                                                        |
| Input/Output              |                                                                                                  |
| <b>Network Interface</b>  | Front: 1 Port<br>Rear: 4 Port, 1 at 12V PoE                                                      |
| <b>Alarm Inputs</b>       | 2 Alarm Inputs (Panic Button & General Use)                                                      |
| <b>Video Out</b>          | 1 RCA                                                                                            |
| <b>Signal Out</b>         | 1 at 12V, 100ma max                                                                              |

| Smart Features                 |                                                                                                                                |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| <b>Smart Temp™</b>             | Keeps DVR within optimal operating temperature                                                                                 |
| <b>Smart Start™</b>            | Safeguards the DVR against electrical spikes with vehicle start-up voltage protection                                          |
| <b>Smart Stop™</b>             | Shuts down DVR if download activity is complete (requires Commander)                                                           |
| <b>Inertia Sensor</b>          | Optional external G-sensor option                                                                                              |
| Electrical                     |                                                                                                                                |
| <b>Voltage Range</b>           | 8 to 32 VDC                                                                                                                    |
| <b>Transient Protection</b>    | 600 W for power input, 400 W per signal input                                                                                  |
| <b>Wiring Harness</b>          | 20' (6m) harness for power                                                                                                     |
| <b>Configuration Backup</b>    | Time & programmed info (retained up to 10 years)                                                                               |
| Mechanical/General             |                                                                                                                                |
| <b>Dimensions (HxWxD)</b>      | 2.8x 11.6x 10.5 in (72 x 294 x 267 mm)                                                                                         |
| <b>DVR Weight</b>              | 6.6 lbs (3 kg)                                                                                                                 |
| Environmental                  |                                                                                                                                |
| <b>Operating Temperature</b>   | HDD: -30 to 50°C (-22 to 122°F)<br>SSD: -30 to 55°C (-22 to 131°F)                                                             |
| Approvals                      |                                                                                                                                |
| <b>Emissions</b>               | FCC (Title 47, Part 15, 47 CFR 15) and EN50155                                                                                 |
| <b>Shock &amp; Vibration</b>   | Vibration Tested against SAE-1455 and MIL-STD 810G SAE-J1455 & MIL-STD-810                                                     |
| Specifications - Plus System   |                                                                                                                                |
| <b>Signals</b>                 | 5 external signal inputs + 5 internal signals                                                                                  |
| <b>Video Alarms</b>            | 4 internal alarms linked to signals, alarm inputs, or other internal triggers                                                  |
| <b>Event/Diagnostic Button</b> | An indicator panel that marks events for quick searches and displays video system status                                       |
| <b>GPS Ready</b>               | Records vehicle speed and location with optional GPS receiver; enables synchronized mapping when used with compatible software |
| <b>Geo-Fencing</b>             | Uses GPS technology to set a geographical boundary for a vehicle; receive an alert if it deviates                              |
| <b>SuperCaps</b>               | Protects against video loss in case of a sudden power disruption such as during an accident                                    |
| <b>Communication</b>           | Optional external Wi-Fi                                                                                                        |

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## Item 6: Current Scheduling and Dispatch System for Marin Access Services

### Trapeze TripSpark PASS v21

Marin Access services currently operate on the TripSpark PASS system, version 21, provided by Trapeze.

If the successful bidder intends to continue to use the TripSpark system, they must use the most recent version of either PASS (minimum, version 21) or Novus (minimum, version 4).

Marin Access utilizes the following modules within TripSpark PASS:

- PASS Workstation
- PASS SUS
- PASS Passenger Portal
- PASS Notifications
- PASS Mon
- PASS Drivermate
- TripSpark XGate

# Genesys Cloud CX

## Summarized plan comparison

Every business is unique, so our approach to pricing and packaging revolves around simplicity, transparency and flexibility. Unlock the full potential of our comprehensive platform with the right AI-powered capabilities for your organization to elevate both customer and employee experiences.

| Genesys Cloud CX 1                                                                                                                                                                                         | Genesys Cloud CX 2                                                                                                                                           | Genesys Cloud CX 3                                                                                                                                                                               | Genesys Cloud CX 4                                                                                                                                                                                                                        |        |        |        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------|--------|
| This plan is best for voice-centric call centers or BPOs specializing in voice services who require a generous fair-use policy for IVR minutes, data storage, API requests and more.                       | Our primary omnichannel offering features CX 1 plus access to digital channels: email, web messaging, SMS, Facebook, WhatsApp, Instagram and open messaging. | CX 3 boosts engagement and productivity with workforce engagement management. It includes Genesys Cloud CX 2 plus an employee activity dashboard with scorecards, leaderboards and KPI trackers. | CX 4 delivers more AI Experience at the best value. It includes Genesys Cloud CX 3 Agent Copilot for every agent, Journey Management for the Contact Center, and 30 tokens per named agent/month or 39 tokens per concurrent agent/month. |        |        |        |
|                                                                                                                                                                                                            |                                                                                                                                                              |                                                                                                                                                                                                  | CX1                                                                                                                                                                                                                                       | CX2    | CX3    | CX4    |
| Core features                                                                                                                                                                                              |                                                                                                                                                              |                                                                                                                                                                                                  |                                                                                                                                                                                                                                           |        |        |        |
| <b>Comprehensive interface</b><br>Give agents, supervisors & admins a single interface to quickly and easily operationalize a broad set of CX, EX, digital, AI and UCC capabilities                        |                                                                                                                                                              |                                                                                                                                                                                                  | ●                                                                                                                                                                                                                                         | ●      | ●      | ●      |
| <b>Voice channel</b><br>Continue to make voice an option while maintaining context across channels                                                                                                         |                                                                                                                                                              |                                                                                                                                                                                                  | ●                                                                                                                                                                                                                                         | ●      | ●      | ●      |
| <b>Digital channels</b><br>Provide seamless customer journeys across digital channels                                                                                                                      |                                                                                                                                                              |                                                                                                                                                                                                  | +                                                                                                                                                                                                                                         | ●      | ●      | ●      |
| <b>Omnichannel routing</b><br>Seamlessly route customer interactions from any channel to an agent most able to help                                                                                        |                                                                                                                                                              |                                                                                                                                                                                                  | +                                                                                                                                                                                                                                         | ●      | ●      | ●      |
| <b>Workforce engagement management</b><br>Unlock the value of your most valuable resource — your people                                                                                                    |                                                                                                                                                              |                                                                                                                                                                                                  | +                                                                                                                                                                                                                                         | +      | ●      | ●      |
| <b>Work automation</b><br>Boost productivity for any work type, including back-office tasks. Track and resolve customer issues faster with Case Management                                                 |                                                                                                                                                              |                                                                                                                                                                                                  | +                                                                                                                                                                                                                                         | +      | +      | +      |
| <b>Unified communications and collaboration</b><br>Enable easy collaboration across the company from a single platform                                                                                     |                                                                                                                                                              |                                                                                                                                                                                                  | ●                                                                                                                                                                                                                                         | ●      | ●      | ●      |
| <b>Speech and text analytics</b><br>Automatically transcribe, analyze customer sentiment, detect topics, and uncover agent empathy behaviors for deeper insights and more                                  |                                                                                                                                                              |                                                                                                                                                                                                  | Tokens                                                                                                                                                                                                                                    | Tokens | ●      | ●      |
| Reduce effort through AI-powered automation                                                                                                                                                                |                                                                                                                                                              |                                                                                                                                                                                                  |                                                                                                                                                                                                                                           |        |        |        |
| <b>AI Studio</b><br>A centralized workspace in Genesys Cloud for designing, deploying, and governing your AI-powered experiences                                                                           |                                                                                                                                                              |                                                                                                                                                                                                  | Tokens                                                                                                                                                                                                                                    | Tokens | Tokens | Tokens |
| <b>AI Guides</b><br>An easy, versatile no-code interface where you design agentic flows using prompts, conversation transcripts, or process documents                                                      |                                                                                                                                                              |                                                                                                                                                                                                  | Tokens                                                                                                                                                                                                                                    | Tokens | Tokens | Tokens |
| <b>Virtual agents</b><br>Get dynamic conversations with topic switching, disambiguation and automatic knowledge answers; and advanced slot collection with Gen AI                                          |                                                                                                                                                              |                                                                                                                                                                                                  | Tokens                                                                                                                                                                                                                                    | Tokens | Tokens | Tokens |
| <b>Native bots</b><br>Provide faster automated answers with native AI-powered bots that understand context                                                                                                 |                                                                                                                                                              |                                                                                                                                                                                                  | Tokens                                                                                                                                                                                                                                    | Tokens | Tokens | Tokens |
| <b>Predictive engagement</b><br>Use AI to analyze customer journeys and proactively engage customers at just the right moment                                                                              |                                                                                                                                                              |                                                                                                                                                                                                  | +                                                                                                                                                                                                                                         | ●      | ●      | ●      |
| <b>Predictive routing</b><br>Harness the power of AI across channels to match customers with the best agents                                                                                               |                                                                                                                                                              |                                                                                                                                                                                                  | Tokens                                                                                                                                                                                                                                    | Tokens | Tokens | Tokens |
| <b>Knowledge workbench</b><br>Turn knowledge into useful information that can be used for customer self-service                                                                                            |                                                                                                                                                              |                                                                                                                                                                                                  | Tokens                                                                                                                                                                                                                                    | ●      | ●      | ●      |
| <b>Knowledge optimizer</b><br>Get detailed insight into knowledge usage and gaps by channel, giving knowledge workers the insight to optimize the knowledge base                                           |                                                                                                                                                              |                                                                                                                                                                                                  | Tokens                                                                                                                                                                                                                                    | ●      | ●      | ●      |
| <b>AI Experience tokens</b><br>All plans natively enabled with ready-to-use Genesys Cloud AI capabilities. Tokens required for certain features.                                                           |                                                                                                                                                              |                                                                                                                                                                                                  | 250 Named / 350 Concurrent tokens per org/month included                                                                                                                                                                                  |        |        |        |
| <b>CX 4 bonus allocation tokens per agent/month</b><br>Genesys Cloud CX includes 30 tokens per Named agent/month or 39 tokens per Concurrent agent/month                                                   |                                                                                                                                                              |                                                                                                                                                                                                  | + 30<br>+ 39                                                                                                                                                                                                                              |        |        |        |
| Agent Copilot                                                                                                                                                                                              |                                                                                                                                                              |                                                                                                                                                                                                  |                                                                                                                                                                                                                                           |        |        |        |
| <b>AI-guided scripts and flows</b><br>Automatically present agents with forms, scripts, tools and more to progress the customer toward their desired outcome                                               |                                                                                                                                                              |                                                                                                                                                                                                  | Tokens                                                                                                                                                                                                                                    | Tokens | Tokens | ●      |
| <b>Enhanced post-interaction summaries</b><br>Speed up after-interaction work with a summary of the conversation, reason for contact, resolution and suggested wrap-up codes                               |                                                                                                                                                              |                                                                                                                                                                                                  |                                                                                                                                                                                                                                           |        |        |        |
| <b>Automatic knowledge surfacing and answer highlighting</b><br>Reduce manual searches by following along customer interactions and presenting critical relevant knowledge to agents at the moment of need |                                                                                                                                                              |                                                                                                                                                                                                  |                                                                                                                                                                                                                                           |        |        |        |

● Included  
+ Available as an add-on  
Tokens - Included; requires tokens

## Engage customers across any channel

|                                                                                                                                                                                   |   |        |        |        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|--------|--------|--------|
| <b>Speech-enabled IVR</b><br>Equip your customers to resolve issues faster with multilingual speech-enabled IVR                                                                   | ● | ●      | ●      | ●      |
| <b>Inbound voice routing (ACD)</b><br>Use your company's defined business priorities to segment, rank and route voice interactions                                                | ● | ●      | ●      | ●      |
| <b>Callback</b><br>Use immediate or scheduled callbacks to eliminate long wait times for customers                                                                                | ● | ●      | ●      | ●      |
| <b>Genesys Case Management</b><br>Enables organizations to manage sustained, long-running customer experiences that extend beyond a single interaction                            | ● | ●      | ●      | ●      |
| <b>Digital User Tracking</b><br>Track visitor journeys across web and mobile in real time to deliver contextual assistance and fully leverage advanced journey features           | + | ●      | ●      | ●      |
| <b>Web messaging, email, SMS, and in-app messaging</b><br>Quickly resolve any customer situation using asynchronous messaging with rich media, email and/or SMS                   | + | ●      | ●      | ●      |
| <b>Third-party messaging</b><br>Meet your customers on the platforms they already use, including Facebook, X, Instagram, WhatsApp, Apple Messages for Business and more           | + | Tokens | Tokens | Tokens |
| <b>Inbound/User-initiated WhatsApp Business Calling</b><br>Handle inbound voice calls over WhatsApp with the same routing, recording and reporting as standard voice interactions | + | ●      | ●      | ●      |
| <b>Social listening and engagement</b><br>Listen with AI-led sentiment analysis and respond to public posts, all integrated with the same agent workspace, routing and queues     | + | Tokens | Tokens | Tokens |
| <b>Co-browse</b><br>View what your customers see and make interactions simple and painless                                                                                        | + | ●      | ●      | ●      |

## Create great employee experiences

|                                                                                                                                                        |        |        |        |        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------|--------|--------|
| <b>Genesys Cloud Copilot</b><br>An agentic assistant for supervisors and admins that saves time and improves outcomes                                  | Tokens | Tokens | Tokens | Tokens |
| <b>AI Translate</b><br>Automatically translate interactions with contextual understanding, enhancing quality management effectiveness for global teams | Tokens | Tokens | Tokens | Tokens |

## Quality assurance and compliance

|                                                                                                                                                                                                                             |   |   |   |   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|
| <b>Real-time monitoring</b><br>Monitor and coach in-progress interactions without disturbing the conversation                                                                                                               | ● | ● | ● | ● |
| <b>Voice and Digital Interaction Recording + Screen recording</b><br>Record all conversations across all channels, including voice and digital and capture agent screen recording in 4K for improved compliance and quality | ● | ● | ● | ● |
| <b>Quality management and evaluations</b><br>Ensure quality across all interactions, gain interaction analysis and uncover improvement opportunities                                                                        | + | ● | ● | ● |
| <b>Voice of the customer</b><br>Collect post-interaction insights effortlessly via web-based or voice surveys                                                                                                               | + | + | ● | ● |

## Workforce management

|                                                                                                                                                                   |   |   |   |   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|
| <b>Mobility apps (Tempo®)</b><br>Empower employees to access schedules, manage time-off requests, review status updates and monitor adherence — anytime, anywhere | + | ● | ● | ● |
| <b>AI forecasting</b><br>Empower managers with advanced AI and over 25 machine learning models for accurate forecasting                                           | + | + | ● | ● |
| <b>AI scheduling</b><br>Ensure realistic schedules to address demand and improve operational efficiency based on the most current demand data                     | + | + | ● | ● |
| <b>Capacity planning</b><br>Make strategic hiring, training, and resourcing decisions using scenario-based modeling                                               | + | + | ● | ● |
| <b>Time off management</b><br>Manage time off proactively using limits, plans and agent requests                                                                  | + | + | ● | ● |
| <b>Monitoring and adherence</b><br>Provide workforce managers with a seamless real-time view for instant decision-making                                          | + | + | ● | ● |

## Employee performance

|                                                                                                                                                                       |   |   |   |   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|
| <b>Real-time performance insights</b><br>Track, manage and boost service levels with tools that monitor performance and enable employees to align with business goals | + | + | ● | ● |
| <b>Gamification</b><br>Make work fun and create a culture of learning, promote fairness and transparency, and decrease time spent onboarding                          | + | + | ● | ● |
| <b>Learning and development</b><br>Give your teams targeted training and coaching based on real-time and post-interaction data                                        | + | + | ● | ● |
| <b>Coaching</b><br>Help improve agent performance in the moment, driving learning while leaving agents less frustrated and customers more satisfied                   | + | + | ● | ● |

## Speech and text analytics

|                                                                                                                                                                               |        |        |   |   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------|---|---|
| <b>Interaction transcription</b><br>Use AI-powered transcription across channels for accurate documentation and deep insights; protect customer information with data masking | Tokens | Tokens | ● | ● |
| <b>Topic detection, management and interaction</b><br>Automatically detect and categorize topics to help teams track customer pain points, high-interest areas and trends     | Tokens | Tokens | ● | ● |

● Included

+ Available as an add-on

Tokens - Included; requires tokens

### Topic miner

Identify emerging topics and conversation patterns, stay ahead of customer needs, and optimize self-service and training strategies

Tokens Tokens ● ●

### Customer sentiment and acoustic analysis

Understand customer sentiment, and capture non-verbal cues like silence, overtalk and speech patterns for proactive quality management

Tokens Tokens ● ●

### Agent empathy analysis

Measure empathy in agent responses, ensuring customer interactions are helpful, supportive and aligned with customer expectations

Tokens Tokens ● ●

### Dictionary management

Improve transcription accuracy by customizing language models with industry-specific terminology, product names and unique phrases

Tokens Tokens ● ●

### Content search with topic and sentiment trends view

Quickly find and retrieve transcripts based on keywords and analytics metrics to gain historical insights

Tokens Tokens ● ●

## Virtual Supervisor

### AI scoring

Automate quality evaluations, providing contextual rationale for every response to ensure fair, consistent and data-driven assessments at scale

Tokens Tokens Tokens Tokens

### AI Summary

Save time with automated conversation summaries and instantly uncover key conversation drivers, sentiment reasons and resolution patterns

Tokens Tokens Tokens Tokens

## Seamlessly integrate your CX ecosystem

### Access to AppFoundry® Marketplace

Add value in a few clicks with prebuilt functionality and connectors to other systems from an expansive marketplace

● ● ● ●

### Unified communications and collaboration

Help front-line agents collaborate with experts across the business by connecting top UCC apps like Microsoft Teams and Zoom

● ● ● ●

### Text-to-speech (TTS) integration

Use high-quality synthesized voice to give callers a sense of familiarity and personalization

+ + + +

### Bot integration (Amazon Lex and Google)

Give customers support at any hour with specialized bots from Amazon, Google and more

+ + + +

### CRM integration

One interface with controls and context inserted directly into CRMs like Salesforce, ServiceNow, Microsoft Dynamics, Zendesk and more

+ + + +

## Proactively contact customers across channels

### Outbound voice campaigns

Create long-lasting opportunities and decrease inbound call volume with voice outbound campaigns

● ● ● ●

### Inbound/outbound blending

Increase agent utilization, reduce wait times and regulate volume by blending inbound and outbound calls

● ● ● ●

### Scheduled callbacks

Offer scheduled callbacks to eliminate long wait times for customers

● ● ● ●

### Outbound SMS, WhatsApp and email campaigns

Leverage automated and agent-assisted outbound communication channels to optimize campaign results and improve customer satisfaction

+ ● ● ●

### Proactive notifications

Target the right customers — at the right moment — with proactive chat messages, SMS notifications and more

+ ● ● ●

### Agentless API

Automatically send messages to customers from backend systems based on triggered events

+ ● ● ●

## Drive decisions with reporting and analytics

### Customizable performance dashboards

Get real-time analytics and dashboards to effectively manage teams across all channels

● ● ● ●

### Historical reporting

Preserve historical context across your contact center and generate reports to track and analyze critical KPIs

● ● ● ●

### Real-time and historical views

Unite real-time and historical data, and easily search for specific customers or interactions

● ● ● ●

### Custom reporting and data visualizations

Automated data integration, analytical data warehouse and real-time data delivered in a dashboard for your most complex requirements

+ + + +

### Conversational intelligence

Automatically analyze interaction content with contextual reasoning and understanding to uncover behaviors for deeper insights

Tokens Tokens ● ●

### Journey flows

Identify improvement opportunities through customer behavior visualization

● ● ● ●

### Journey management

Empower your organization to align and optimize each customer's journey

+ + + ●

## Genesys Cloud AI Experience tokens: An innovative approach to AI consumption

We offer a consumption-based pricing model for our AI solutions. Genesys Cloud AI Experience tokens offer flexibility, scalability and cost efficiency for AI contact center capabilities. With Genesys Cloud AI Experience tokens, there's no need to commit to an inflexible AI infrastructure upfront. Instead, you can choose the AI capabilities you need and only pay for what your organization uses. This modular approach allows organizations like yours to deploy what's required at any given time, so you can control costs while maximizing the potential of AI to enhance your customer and employee interactions.

## Start orchestrating AI-powered experiences with Genesys

Genesys is a trusted leader in orchestrating exceptional customer and employee experiences. Our AI-powered solutions offer your business the tools, flexibility and innovation needed to thrive in today's fast-paced world. When you choose Genesys, you partner with a leader who's committed to helping you deliver seamless, personalized experiences that drive meaningful outcomes. Take your next step toward creating enhanced customer and employee experiences.

[Get started today](#)

● Included

+ Available as an add-on

Tokens - Included; requires tokens



## About Genesys

Genesys empowers more than 8,000 organizations in over 100 countries to improve loyalty and business outcomes by creating the best experiences for their customers and employees. Through Genesys Cloud, the AI-Powered Experience Orchestration platform, Genesys delivers the future of CX to organizations of all sizes so they can provide empathetic, personalized experience at scale. As the trusted platform that is born in the cloud, Genesys Cloud helps organizations accelerate growth by enabling them to differentiate with the right customer experience at the right time, while driving stronger workforce engagement, efficiency and operational improvements. Visit [www.genesys.com](https://www.genesys.com).

● Included

+ Available as an add-on

Tokens - Included; requires tokens

2026-04-01

**Next Generation Clipper® Fare Collection System**  
**Paratransit Payment Integration Requirements V1.1**  
**Updated: 2025-12-16**

**Overview.**

Through the use of application programming interfaces (APIs), Clipper is available as an option for Transit Operators in the Clipper service area to pay for paratransit fares. To support this, the paratransit booking and dispatch software and provider will need to interface with the Clipper System and system operator to design, develop, test and implement API-based interfaces. Such interfaces are defined by Cubic and are common across all operators; they will not be customized by transit or Paratransit Service Provider.

Fare calculation is the responsibility of the Paratransit Software that will calculate the fare and submit a single fare payment request to Cubic who will then post it to the client's Clipper account. Clipper charges are posted at the time that the trip is performed, not at the time of booking.

Revenues associated with paratransit trips will be settled to the Transit Operator in accordance with regional revenue settlement policies. No funds will be settled directly to the paratransit operator or paratransit service provider, though data will be provided to allow the Transit Operator to allocate or transfer funds internally or to its service provider outside of the Clipper system.

**Definitions.**

- Application Programming Interfaces or APIs: System-level interfaces between Paratransit Software and the Clipper System for the purpose of providing Paratransit Payment Integration.
- Clipper or Clipper System: The regional fare payment system provided by Cubic.
- Cubic (Cubic Transportation Systems): The contractor responsible for the provision and operation of the Clipper System.
- MTC (Metropolitan Transportation Commission): The entity responsible for contractual and operational management of the Clipper System.
- Paratransit Payment Integration: Work required to interface and integrate Paratransit Software with the Clipper System.
- Paratransit Service Provider: The entity, whether internal or a contract third party, responsible for operation of the paratransit booking and dispatch system.
- Paratransit Software: The paratransit booking and dispatch software to be provided under this contract.
- Transit Operator: The overall agency responsible for provision of fixed route, paratransit and other services.

- Vendor: The contractor or entity responsible for provision of the Paratransit Software.

## **10 General Requirements.**

- 10.1. Vendor shall be responsible for all work to update and integrate Paratransit Software to provide Clipper payment functionality.
- 10.2. Vendor shall be responsible for providing operator (user) and system administrator training to the Paratransit Service Provider.
- 10.3. Vendor shall coordinate with Transit Operator, MTC, and Cubic to plan, design, test, and implement integration of Paratransit Software integration with Cubic on behalf of Transit Operator and Paratransit Service Provider.
- 10.4. Prior to the commencement of work, Vendor shall execute a non-disclosure agreement with Cubic to obtain technical details and onboarding information.
- 10.5. Vendor shall comply with Cubic's API definitions, and onboarding requirements.
- 10.6. Vendor shall comply with all applicable Transit Operator, MTC, Clipper and regional policies.

## **20 Technical Requirements.**

- 20.1. Vendor shall be responsible for all work to update and integrate its Paratransit Software to provide Clipper payment functionality.
- 20.2. Paratransit Payment Integration shall utilize APIs as defined by Cubic.
- 20.3. Clipper payment functionality shall be provided through all staffed and self-service sales channels that allow a client to book paratransit travel in order to provide a common user experience regardless of channel utilized.
- 20.4. Vendor shall provide functionality in the Paratransit Software to record and report on all Clipper payments for Transit Operator review and reconciliation of reimbursement from Clipper.
- 20.5. Vendor shall provide functionality to record and associate the client's Clipper account serial number with the client's account in the Paratransit Software.
- 20.6. The Paratransit software shall support both historic 10 digit and new 19 digit Clipper account serial numbers.
- 20.7. Integration shall be provided through a virtual private network connection between the Paratransit Software and Cubic's Azure demarcation point over a public Internet connection provided by Transit Operator or Vendor.
- 20.8. Vendor and Paratransit Software shall integrate with three (3) Clipper APIs:
  - a. Validate Account Details. This API shall be used to check that the Clipper account is valid, and that there is sufficient funds balance in the client's account to pay for the cost of travel. If the Transit Operator allows other products such as period passes to be used for paratransit travel, this API

shall also be used to check for the existence and validity of useable products; and

- b. Pay for Service. This API shall be used to allow Clipper to be used as a payment method to post a dollar-value charge against the client's account and available funds; and
  - c. Void Transaction. This API shall be used void a specific Pay for Service transaction based on a transaction reference identifier that is provided at the time the Pay for Service transaction is posted.
- 20.9. Vendor shall provide functionality to pay for a companion fare as follows and as permitted by Transit Operator policies:
- a. Calculate a combined fare for the client and companion, and post as a single Pay for Service request to the clients Clipper account on file; and
  - b. Allow the companion to use a non-Clipper form of payment such as cash, coupon or mobile payment and record that payment separately in the Paratransit Software (outside of Clipper); and
  - c. Allow the companion to provide a second Clipper account number and create two separate Pay for Service postings – the first to the clients account, and the second to the companions account based on the applicable fares.
- 20.10. The Pay for Service API does not validate the account balance or validity, so the Paratransit Software shall utilize the Validate Account Details API to verify that there are or are not sufficient funds or products available for paratransit travel:
- a. At the time of trip booking; and
  - b. At the time of manifest creation.
- 20.11. In the event that the Validate Account Details indicates that there are insufficient funds or available products for paratransit travel, the Paratransit Software shall provide a notification to paratransit booking staff so that they can notify the customer at the time of booking or manifest creation to add funds to their Clipper card prior to the scheduled trip.
- 20.12. The Paratransit Software shall execute the Pay for Service API at the time that the trip is performed, not at the time of booking.
- 20.13. In the event that the Pay for Service API returns an error (i.e. transaction failure), the Paratransit Software shall provide an alert to the dispatcher and vehicle driver (through the mobile data terminal). Vendor shall work with the Transit Operator and Paratransit Service Provider to develop operational procedures to resolve the issue such as requesting an additional form of payment.
- 20.14. In the event that a trip is canceled or unperformed after being performed, the Paratransit Software shall provide functionality for an authorized representative

of the Paratransit Service Provider to reinstate the cost of the trip in the client's Clipper account through execution of the Void Transaction API.

20.15. In the event that the client elects to change their preferred form of payment at the time the trip is performed, the Paratransit Software shall include functionality to update the form of payment at that time and correctly record the payment used.

20.16. Vendor shall coordinate with Transit Operator and Paratransit Service Provider staff to develop procedures and responsibilities for executing the Void Transaction API.

### **30 Implementation Requirements.**

30.1. Vendor shall coordinate Paratransit Payment Integration work with other work and obligations of the contract.

30.2. Vendor shall coordinate the timing and schedule of major project activities with the Transit Operator, Paratransit Service Provider, MTC and Cubic.

30.3. Vendor shall designate a lead technical contact for Paratransit Payment Integration work that will act as the primary source of work and technical coordination.

30.4. Vendor shall prepare a Project Plan in draft and final format outlining the scope of work, schedule, responsibilities, and coordination requirements for Paratransit Payment Integration.

30.5. Vendor shall prepare a System Design in draft and final format documenting the design and intended operation of Paratransit Payment Integration.

30.6. Vendor shall establish a development and testing environment to conduct development and testing work prior to deployment in production.

30.7. Vendor shall coordinate with Cubic for onboarding and establishing connections to designated Clipper test and production servers through Cubic's Azure gateway.

30.8. Vendor shall document and test all payment functions and API calls through a series of documented use cases and user stories.

30.9. Vendor shall provide training materials and training for Paratransit Payment Integration operations.



**DV24-5070**

**NOVEMBER 2024**

# **EQUANS CAD/AVL SYSTEM PROPOSAL TO MARIN TRANSIT**



## **REQUEST FOR PROPOSALS FOR COMPUTER-AIDED DISPATCH (CAD) AND AUTOMATIC VEHICLE LOCATION (AVL) SOLUTIONS FOR THE MARIN COUNTY TRANSIT DISTRICT**



From: Ineo Systrans USA Inc.  
Contact person: Mr. Kilian Ollivier  
Director of Business Development  
[Kilian.ollivier@equans.com](mailto:Kilian.ollivier@equans.com)  
Tel: 571 428 9392

**To the attention of:**

Kyle French  
Marin County Transit District  
711 Grand Ave, #110 - San Rafael, CA 94901

**Ref: Request for Proposals for COMPUTER-AIDED DISPATCH (CAD) and AUTOMATIC VEHICLE LOCATION (AVL) SOLUTIONS for the MARIN COUNTY TRANSIT DISTRICT**

Dear Marin Transit,

On behalf of EQUANS, thank you for the opportunity to submit a proposal for the implementation of the Marin Transit new CAD/AVL system.

The EQUANS CAD/AVL system will deliver an efficient, high quality service for public transportation in the Marin County community, which will greatly improve the customer experience and promote Marin Transit as a first-class transit system. EQUANS has never failed a project, never been replaced in North America, and holds a very high customer satisfaction rate. Partnering with EQUANS is to gain assurance of a successful project, and a win for Marin Transit and its community.

EQUANS has been in business for 45 years, solely dedicated to CAD/AVL and real-time passenger information systems. EQUANS provides state of the art, innovative, and reliable CAD/AVL systems to public transit that improve the passenger experience, operational efficiency, safety, and maintenance. Our software suite, in-vehicle hardware, and mobile technologies support the operations of fixed route bus, light rail, and ferry operations around the world.

EQUANS has delivered a CAD/AVL system to many agencies with a similar size and scope to Marin Transit including Medford, OR; Green Bay, WI; Corpus Christi, TX; Greenville, SC; Rochester, MN; and Lowell, MA. Three of our clients (Greenlink in Greenville, SC, TriCounty Link in Charleston, SC and Rock Region METRO in Little Rock, AR) decided to switch from Syncromatics to the EQUANS CAD/AVL system. Greenville has been using the EQUANS' CAD/AVL and APC system since 2023 and Little Rock is currently in deployment. The experience that EQUANS possesses to transition from Syncromatics to the EQUANS system will be a key advantage for a successful project.

EQUANS is confident that this proposal reflects the importance of partnering with Marin Transit, with the goal of building a strong and lasting relationship and providing excellent customer support. Your EQUANS project team will work with you to create a schedule that minimizes impact on existing operations and a system **fully installed and live by the end of June 2025**. Our team will collaborate with you through the entire implementation process, including a comprehensive on-site training program. EQUANS commits to providing you with exceptional customer support. Marin Transit will be treated as a key customer, with a dedicated Project Manager and Project Engineer, for the next decade to come.

The proposed Project Manager is Hoki Tse. Hoki began his Public Transit career in San Jose over ten years ago. Hoki is a Senior Project Manager at EQUANS, PMP certified, has ten years of project management and Transit Technology experience, and is an accomplished operations leader excelling at driving client satisfaction. He possesses a strong background in training, driving team cohesion, and best practices alongside a can-do and positive attitude to the EQUANS team. Hoki is trusted to lead key projects in highly diverse environments and can manage project deliverables that ensure projects run cost-effectively and efficiently while attaining to customer requests. Hoki is based on the West Coast, within the same time zone as Marin Transit.

After meeting with Marin Transit staff over the past year, we believe we have a good understanding of your operational needs, such as a reliable, proven CAD/AVL and AVA system providing accurate announcements to passenger aboard the buses; providing a robust and wired Mobile Data Terminal (MDT) for bus operators (thus not losing connectivity with the Cradlepoint and onboard system); providing seamless integration with existing assets such as the new UTA APC, Hanover Destination Signs, and with TransTrack for an integrated data management system; and monitoring the vehicles from Golden Gate Transit (EQUANS uses SIRI as a standard API and has multiple projects in which we import a SIRI feed to display buses from third party agencies); all with



a vendor that will provide strong customer support. Our CAD/AVL will provide key benefits to Marin Transit operations:

- **The EQUANS CAD/AVL is designed on a modular off-the-shelf approach**, with an open database, reliable hardware, long-term warranty, fully documented open API, and scalability, which allows you to keep up with the changing pace of technology, expand the fleet to more vehicles, and add new components.
- **A cloud-based system that is 100% secure**, accelerates the overall deployment, simplifies IT work, and reduces maintenance cost. The EQUANS CAD/AVL has been proven to operate with no downtime.
- **Fully integrated CAD/AVL for Single Log-in** with Hanover Destination Signs and Sunrise interior signs, changing the destination signs automatically without driver interaction, even in cases of interline. The EQUANS CAD/AVL also has the ability to integrate with the UTA APC -for real-time crowding information.
- **Proven integration with Optibus**, which will reduce manual data entry and automate the scheduling data transfer process into the CAD/AVL.
- **A robust, flexible, and reliable Computer Aided Dispatch**, helping operations staff improve efficiencies of the transit operations, with tracking fleet on-time performance, dynamically manage service changes and unforeseen disruptions, and empowering dispatchers to make smart decisions proactively. For example, if Marin Transit is short on drivers and has to cancel runs, the EQUANS CAD/AVL allows runs or block cancellation and will push the information to the passenger in real-time. When a change is made, such as a detour or a trip cancelled, the update is pushed to your riders in real-time. Additionally, the Playback features will help your operation team review events such as speeding or off route.
- **Improve bus operator's daily work** and on-time performance with an intuitive, driver-facing MDT that indicates when vehicles are running early, late, or on time, and allows easy two-way communications with dispatch. In addition, the MDT offers easy to read real-time detour indication and audio turn by turn.
- **Crystal-clear voice communications via the EQUANS Voice over IP module**: Through our reliable VoIP, running on the same MDT, and an Android mobile application for road supervisors, your staff can easily manage voice communication with individual, group and fleet-wide calls, adding other staff members to a call, or replay recent calls.
- **A reliable Automatic Vehicle Announcement System (AVAS) fully integrated to the CAD/AVL**, featuring configurable text-to-speech, multi-lingual announcements and your choice of voices. The system never loses AVAS functionality, even when the vehicle is out of cellular coverage.
- **The EQUANS CAD/AVL natively include GTFS and GTFS RT data feed**, and follows GTFS Best Practices. It can export GTFS/GTFS RT dataset that includes all required and optional GTFS files. The EQUANS GTFS RT feed include all service alerts, real-time occupancy, active detour, and trip cancellations.
- **Proven integration with TransTrack**: EQUANS has partnered multiple times with TransTrack and integrated our CAD/AVL with their Business Intelligence software in Memphis, Naples and Charleston.
- For your maintenance staff, **J1939 real-time alarms will support improving efficiencies in maintenance**, and the integration of our hardware in the buses will lower the amount of maintenance needed (rugged hardware made for transit and real cables used).
- **EQUANS works with GILLIG for factory installation**, so your future new buses will arrive ready to go.
- **Strong track records of successful installation** for agencies of all sizes. Our staff and installation team will provide a thorough and quality installation with no interference of operations.
- **Finally, we want to work and partner with Marin Transit** – We will provide proactive project management and a very high level of customer support, always available on an unlimited basis.

**EQUANS encourages Marin Transit to contact existing clients such as Rogue Valley Transit District, Greenville, Green Bay Metro, and Corpus Christi RTA, to discuss EQUANS' expertise in integration, CAD/AVL features, customer support, and quality of installation.** EQUANS is excited about partnering with Marin Transit, and commits the resources required for a successful project implementation, on time and on budget.

**EQUANS acknowledges receipt of addenda 1, 2, 3, and 4.**

Please direct all communications during the solicitation and selection process to EQUANS' Director of Business Development, Kilian Ollivier, who is available to answer any questions you may have moving forward.

This proposal is valid for a period of one hundred twenty (120) days from the proposal opening.

Sincerely,

A handwritten signature in blue ink, appearing to read 'B. Huon', enclosed within a large, loopy blue oval.

**Baudouin HUON**  
Chief Executive Officer – CEO



**DV24-5070**

**NOVEMBER 2024**

**REQUEST FOR PROPOSALS FOR  
COMPUTER-AIDED DISPATCH (CAD) AND  
AUTOMATIC VEHICLE LOCATION (AVL) SOLUTIONS  
FOR THE MARIN COUNTY TRANSIT DISTRICT**



**EQUANS CAD/AVL SYSTEM FOR  
MARIN TRANSIT**

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## A. EXECUTIVE SUMMARY

EQUANS appreciates the opportunity to respond to Marin Transit RFP for a new Computer Aided Dispatch/Automatic Vehicle Locator (CAD/AVL) system.

EQUANS has applied significant effort and resources identifying what we believe to be the optimal configuration to satisfy your requirements and achieve your long-term vision. We are confident our proposed solution will deliver the precision and performance you expect for your investment, including seamless integration with your existing assets.

EQUANS is extremely eager to work and partner with Marin Transit. Marin Transit will be a key customer and key account for EQUANS, with a dedicated team consisting of a Project Manager and Senior Project Engineer, for the next decade to come.

EQUANS understand that Marin Transit needs a reliable partner and proven CAD/AVL system. EQUANS is experienced and proven to deliver a top of the industry solution to Marin as well as meet several of your top needs. EQUANS can easily import real-time bus location from Golden Gate Transit vehicles from INIT via SIRI feed. This is at no extra cost to you, and EQUANS has successfully done integrations like this many times over the past years.

The EQUANS CAD/AVL will also integrate with your existing Fareboxes, Cradlepoint, UTA APC, Destination Signs, and TransTrack, providing a fully integrated solution. The EQUANS CAD/AVL will facilitate bus driver work with an innovative and ruggedized Mobile Data Terminal (MDT), and dispatch software that will improve operations efficiencies and facilitate NTD reporting.

Additionally, EQUANS is able to provide several optional items to Marin Transit such as Voice over IP (VoIP) radio module which is an off the shelf functionality of the EQUANS CAD/AVL and Fare Media Creation through our trusted partner Paragon ID. EQUANS can also integrate with Marin Transit's SEON cameras.

The EQUANS CAD/AVL will help Marin Transit meet your objectives. The proposed system will provide a **reliable tool to manage bus** operations that is trusted by agencies throughout the US and across the world, and has been for decades. The system will **improve service quality** by offering continual one (1) second updates to Marin Transit, more automated process for dispatch to create a detour or service change, more automated process in maintenance or planning, support drivers with turn by turn, and your passengers will get instant updates pushed anytime detours or route updates are made, so that they always have the latest information available, in real-time.

The **improved delivery of transit information to the public** will also be achieved through a wide range of avenues including a public website, integration with existing Wayside and Sunrise electronic signs, the ability to send custom messages to any electronic signs but also onboard the bus, AVA announcements available in multiple language, and SMS for real-time arrival at the bus stops. The EQUANS SMS features include the ability to subscribe to your favorite routes, and include real-time occupancy.

EQUANS will also **improve Marin Transit operational efficiency** through an easy-to use platform for seamless fleet management and a wide range of reports that will show Marin Transit where improvements can be made, what route are underperforming, how is dwell time at every stop, what route could optimize running times.

One example is the Corpus Christi Regional Transportation Authority (CCRTA), using the EQUANS CAD/AVL system, recorded an improvement of 8.4% of on-time departure since the EQUANS CAD/AVL was implemented. In Quebec City, after implementing the EQUANS CAD/AVL, using the reports they identified routes with too much dwell time scheduled compared to what drivers really needed, and have been able to

save thousands of hours of unproductive service that they then reinjected as service improvements. These are just a few example of how the EQUANS CAD/AVL can increase efficiency and save the agency time and money.

Overall, the EQUANS CAD/AVL suite will provide Marin Transit with a well proven CAD/AVL system, an improved and easy to use system for administrators, drivers, and passengers, reliable and accurate reporting for service planning, and the highest level of customer support.

The EQUANS CAD/AVL is a turnkey system that includes all costs required to design, install, test, and maintain a complete package as well as train Marin Transit staff. EQUANS provide a robust, in-person training to ensure Marin Transit is comfortable and well-versed in our system. EQUANS' fully integrated solution provides value to small and mid-size transit agencies seeking tools for internal operations and real time passenger information from a single vendor.



#### PROVEN CAD/AVL SYSTEM

- EQUANS is a reliable, stable, proven partner for Marin Transit. With EQUANS, you have the insurance of a company that will be present to support you, provide proactive project management, and the best customer support in the industry. **The EQUANS CAD/AVL is a complete solution** has been implemented on hundreds of transit agencies over the world and has never failed to deliver a project.
- **Similar deployments:** EQUANS has implemented multiple CAD/AVL projects similar to the Marin Transit project:
  - Greenville, SC: EQUANS replaced Syncromatics and delivered a complete CAD/AVL and ITS system on-time, including interior signs, AVA, Infotainment, APC by integrating with existing sensors, real-time information on an app and website, Google integration, NTD certification with UTA, and more.
  - Rogue Valley Transportation District in Medford, OR: EQUANS successfully delivered a CAD/AVL and CAD/AVL system on 45 buses including AVA, APC, Interior LED signs and onboard infotainment, as well as integration with UMO mobile ticketing, destination signs, and routers.

- Corpus Christi, TX: Implementation of the EQUANS CAD/AVL and APC system on 65 buses including AVA, interior signs, Onboard Infotainment displays, integration with Cradlepoint router, single-sign-on integration with Hanover headsigns and Genfare fareboxes, and GTFS/GTFS RT feed to Google, passenger website, Wayside and GDS displays, and CCRTA's mobile app.
- **EQUANS offers our AVAS system which is ADA-compliant**, tested and proven at hundreds of client locations, and continuously supported by our engineering team. Marin Transit can edit announcements as easily as typing a text, select which stop to announce, can choose a voice among a dozens of available voices, make ad-hoc announcements seamlessly and instantaneously into any bus. The EQUANS CAD/AVL never lose AVA functionality, even when the bus is out of cellular range.
- **The EQUANS system is designed to offer a long-time investment of at least 12 years** with software that will improve as we add new features and modules to our product roadmap. Additionally, our system is scalable and Marin Transit can easily add new vehicles, components, features, or integrations without disrupting the CAD/AVL system.
- **Proven to work well with GILLIG buses:** EQUANS has installed its CAD/AVL on hundreds of GILLIG buses, both via retrofit installation such as in Green Bay, and new bus builds installed directly at the factory. EQUANS is an approved system for factory installation at GILLIG, ensuring that your new buses arrive ready to go.
- **EQUANS is well-versed in Electric bus fleets** and can partner with Marin as you reach toward your goal of becoming a fully zero emission fleet by 2040. EQUANS can seamlessly track all bus types including electric buses and show their level of charge in real-time so that administrators are always up to date.

#### IMPROVED TECHNOLOGIES FOR MARIN TRANSIT

- **A Real-Time Cloud-based system:** The EQUANS CAD/AVL has been designed for real-time operations and real-time information from the start and has been managing bus fleet in real-time for more than two decades. Our experience in real-time bus tracking, real-time monitoring, and real-time passenger information will support Marin Transit move to a real-time system and provide the best experience for Marin Transit passengers.
- **Improved Reporting will greatly benefit Marin Transit administrators** daily and usage and tracking of the CAD/AVL. Our comprehensive reporting includes detailed information regarding deadhead, mileage, NTD data, and much more as detailed in the reporting section of the proposal.
- **A hardwired Mobile Data Terminal (MDT) offers an effective and secure replacement** to removable and, at times, unreliable tablet-based solution. The EQUANS MDT is designed for sole use in transit buses and hardwired to the VLU, ensuring it never lose connectivity or power. The usable lifetime of the EQUANS MDT is 12 years, which is much longer than a consumer grade tablet.
- **The EQUANS CAD/AVL system support Traffic Signal Priority (TSP) integration.** EQUANS has integrated with TSP at many locations including integration with Miovision Opticom TSP system in Memphis, TN and Naples, FL.
- **EQUANS seamlessly integrate with existing onboard Sunrise LED signs** and can also provide LED signs for the vehicles that only have static signs. Additionally, custom messaging is very easy for system administrators to create and can be sent to one or several buses with a click of the button and can be customized to show at specific stops along specific routes.

## EASY TO USE

- **The EQUANS CAD/AVL system is easy to use**, configurable to each user with different type of account and access per user type (planner, dispatch, administration, maintenance, Operations Manager...), and is based on an open architecture with open API to integrate with third parties.
- **Strong Computer Aided Dispatch capabilities:** EQUANS' CAD/AVL will assist dispatch in making better real-time decisions, support assignment management, detour creation, driver communication, push service adjustments to the fleet and update passengers, all in real-time. It will allow operations staff to improve efficiencies of the transit operations, with tracking fleet on-time performance, dynamically managing service changes and unforeseen disruptions, and empowering dispatchers to make smart decisions proactively.
- **Ability for driver to easily count passengers by fare class through the Mobile Data Terminal.** Administrators can run reports on all fare class information to oversee and track for trends.

## CUSTOMER SUPPORT

- **High Level of customer support:** Your Project Manager will be your dedicated and consistent point of communication for this project. The Project Manager and Senior Project Engineer will provide frequent on-site visits with the project team. They will also act as Marin Transit representative internally within EQUANS, ensuring we always meet your needs. EQUANS' prides ourselves in being present on our client sites during implementation and training.  
**In addition, unlimited customer support and service is provided to all end users of Marin Transit, and local customer support will be provided from our Irvine, CA, office.**
- **In-person training-** to ensure Marin Transit is comfortable using the system and understands how to best set up the many accommodations of the system to best fit your top priorities. In addition, EQUANS will provide continuous and refresher training to ensure that any new staff is fully competent with the system over time.
- **Customer support and customer satisfaction is at the core of EQUANS' DNA** and the main differentiator with our competitions. At EQUANS, we pride ourselves on delivering the best support and assistance possible. Our expert customer support staff are available 24/7/365, and a web customer portal is available for you to use at any time to log request or issues. They will instantly take care of incidents so that you are always able to ensure the maximum service availability for your passengers.
- EQUANS wants not only to be a vendor to Marin Transit, but a long term partner, and support Marin Transit in being the premier transportation choice in the San Rafael community as well as a top tier public transit in the US.

# R1900 Series 5G Ruggedized Router

**High-performance 5G router for the ultimate in-vehicle network connectivity**



**Firewall Throughput:  
940 Mbps**



**WAN Connectivity:  
5G & LTE Cat 20**



**LAN Connectivity:  
Wi-Fi 6, GbE, BT 5.1**



**NetCloud Solution:  
Mobile Performance**

The R1900 Series router was built from the ground up to handle high-performance mobile 5G connectivity and edge computing. Purpose-built to withstand extreme environments, the R1900 is an all-in-one mobile networking solution ideally suited for installations within a wide range of vehicles including metro transit buses, school buses, commercial fleets, as well as first responder vehicles such as police, fire, ambulance, and mobile command trailers.

The R1900 is part of a NetCloud Mobile Performance Package. Cradlepoint NetCloud provides connectivity, network, security, location, and IoT services to connect everything in the vehicle, while providing access to IT for remote management, troubleshooting and analytics. When coupled with the Advanced Mobile Performance service plan, you gain full suite of security and AVL capabilities including threat management, web filtering, application visibility, analytics, and advanced GNSS/GPS functionality including location tracking and cellular coverage maps.

## Key Features:

- Deploy the ultimate 5G NR / Cat 20 LTE mobile networking solution with industry-leading features
- Add a second cellular modem with the optional RX30 managed accessory for simultaneous dual-carrier connectivity
- Take advantage of Wi-Fi 6 for the best possible connections
- Integrate into AVL systems with discrete GNSS and dead reckoning
- Extend your deployment with powerful edge compute capabilities and container support
- Enable unified edge security with application aware multizone firewalls, IDS/IPS, and Internet security
- Define policies through centralized cloud-based management for easy deployment at scale

## Hardware Specs

|                                 |                                                                                                                       |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Category                        | Mobile                                                                                                                |
| Cloud Management                | Yes                                                                                                                   |
| Wireless Connectivity           | Dual Connectivity 5G & Cat 20 LTE                                                                                     |
| 5G Status                       | 5G Embedded                                                                                                           |
| Form Factor                     | Ruggedized Metal                                                                                                      |
| Ethernet Ports                  | 4 GbE (LAN/WAN switchable)                                                                                            |
| Ports                           | USB Port: 1, Serial Port: 1                                                                                           |
| Bluetooth® wireless technology  | Yes, embedded Bluetooth 5.2                                                                                           |
| Dual-Modem Support              | Yes, with RX30-MC                                                                                                     |
| Network Operator Standards      | PTCRB (U.S.), GCF (global)                                                                                            |
| Network Operator Certifications | AT&T, T-Mobile, Verizon                                                                                               |
| Regions                         | North America, Latin America, Europe, Africa/Middle East, Asia-Pacific<br><i>See country and model availability</i>   |
| Public Safety Networks          | ESN, FirstNet Trusted, T-Mobile Connecting Heroes, Verizon Frontline<br><i>See data sheet for model applicability</i> |
| Firewall Throughput             | 940 Mbps                                                                                                              |
| VPN Tunnel Count                | 20                                                                                                                    |
| Wi-Fi                           | Dual-band, dual-concurrent; 802.11ax (Wi-Fi 6)                                                                        |
| GNSS/GPS                        | Discrete active GNSS with dead reckoning                                                                              |
| PoE                             | Yes, with RX30-PoE                                                                                                    |
| Operating Temp                  | -30 °C to 70 °C (-22 °F to 158 °F)                                                                                    |
| Rack Mountable                  | No                                                                                                                    |
| Private Cellular Network        | Yes (4G, 5G, CBRS)                                                                                                    |

## NetCloud Comparison for Mobile

NetCloud Service for Mobile provides the enterprise capabilities that organizations need to manage their in-vehicle work and includes:

- Centralized endpoint management with insights and visual analytics
- 24x7 enterprise support and limited lifetime warranty
- On-demand training with Cradlepoint University

|                                                                |   |
|----------------------------------------------------------------|---|
| Secure Remote Management & Orchestration                       | ● |
| Dynamic Routing Protocols, Traffic Steering & QoS              | ● |
| Zone-Based Firewall & VPN                                      | ● |
| In-Band & Out-of-Band Management                               | ● |
| Real-Time Troubleshooting Tools & Diagnostics                  | ● |
| Insights, Alerts & Dashboard Analytics                         | ● |
| Modem-Data-Usage Dashboard & Predictive Alerting               | ● |
| Location Services                                              | ● |
| Extensibility (SDK, API, third-party integrations)             | ● |
| 5G Cellular Coverage Map & Location Tracking                   | ● |
| Application-Aware Traffic Steering, QoS, Networking & Firewall | ● |
| Web Filtering & Threat Management                              | ● |
| Cellular Health, Traffic & Security Dashboards                 | ● |
| IoT Ecosystem Integration (Microsoft, AWS)                     | ● |
| Docker Container Support                                       | ● |

● Included ● Advanced

[Learn more at cradlepoint.com/r1900-series](https://www.cradlepoint.com/r1900-series)

## Data Sheet

# RX30 Series

2023 - 08 - 24

The RX30 Series managed accessories are compact and ruggedized for use with the R1900 Series 5G Ruggedized Router. They can provide either four additional GbE PoE ports to connect and power additional Ethernet connected devices or a modem expansion slot and four additional standard GbE ports for carrier diversity and the ability to add additional connected devices.



[RX30-MC Product Page](#)



[RX30-PoE Product Page](#)



[Quick Start Guide](#)

## Hardware Specifications

| SPECIFICATION        | RX30-POE                                                                                         | RX30-MC                                                                                                                               |
|----------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| <b>Technology:</b>   | RX30-PoE Managed Accessory — PoE Switch                                                          | RX30-MC Managed Accessory — Modem & Switch                                                                                            |
| <b>Ethernet:</b>     | 4 x GbE RJ45 (LAN/WAN switchable)                                                                | 4 x GbE RJ45 (LAN/WAN switchable)                                                                                                     |
| <b>PoE:</b>          | 4 x PoE 802.3bt Type 3 (up to 60 W per port)<br><br>— 60 W total PoE power budget                | N/A                                                                                                                                   |
| <b>Expansion:</b>    | — 1 x 6-pin GPIO connector<br>— 2x3 Molex micro-fit (3 mm locking type)                          | — 1 x 6-pin GPIO connector<br>— 2x3 Molex micro-fit (3 mm locking type)<br>— 1 x MC400 Modular Modem slot (Peak throughput: 300 Mbps) |
| <b>ENVIRONMENTAL</b> |                                                                                                  |                                                                                                                                       |
| <b>Temperature:</b>  | — Operating: -30 °C to 70 °C (-22 °F to 158 °F)<br>— Storage: -40 °C to 85 °C (-40 °F to 185 °F) | — Operating: -30 °C to 70 °C (-22 °F to 158 °F)<br>— Storage: -40 °C to 85 °C (-40 °F to 185 °F)                                      |

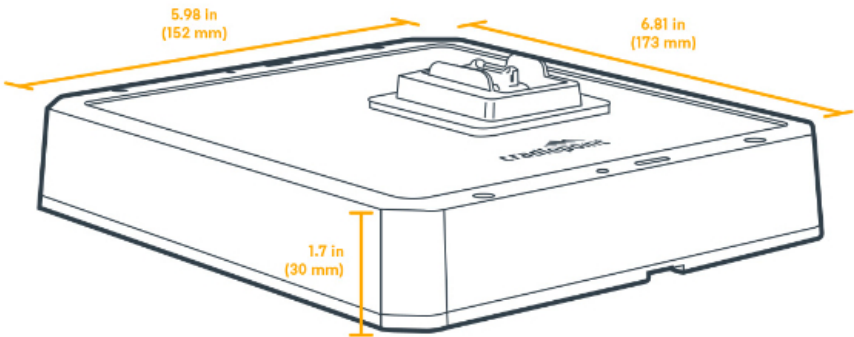
|                                  |                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Humidity:</b>                 | <ul style="list-style-type: none"> <li>Operating: 10% to 90%</li> <li>Storage: 5% to 95%</li> </ul>                                                                                                                                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>Operating: 10% to 90%</li> <li>Storage: 5% to 95%</li> </ul>                                                                                                                                                                                                                                                                                                             |
| <b>Ingress Protection:</b>       | IP64 (dust tight and splashing water)                                                                                                                                                                                                                                                                                                                                                                           | IP64 (dust tight and splashing water)                                                                                                                                                                                                                                                                                                                                                                           |
| <b>POWER</b>                     |                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Required:</b>                 | DC input steady state voltage range: 9–36 VDC<br>(requires in-line fuse for vehicle installations) <ul style="list-style-type: none"> <li>For 9–24 VDC installations, use a 10 A fuse</li> <li>For &gt; 24 VDC installations, use a 5 A fuse</li> <li>Connector type: 6-pin (2x3) Molex Micro-fit External Power Connector</li> <li>Reverse polarity and transient voltage protection per ISO 7637-2</li> </ul> | DC input steady state voltage range: 9–36 VDC<br>(requires in-line fuse for vehicle installations) <ul style="list-style-type: none"> <li>For 9–24 VDC installations, use a 10 A fuse</li> <li>For &gt; 24 VDC installations, use a 5 A fuse</li> <li>Connector type: 6-pin (2x3) Molex Micro-fit External Power Connector</li> <li>Reverse polarity and transient voltage protection per ISO 7637-2</li> </ul> |
| <b>Consumption:</b>              | R1900-5GB + RX30 12V input, 25 °C (77 °F)<br>ambient temperature <ul style="list-style-type: none"> <li>Sleep: 0.07 W<sup>†</sup></li> <li>Idle: 14 W<sup>†</sup></li> <li>Typical: 21 W<sup>†</sup></li> <li>Heavy: 23 W<sup>†</sup></li> </ul>                                                                                                                                                                | R1900-5GB + RX30 12V input, 25 °C (77 °F)<br>ambient temperature <ul style="list-style-type: none"> <li>Sleep: 0.07 W</li> <li>Idle: 21 W</li> <li>Typical: 27 W</li> <li>Heavy: 31 W</li> </ul>                                                                                                                                                                                                                |
| <b>PHYSICAL</b>                  |                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Weight:</b>                   | 0.84 kg (1 lb 13.5 oz)                                                                                                                                                                                                                                                                                                                                                                                          | 0.84 kg (1 lb 13.5 oz)                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Size:</b>                     | 173 x 152 x 30 mm (6.81 x 5.98 x 1.18 in)                                                                                                                                                                                                                                                                                                                                                                       | 173 x 152 x 30 mm (6.81 x 5.98 x 1.18 in)                                                                                                                                                                                                                                                                                                                                                                       |
| <b>RELIABILITY</b>               |                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Calculated MTBF:</b>          | 1,231,708 hours (Telcordia SR332 at 25 °C)                                                                                                                                                                                                                                                                                                                                                                      | 2,697,409 hours (Telcordia SR332 at 25 °C)                                                                                                                                                                                                                                                                                                                                                                      |
| <b>CERTIFICATIONS</b>            |                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Safety:</b>                   | <ul style="list-style-type: none"> <li>UL/cUL</li> <li>CB Scheme</li> <li>EN 60950-1</li> <li>EN 62368-1</li> </ul>                                                                                                                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>UL/cUL</li> <li>CB Scheme</li> <li>EN 60950-1</li> <li>EN 62368-1</li> </ul>                                                                                                                                                                                                                                                                                             |
| <b>Vehicle:</b>                  | E-Mark                                                                                                                                                                                                                                                                                                                                                                                                          | E-Mark                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Rail:</b>                     | <ul style="list-style-type: none"> <li>EN 50121-3-2 (Power Surge 0.5 &amp; 1 kV Criteria A; 1.5 kV Criteria C)</li> <li>EN 50155 Class S1</li> </ul>                                                                                                                                                                                                                                                            | <ul style="list-style-type: none"> <li>EN 50121-3-2 (Power Surge 0.5 &amp; 1 kV Criteria A; 1.5 kV Criteria C)</li> <li>EN 50155 Class S1</li> </ul>                                                                                                                                                                                                                                                            |
| <b>Materials:</b>                | <ul style="list-style-type: none"> <li>WEEE</li> <li>RoHS</li> <li>REACH</li> <li>California Prop 65</li> </ul>                                                                                                                                                                                                                                                                                                 | <ul style="list-style-type: none"> <li>WEEE</li> <li>RoHS</li> <li>REACH</li> <li>California Prop 65</li> </ul>                                                                                                                                                                                                                                                                                                 |
| <b>Shock/Vibration/Humidity:</b> | MIL STD 810G and SAE J1455                                                                                                                                                                                                                                                                                                                                                                                      | MIL STD 810G and SAE J1455                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>COMPATIBILITY</b>             |                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                 |

|                    |                                   |                                   |
|--------------------|-----------------------------------|-----------------------------------|
| Supported Routers: | R1900 Series 5G Ruggedized Router | R1900 Series 5G Ruggedized Router |
|--------------------|-----------------------------------|-----------------------------------|

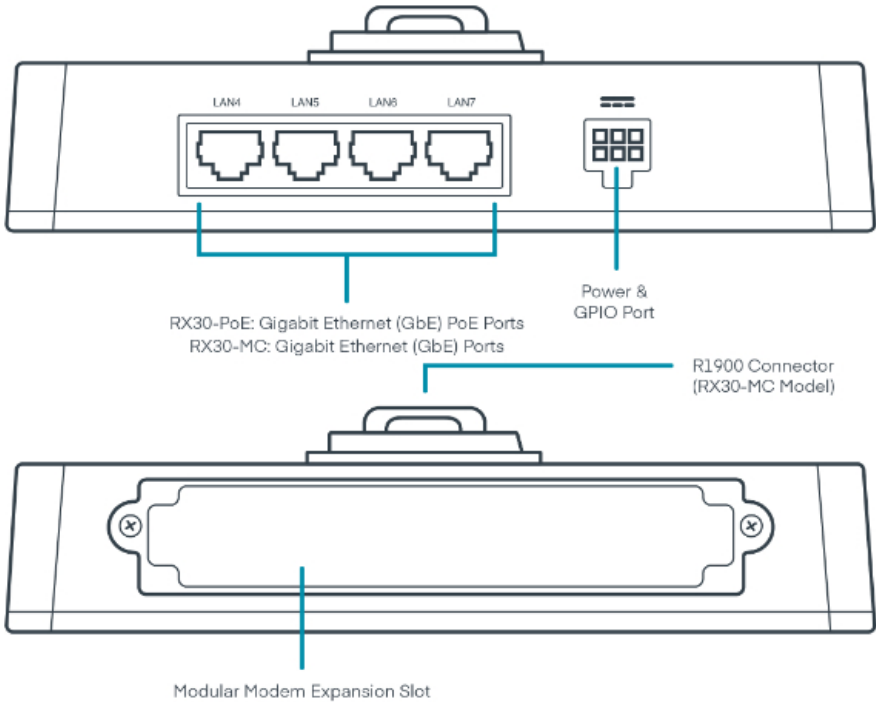
Refer to the [RX30 Managed Accessory Quick Start Guide](#).  
<sup>†</sup>Numbers shown are the minimum PoE power draw at each load but can go up an additional 60 W based on the attached PoE devices.

# Physical Measurements

RX30-MC & RX30-PoE Models



# Features



# Ordering Guide

The RX30 Managed Accessories are designed for the R1900 Series Router. Activation and use of the RX30-MC or RX30-PoE requires a Cradlepoint R1900 Series Router that is licensed to a NetCloud Service Plan. For details on the features available to a licensed Cradlepoint router by service plan, refer to the summary on the NetCloud Service webpage and the detail in the NetCloud Service features document: [cradlepoint.com/netcloud-service](https://cradlepoint.com/netcloud-service)

NetCloud Packages for the RX30 Managed Accessories

| REGION       |                                         | PART NUMBER |
|--------------|-----------------------------------------|-------------|
| All Regions: | RX30 Managed Accessory — PoE Switch     | MB-RX30-POE |
|              | RX30 Managed Accessory — Modem & Switch | MB-RX30-MC  |

## Accessories

| INCLUDED                                                                   | PART NUMBER |
|----------------------------------------------------------------------------|-------------|
| RX30 Managed Accessory                                                     |             |
| GPIO & Power Cable, 2x3, 3 meters, 18AWG                                   | 170858-000  |
| Small Accessories Kit                                                      | N/A         |
| Mounting Template                                                          | N/A         |
| OPTIONAL                                                                   | PART NUMBER |
| Power Supply, 12V, Small, 2x3 (C13 line cord not include), -30 °C to 70 °C | 170870-000  |
| Rail Safe GPIO Cable, Small 2x3, Black, 3 meters, 18AWG                    | 170872-000  |

## Support & Warranty

The RX30-PoE and RX30-MC are sold only as optional accessories. All Cradlepoint hardware products are covered by a limited lifetime warranty for as long as they have a subscription license to an active NetCloud Service Plan.

Find the most up-to-date information at [cradlepoint.com/rx30-poe](https://cradlepoint.com/rx30-poe) and [cradlepoint.com/rx30-mc](https://cradlepoint.com/rx30-mc).