Customer Communication Manager User Guide

Table of Contents

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What is Customer Communication Manager?

Customer Communication Manager (CCM) by Trimble Maps is a system of APIs and an application that allows fleet customers to automatically send messages to their customers (receivers) based on order status changes throughout the day. Whether the fleets need to let a customer know their order has shipped or inform them of a delay, CCM makes it easy to keep their customers informed and up-to-date. This application automates a traditionally manual process and eliminates unnecessary phone calls between several parties, thereby reducing operational costs. CCM can be integrated with various other software types including ERP systems, TMS software, and dispatch applications to get the statuses needed to generate messages.

Customer-configured rules govern which messages are sent and when. The messages sent by CCM can either be sent via SMS or email and can be configured to include the information that is most relevant to those end customers including logos, links, and special text. In addition, a tracking link will be provided that can show route progress on a map so that the customers can understand exactly when they can expect their delivery.

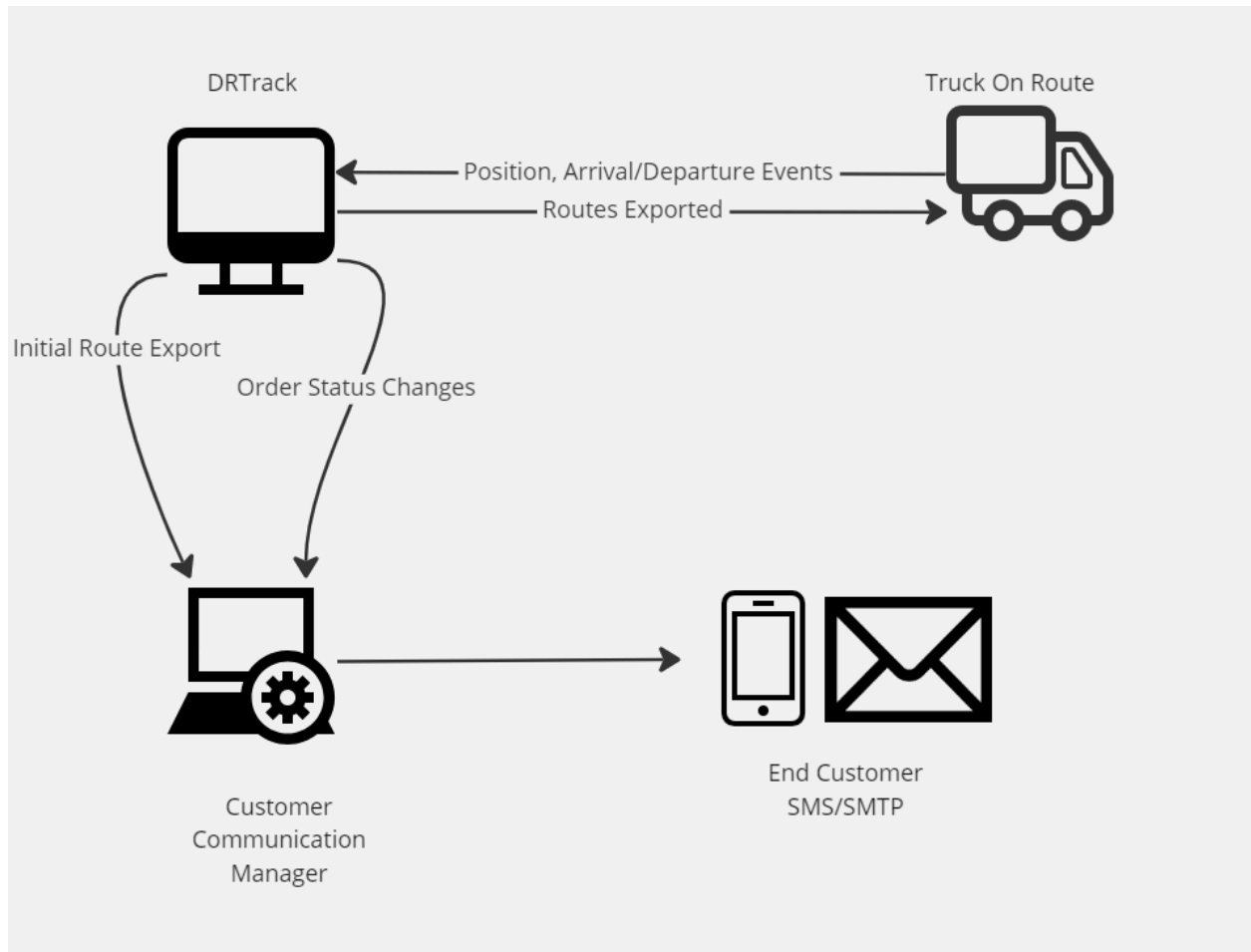This guide will outline how to set up and use CCM as it's integrated with DRTrack, Trimble Maps dispatch system.

How does Customer Communication Manager Work with DRTrack?

Communication Manager operates as an extension of your current Trimble Maps Appian software workflow:
- Routes are planned in DirectRoute or DRTrack.
- Drivers/Devices are assigned to routes.
- Routes are exported to CCM.
- Routes are exported to Telematics/Mobile or Logged in (One-way Integrations).

Behind the scenes, the mobile or telematics software, DRTrack, and CCM are communicating about what is happening while the driver is on the road.
- Information (position, arrival departure events) flows into DRTrack.
- Routes are updated with that information, and order statuses change.
- Based on status changes and rules that have been configured in CCM UI, notifications are sent to the end user via SMS or email.

DRTrack

Truck On Route

Position, Arrival/Departure Events

Routes Exported

Initial Route Export

Order Status Changes

Customer
Communication
Manager

End Customer
SMS/SMTP

Customer ERP

OIS, Webservices, DR

DRTrack

Order Created

Order Status Updated

Export Routed Orders to CCM Sync

Polling to check order Status

DRTrackCimsSync
Send Order info to CCM API

CCM UI

Ruleset Interface

Set status conditions

Modify Templates

CCM API

Sends Email And/Or SMS to End user

Determines ruleset and templates to use

Twilio (SMS)

SMTP Server (Emails)

End Customer

Notifications for orders on routes are not automatically sent until a route has been exported to CCM. This allows fleets more control over if and when notifications are sent, so it does not have to be universal.

To export routes to CCM, from DRTrack click **Dispatch > Routes**. Select the routes that notifications should be sent for, then click **Email > Send CCM Notification Message**.
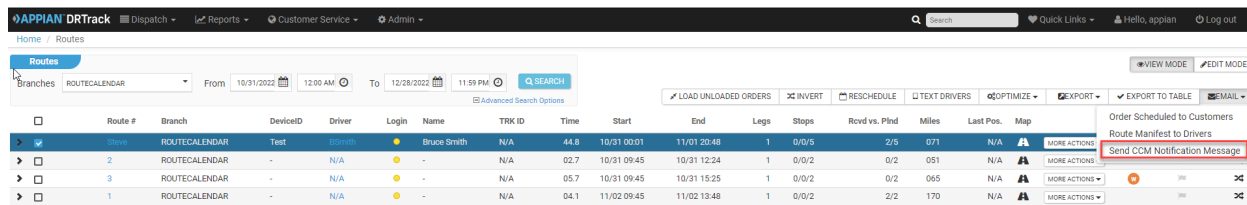
Once successful, you will receive a message that the Orders for the Route were added to the CCM Messaging Queue. Once the order statuses meet the conditions configured in CCM, notifications will be sent.

There is no batch process for exporting accounts to CCM, so if an order is exported to CCM and the account doesn't exist there, it's created. The account is also given a copy of the default ruleset and notification templates, so the first time a notification goes out for an order for that account, it will receive the default messages.

DRTrack Order Statuses

Order status changes in DRTrack combined with the rules configured in CCM are how it knows when to send out notifications. The order statuses considered are:

- **Order Scheduled:** this status is applied when an order is placed on a route.
- **Customer Up Next for Delivery/Pickup:** this status is applied when the order is being delivered to an account that is planned to be visited next on the route.
- **Order Delivered/Picked Up:** this status is applied when the order has been delivered or picked up.
- **Order Out for Delivery:** this status is applied when the arrival/departure event for the origin terminal is completed on the route where the order is scheduled.

The following statuses are not generated solely from DRTrack Order information, but rather through a combination of constraint rules and order statuses:

- **Order Scheduled Outside of SLA/Time Window:** this status is applied when an order is placed on a route and has an ETA outside the SLA/Time Windows.

- **Order Running Behind ETA:** There is a change to an ETA on a stop and that ETA is outside the original planned time by a certain amount of time set by the company.
- **Order Running Behind ETA causing a Time Window Violation:** There is a change to an ETA on a stop and the ETA is outside the SLA/Time Window.
- **Order Running Ahead:** There is a change to an ETA on a stop that ETA is outside the originally planned time by a certain amount of time set by the company.
- **Order Running Ahead Causing a Time Window Violation:** There is a change to an ETA on a stop and the ETA is outside the SLA/Time Window.

Configuring DRTrack

Initial Configuration

Trimble Maps Appian implementation and support staff will do the initial configuration of DRTrack to enable CCM.

For reference, the information needed to configure the service will be in the *dotnet* section of Settings & Configuration (**Admin > Site > Settings & Configuration**).

Two configurations are set:
- `CCMActive` enables the service
- `CCMAP_URL` specifies the CCM Application.

Section	Name	Value		Description
dotnet	CCMActive	☑	Edit	Determines if the CCM Messaging Service is active.
dotnet	CCMAPI_URL	https://configurationportal.d	Edit	Specifies the CCM Messaging API URL.

Once the service is enabled, four new user fields and aliases are automatically added to the alias manager. These user fields will contain contact information for each order that is intended to receive a notification; these user field aliases are:
- CCM First Name
- CCM Last Name
- CCM Email
- CCM Phone

To check which user fields you are currently configured with, navigate to **Admin > Routing > Alias Manager**.

NOTE: CCM does not use any contact information stored on the account level in DRTrack (Name, Phone, Contact).

Deployment

Trimble Maps employees (DevOps) will deploy CCM. To do this, the CIMS service has to be enabled, and the following configuration settings need to be set:

- **cimsapikey:** ALK API Key for the ALK customer account that is set up. Obtained from the Trimble Maps Admin.
- **cimsauthurl:** ALK Authorization Service URL. This would be environment type specific but the same for all customers in a given type of environment (e.g. same for PROD).
- **cimsexeinterval:** Duration in seconds when the Service polls for order status changes. This value can be kept as 60 for all customers.
- **cimsserviceuri:** The CCM API base endpoint. This is provided by the CCM team/documentation. This is also the same for a given environment type.

Configuring Orders and Accounts

Rather than storing contact information on an account level, DRTrack's integration with CCM uses contact information passed on an order level. This was a design decision to allow flexibility in case contact information changes at a receiver from order to order or in cases where the shipping location for an order changes, while the main account information does not change. There are several ways to accomplish this goal, the table below outlines the main methods.

Method	Complexity	Pros	Cons
Manual Order Update in DRT Order UI	Low	Applicable if using the service to send occasional messages	Manual process needs to be repeated for each order every day.
Order Feed Change	Medium to High	Contact information is completely dynamic and easily updated each delivery once the order feed integration is updated	Order feed updates are a higher complexity method of accomplishing goals

Updating Order in DRTrack

To update the contact information on an order in DRTrack, navigate to the **_Order Management_** screen. You can get there from **Dispatch > Unloaded Orders**, or by selecting the order number on a route. Once you are viewing the order details screen, maximize the user field section by clicking on it.

Scroll down to the new user fields (CCM First Name, CCM Last Name, CCM Email, CCM Phone) and add the values for the contact person for that order. CCM can send notifications to multiple contacts. Values for the (CCM First Name, CCM Last Name, CCM Email, CCM Phone) can be entered into these fields and separated by a comma.

NOTE: Contact information has to be filled in before exporting the route to CCM.

Updating Order Feed

There are numerous methods for importing orders into DRTrack including the order import service or through DRTrack's web services. Please discuss with your implementation consultant or support representative if this is the approach you'd like to take to ensure contact information is sent to DRTrack.

Updating Account Master Record in DRTrack

Much like the first method, this involves updating a record in DRTrack with the contact information. However, this method is for updating an Account Master record. Once the contact information is added to the Account Master record, all orders that flow into DRTrack for that account will inherit the contact information from the user fields on the Account Master. This method is most appropriate if the contact information for each order and the account is not going to change that often, it is far less dynamic than the first and second methods.

To update the Account Master record with the contact information, click **Admin > Customers. Accounts**. Either use the search bar at the top to find a particular account or select the account from the list.

Once an account is selected, navigate to the user field section and scroll until you find the new user fields that were added by enabling CCM. Once you fill in the information and save it, this method is complete.

Batch-Edit Account Master with DirectRoute

If you have a DirectRoute license, and have numerous accounts to update, you can download your Account Master into an Excel spreadsheet (.xls) and update all of your records there. Once the records have been updated, you can re-upload the Account Master to DRTrack with the changes.

Before downloading, you'll need to add the correct user fields to your DRProject.config. Click **File > Preferences > Configuration**. Select *Stop User Fields*, then add the four new user field aliases to the list of other user fields.

- CCM First Name
- CCM Last Name
- CCM Email
- CCM Phone

To download your Account Master in DirectRoute, ensure your DRTrack credentials are entered under **File > Preferences > DRTrack**.

Once your credentials are set, click **DRTrack > Download Account Master**. Select your branch and the location where you want to save the file, then click **OK**. The Account Master will be saved as an Excel spreadsheet (.xls) and will have columns for each attribute on the account, including the new user fields.

Once you've added the values to the cells for the accounts that will be receiving notifications, reupload your Account Master by clicking **DRTrack > Upload Account Master** from the DirectRoute menu.

Configuring Customer Communication Manager

The majority of the configuration for the system takes place in the dropdown menu user interface. You can navigate directly to the application through the link provided in your email OR via the DRTrack UI. To navigate to CCM from DRTrack, click **Admin > CCM-Customer Communication Manager**. This will open the application in a new tab, but will not sign in the user automatically.

Configuring Notification Service Settings

Depending on your preferences, you will need to configure both an SMTP Relay and SMS Provider so that the dropdown menu can send messages to the contacts provided. The dropdown menu does not send the messages but relies on external services to do the actual messaging.

SMTP (Email)

SMTP, or Simple Mail Transfer Protocol, is a protocol for sending email messages between servers. Most email systems that send mail over the Internet use SMTP to send messages from one server to another, and to deliver messages to local mail clients like Microsoft Outlook or Apple Mail.

For SMTP, we have chosen to adopt the route of using a customer's own SMTP relay. Most companies already have an email service and a domain that they prefer communication from their company to be associated with. This allows them to manage their sender scores and ensure emails are sent successfully and received in their customers' inboxes. The end customers will also recognize the sender since they are most likely already receiving emails from that domain.

To configure SMTP and SMS settings, select the gear icon (Configuration) on the left-hand panel of the dropdown menu. Select the Notification section in the middle and complete the following information.

CCM needs the following information to send notifications via email:

- **SMTP Relay URI (Uniform resource identifier):** this is the relay URI/URL.
- **SMTP Port:** An SMTP port is a network port that is used to send and receive email messages over the Internet. The default SMTP port is port 25, but many ISPs and email hosting providers block or restrict access to this port to reduce spam and prevent abuse. As a result, many organizations use an alternative SMTP port, such as 587 or 465, to send email messages.
- **From Name:** this is the name that shows up as the sender of the email in the end receiver's inbox.
- **From Address:** This is the sender's email address.
- **SMTP User Name:** Username for the dropdown menu to access the SMTP relay to send the message.
- **SMTP Password:** The password dropdown menu needs to access the SMTP relay to send the message.
- **Encryption Type:** Can be set to None, StartTLS, SSLOnConnect.

Once this information is complete, you must click **Update Notification Configuration** button to save. You can test sending an email through the service by clicking **Send Test Email**. Fill in a recipient email address, subject, and a test message and click **Send**.

Encryption

StartTLS and SSLOnConnect are the two methods we support that can be used to encrypt email messages and secure the connection between an email client and an email server.

TLS is a protocol that provides secure communication over the Internet, and it is often used to encrypt email messages and protect them from being intercepted or tampered with during transmission. To use StartTLS, an email client will first establish an unencrypted connection to the email server, and then send the StartTLS command to the server. The server will respond by negotiating the encryption parameters and setting up a secure, encrypted connection using TLS.

SSLOnConnect, on the other hand, is a method that establishes a secure, encrypted connection using Secure Sockets Layer (SSL) from the beginning. With SSLOnConnect, an email client will connect to the email server using a secure SSL connection, and all communication between the client and server will be encrypted.

NAT

For all SMTP traffic, we have adopted a NAT (Network Address Translation) to simplify creating an allow list of IP addresses for incoming traffic. NAT is a method of connecting multiple devices on a local network to the Internet using a single public IP address. NAT allows devices on a private network, such as a home or office network, to communicate with the Internet and with each other, while still hiding the internal network structure and addresses from the external network.

To ensure connectivity, your implementation consultant or support team member can provide you with the IP addresses that need to be whitelisted for the service.

SMS (Text Messages)
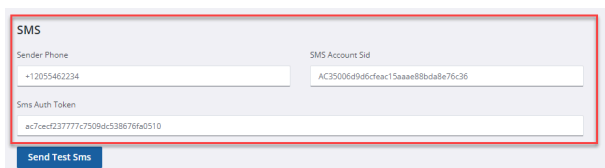
SMS, or Short Message Service, is a text messaging service that allows people to send and receive short text messages, typically using their mobile phones. SMS messages are sent and received using a cellular network, and they can be sent to and from any phone that has SMS capability, regardless of the make or model of the phone.

For the dropdown menu, Trimble has selected Twilio as our provider of SMS services. Twilio is a cloud communications platform that allows developers to build, scale, and operate real-time communication applications using web service APIs. Twilio provides a variety of APIs and tools that enable developers to build applications that can send and receive phone calls, text messages, and other types of communication using a variety of different channels, including voice, SMS, and messaging apps like WhatsApp and Facebook Messenger.

If you already have a Twilio account, the dropdown menu can use your account; if you don't, Trimble can create a sub-account, procure a phone number that's appropriate for your projected volume, and provide you with the information required by the service to send SMS messages.

To configure SMTP and SMS settings, select the gear icon(Configuration) on the left-hand panel of the dropdown menu. Select the Notification section in the middle and complete the following information:
- Sender Phone Number
- SMS Account SID
- SMS Auth Token

Once this is complete, click **Update Notification Configuration** to save. You can send a test message by clicking **Send Test SMS**. Fill in a recipient's cell phone number and a test message then click **Send**.

Twilio Credentials

To find the SMS Account SID and SMS Auth Token, visit the Twilio Console, and the credentials should be listed under account information.

Tracking Portal Link

The tracking portal allows end recipients of messages to track the most up-to-date ETA and view the truck on a map as the delivery time gets closer. With the DRTrack workflow, this link should always be set to: `https://customerportal-ccm.trimblemaps.com/id/{orderid}`.

This link can be provided to the end recipient as part of the message body but is not required.

Rulesets

Rulesets are a collection of rules that govern when the dropdown menu should trigger messages being sent. When order statuses change and they meet certain conditions or rules, the system sends the messages.
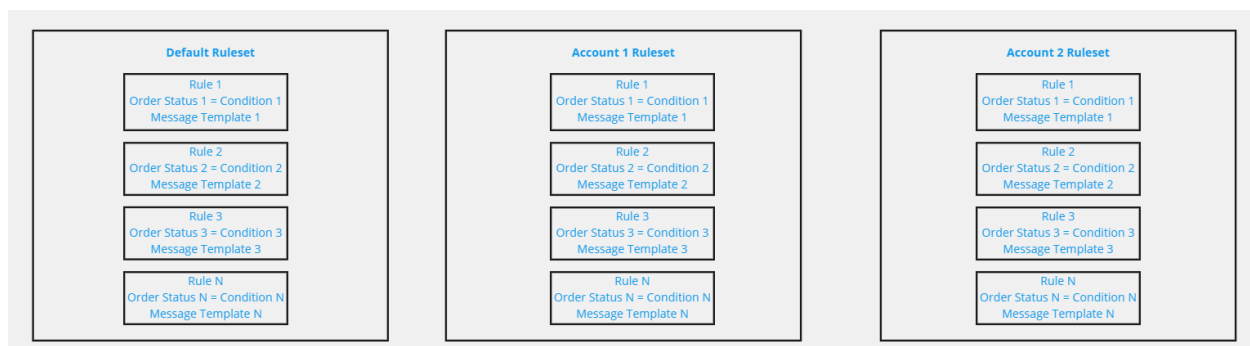
When you first log in, you'll see no rulesets listed. After you set up a default ruleset and begin using the service, each account imported into the dropdown menu will have a ruleset listed. You can sort or search for a particular account ruleset and can edit individual account rulesets. Any changes to the default ruleset will automatically be applied to every account that has inherited the default ruleset and has not been changed.

Adding Conditions

Before setting up the Default ruleset, you must add a list of conditions to the system. Conditions are user-friendly aliases for common values within the system.

Navigate to the Configuration Menu with the gear icon and select the conditions screen. Once there, select the Edit Custom Values icon next to the Order Status section. Even if you don't plan on using all of the conditions to create rulesets, you'll want to add all order statuses to this list.

There are two parts to the conditions, the name and the value. Add the name, value, and click **Add**. Once the list is complete, click **Update** to save.

CCM Ruleset Conditions Table

Name	Value
Order Scheduled	2
Order Shipped/Driver Out For Delivery	3
Order Scheduled On Route Outside of Time Window	4
Customer Up Next	5
Order Rescheduled	6
Order Removed From Route	7
Order Delivered	8
Driver Running Behind, no SLA violation	See Other Rules and Conditions Table for proper running ahead and behind format
Driver Running Behind, SLA violation	See Other Rules and Conditions Table for proper running ahead and behind format
Driver Running Ahead, no SLA violation	See Other Rules and Conditions Table for proper running ahead and behind format
Driver Running Ahead, SLA violation	See Other Rules and Conditions Table for proper running ahead and behind format

Edit values for OrderStatus ✕

Name	Value	
		Add

Name	Value	
Order Created	1	🗑
Order Scheduled	2	🗑
Order Shipped/Driver Out For Delivery	3	🗑
Order Scheduled On Route Outside of Time Window	4	🗑
Customer Up Next	5	🗑
Order Rescheduled	6	🗑
Order Removed From Route	7	🗑
Order Delivered	8	🗑
Order Complete	9	🗑
Driver Running Behind, no SLA violation	10	🗑
Driver Running Behind, SLA violation	11	🗑
Driver Running Ahead, no SLA violation	12	🗑
Driver Running Ahead, SLA violation	13	🗑
Order Complete/Rejected	14	🗑

Cancel　**Update**

Not all rulesets available are required, customers can pick the ones most applicable to their business and goals. Some customers might want notifications only to trigger when orders are delivered, others might want messages sent when an order is out for delivery when it's running early or late, or various other combinations.

Creating Default Ruleset

The rules (and message templates discussed later) for this Default ruleset will automatically be applied to every account that is imported into the CCM Portal from DRTrack. Specific account-level rulesets can be changed, but will initially inherit the properties of the Default.

To begin, click **Create New Ruleset**:

Type **DEFAULT** (in all capital letters) in the ruleset name and description. This description should be set to something like "Do Not Delete," as deletion of the default ruleset will interfere with all accounts (existing and new) that have inherited the default profile ruleset. The subsequent rulesets created automatically will be named after the account name on the orders that are imported into the dropdown menu.

NOTE: If the ruleset is not called **DEFAULT**, the sync between DRTrack and CCM will fail.

Click the **RULES** tab to view rules and templates. The Rules screen shows a list of all rules configured for a ruleset and a section for creating new rules.

The rule configuration consists of several parts:
- **Rule Name:** Name of the actual rule.
- **Rule Description:** Description of the rule.
- **Email Template:** Which email template should be used by the rule.
- **SMS Template:** Which SMS template should be used by the rule.
- **Defined Condition:** Select which list of conditions should be used for the rule.
- **Operator:** Tells the system how to evaluate the rule.
- **Value:** list of conditions that the order status should be compared to.
- **Only Trigger Once:** no matter how often the order status is met, this setting will let the dropdown menu know only to send the message once. For example, if an order is running late and the ETA progressively gets worse, a new message will not be generated each time the ETA changes.

To configure a rule:
1. Fill in the rule name and description using the information in the chart below.
2. Select the email and/or SMS template you want to use for the message.
3. Leave the **Rule Operator** dropdown menu set to **AND**.
4. Select **Order Status** from the *Defined Condition* dropdown menu.

5. Select **EqualsTo** from the **Operator** dropdown menu.
6. Select the Appropriate Condition for the rule from the dropdown menu for Values.
7. Click **Add**.
8. Click **Save**.

Ruleset - DEFAULT   ✕

RULESETS	RULES	NOTIFICATION TEMPLATES

Rules 🗑

| Order Shipped/Driver Out for Delivery |
| Driver Running Behind, SLA Violation |
| Order Delivered ✓ |

Rule Name
`Order Delivered`

Description
`Order has been delivered`

Update Rule

Email Template
`Order Delivered Email  ⌄`

SMS Template
`Order Delivered SMS  ⌄`

Conditions

Rule Operator
`AND  ⌄`

Defined Condition
`Eta Outside Sla  ⌄`

Operator
`  ⌄`

Value
`  `

Add

Condition	Operator	Value	
Order Status	**EqualsTo**	**Order Delivered**	🗑

Properties

☑ Only Trigger Once

Cancel   **Save**

Using operators, very complex rules can be built. Each rule can have a "time element" added to it so that it only triggers a notification if it meets even more specific criteria. Some examples include

Order Running Ahead by 30 Minutes. In this case, three conditions need to be met:
1. ETA still within Time Window
2. Order Status is Out for Delivery
3. ETA Before Planned by 30 minutes.

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Rule Name

Order Shipped Behind over 30 mins

Description

Order Shipped Behind over 30 mins

Update Rule

Email Template

Order Shipped Delay over 30 mins Em ∨

SMS Template

Order Shipped is Delayed over 30 min ∨

Conditions

Rule Operator

AND ∨

Defined Condition	Operator	Value	
Eta Outside Sla ∨	∨		Add

Condition	Operator	Value	
Order Status	EqualsTo	Order Shipped/Driver Out for Delivery	🗑
AND			
Eta Within Sla			🗑
AND			
Eta After Planned	GreaterThan	30	🗑

Other Rules and Conditions Table

Rule Name	Rule Description	Condition(s) to Select in Value dropdown menu
Order Scheduled	Order has been Scheduled by the shipper	Order Scheduled
Order Shipped/Driver Out for Delivery	Order is currently out for delivery	Order Shipped/Driver Out for Delivery
Order Scheduled on a Route outside of TimeWindows	Order has been scheduled at a time that falls outside the TimeWindows	Rule Operator: And

Defined Condition 1: Order Scheduled |

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		Defined Condition 2: ETA Outside SLA
Customer Up Next	The Customer is the next stop on the Route	Customer Up Next
Order Rescheduled	Order Has been Rescheduled and the planned times have changed	Order Rescheduled
Order Removed From Route	The order has been taken off of the planned route and has not been rescheduled on another route	Order Removed From Route
Order Delivered	Order has been delivered	Order Delivered
Driver Running Behind, no SLA Violation	Driver is currently running behind scheduled and ETA is within TW's	Multi-Condition: Order Status: Out for Delivery ETA Within SLA ETA After Planned > X
Driver Running Behind, SLA Violation	Driver Running Behind and puts the ETA outside of the TW's	Multi-Condition: Order Status: Out for Delivery ETA Outside SLA ETA After Planned > X
Driver Running Ahead, No SLA Violation	Driver is running ahead of scheduled and ETA is within the TW's	Multi-Condition: Order Status: Out for Delivery ETA Within SLA

		ETA Before Planned Planned > X
Driver Running Ahead, SLA Violation	Driver is currently running ahead of scheduled and the ETA is Outside of the TW's	Multi-Condition: Order Status: Out for Delivery ETA Outside SLA ETA Before Planned > X

Names and descriptions do not have to match the chart exactly, but should be named something easy to understand.

Creating Messaging Templates

Message templates, E-mail, and SMS, allow companies to tailor the messages being sent to their end customers. Depending on the medium, the templates can include pictures, links, and special formatting so the dropdown menu customers can drive brand recognition and provide the maximum value possible.

Once you create a template for SMS or email, it can be applied to any rule inside any ruleset. This means, that in theory, you can create special templates for each customer if they wish.

To create a template, click on an existing ruleset or create a new ruleset as described above. Select the notification template menu to see the template editor. On the left-hand side will be a list of all templates currently being used in the ruleset.

Ruleset - DEFAULT   ✕

| RULESETS | RULES | NOTIFICATION TEMPLATES |

Used in set   🗑

| Order Shipped/Driver Out For Delivery Email |
| Order Shipped/Driver Out For Delivery SMS |
| Driver Running Behind, SLA violation Email |
| Driver Running Behind, SLA violation SMS |
| Order Delivered Email |
| Order Delivered SMS |

Template Name

Template Description

Add Template

Time format

Date fromat

☐ Communicates Eta

Subject

Order Data

Order Id ⌄   📋 🗐

1 |

Cancel   **Save**

- Type in a template name that matches a condition from the condition list and a description of that template. The name/description should also indicate if it's for SMS or e-mail.
- Set your time format. For US customers, it should be set as hh:mm:tt.
- Set your date format. For US customers, it should be set as MM/dd/yyyy.
- Type in a Subject Name for the messages that are being generated. Subjects are only used for Emails and not SMS:
    - Dynamic order data like order numbers can automatically be added to sections of the message, including the subject. To include these, just type in the text you wish and then these fields for different order data. For example: {{receiver.firstName}}, Your Order(s) {{order.content}} have been delivered.
    - The following fields can be used to represent dynamic data in the subject line or body of the message:
        - {{order.content}}: represents a comma separated list of order numbers.
        - {{order.externalId}}: represents a single order number, but provides the GUID, not the actual Order Number.
        - {{receiver.firstName}}: represents the first name provided as the contact information via the user field on the order.

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- ■ {{receiver.lastName}}: represents the last name provided as the contact information via the user field on the order.
        - ■ {{receiver.firstName}} {{receiver.lastName}}: represents the full name provided as the contact information via the user field on the order.
        - ■ {{receiver.email}}: represents the email address provided as the contact information via the user field on the order.
        - ■ {{receiver.phone}}: represents the phone number provided as the contact information via the user field on the order.
        - ■ {{order.address.name}}: represents the name of the account for the order.
        - ■ {{order.address.streetAddress}}: represents the shipping address for the order.
        - ■ {{order.address.postalCode}}: represents the zip code for the order.
        - ■ {{order.address.city}}: represents the city on the order.
        - ■ {{order.address.state}}: represents the state on the order.
        - ■ {{time order.eta}}: represents the time of the ETA for the order.
        - ■ {{date order.eta}}: represents the date of the ETA for the order.
        - ■ {{time order.sla.startTime}}: represents the time window open time.
        - ■ {{date order.sla.startTime}}: represents the time window open date.
        - ■ {{time order.sla.endTime}}: represents the time window close time.
        - ■ {{date order.sla.endTime}}: represents the time window close date.
        - ■ {{order.status}}: shows the current order status.
        - ■ {{customerPortalUrl}}: contains the link to the tracking portal.
- Type in the body of the message:
    - This can be plain text, plain text with dynamic content from above OR can benefit from rich HTML for heavy formatting including hyperlinks, images, or other stylistic choices.
    - Currently, there is no drag-and-drop formatting, but there are plenty of free HTML editors with previews available online including:
        - ■ https://html5-editor.net/
        - ■ To use this - create your body on the right-hand side of the screen using their drag-and-drop editor and the HTML is generated automatically on the left. Copy the HTML into the dropdown menu.
    - After creating the body, click **Update Template** and the work is complete.
    - To see a preview of the message in an SMS or HTML in the actual medium, the best method is to navigate to the configuration menu and use the Send Test Email and Send Test SMS functionality. Copy the message body and subject into the text box and send an email or text to a recipient of your choosing to ensure it meets expectations.

NOTE: SMS messages should be limited to 160 characters or they are broken into segments and the end recipients will receive multiple text messages (1/N, 2/N, etc).
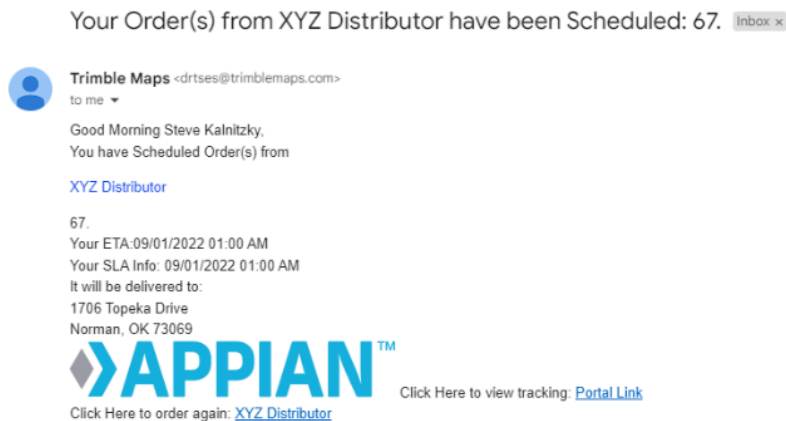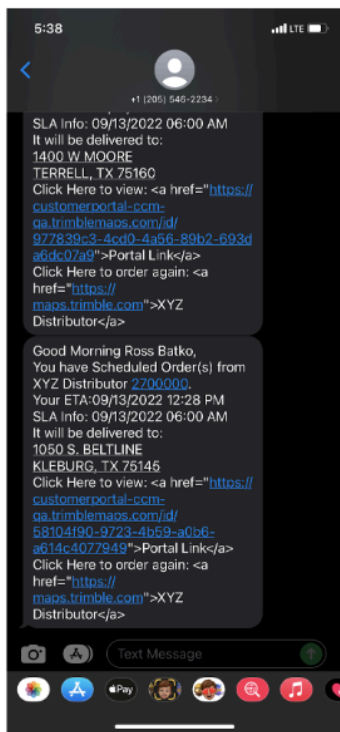
NOTE The date format should be capitalized in the notification template editor. MM/DD/YYYY will provide the appropriate ETA. mm/dd/yyyy will display the minute of the ETA, rather than the month of the ETA.

Exporting and Importing Rulesets

CCM allows you to import and export rules, rulesets, and templates. This process can be utilized to perform bulk edits of existing data. Three files are utilized in the process, which CCM exports as a ZIP archive:

- rules.csv
- rulesets.csv
- templates.csv

These files can all be tied together using identifiers in each sheet. For example, the rule name can be added to the rule sheet by using the rulesetID. The template information can also be brought to the rules by using the name/description from the template sheet.

rules.csv

This file contains eight columns:
- **Ruleset ID:** shows the *rulesetID*, which corresponds to a customer account in CCM and is visible in the CCM UI. There can be multiple lines with the same *rulesetID* if there is more than one rule for the customer.
- **Name:** shows the name of the rule
- **Description:** shows the description of the rule
- **Conditions:** shows each condition present in the rule.
- **emailTemplateId:** shows the key that identifies the template that is assigned. If this field is blank, then a template is not selected in the UI for this ruleset.
- **smsTempalteId:** shows the key that identifies the assigned template. Note if this field is blank, then a template is not selected in the UI for this ruleset.
- **onlyTriggerOnce:** TRUE/FALSE value indicating if a rule may trigger a notification more than once
- **Operator:** AND/OR value that determines how rules work together for the ruleset

In this example, *rulesetID* (customer account) is 6516. This customer has three rules, so there are 3 lines in the sheet. These rules are:
- Order Shipped
- Driver Running Behind/SLA Violation
- Order Scheduled

rulesetId	name	description	conditions
6516	Order Shipped/Driver Out for Delivery	Order is currently out for delivery	[{"name":"OrderStatus","operator":"EqualsTo","value":"3"}]
6516	Driver Running Behind, SLA Violation	Driver Running Behind and puts the ETA outside of the Time Windows	[{"name":"OrderStatus","operator":"EqualsTo","value":"11"}]
6516	Order Scheduled	BCI order(s) have been scheduled	[{"name":"OrderStatus","operator":"EqualsTo","value":"2"}]

Order Shipped has a single condition: orderstatus = order shipped/driver out for delivery.

There should be no rulesetIDs with no rules assigned. Blank values in any of these cells are likely an indicator of an issue with the way the rule &/or ruleset is configured and it should be reviewed in the CCM UI. The only exception may blank template IDs, which could be intentional for certain use cases.

rulesets.csv

This file contains three columns:
- **externalID:** the rulesetID created by CCM.
- **Name:** the human-readable name of the ruleset (Customer Account).

◈ Trimble.

- **Description:** the description, if different from the name.

This file can be used in conjunction with the others so that you don't have to learn or remember the externalIDs.

templates.csv

This file contains ten columns:
- **Id:** This is the CCM-generated identifier of the template.
- **Name:** This is the human-readable name of the template.
- **Retailer:** Currently unused by DRTrack, however, this field is used by other TMS software.
- **communicateEta:** shows whether or not a particular template has an ETA element. This is set in the CCM UI
- **Content:** shows the message that is going to be sent. If viewing in Excel, these have line breaks, so you'll need to expand the header row to see everything.
- **Subject:** the subject line of the message being sent
- **Description:** the description of the template, most of the time will mirror the name.
- Time/date formats show how the date and times displayed on the notifications will be displayed
- **versionID:** represents if changes have been made to the template

| id	name	retailer	communicateEta	content	subject	description	timeFormat	dateFormat	versionId
d5c3f10a-1218-434d-afc4-8dee6e98b2df	Driver Running Behind, SLA violation SMS	-	TRUE	{{receiver.firstName}} {{receiver.lastName}} Your Order is Delayed It will be delivered to: {{order.address.streetAddress}} {{order.address.city}}, {{order.address.state}} {{order.address.postalCode}} At: {{date order.eta}} {{time order.eta}} Click Here to view: Portal Link	Driver Running Behind, SLA violation {{order.content}}.	Driver Running Behind, SLA violation SMS	hh:mm tt	MM/dd/yyyy	dee575be-4fca-42a7

Export

CCM allows you to export all configured rules, rulesets, and templates. This can be done for visibility, troubleshooting, or bulk editing of existing data.

To export the data, navigate to **Rulesets**, click **Import/Export**, then click the *EXPORT* tab.
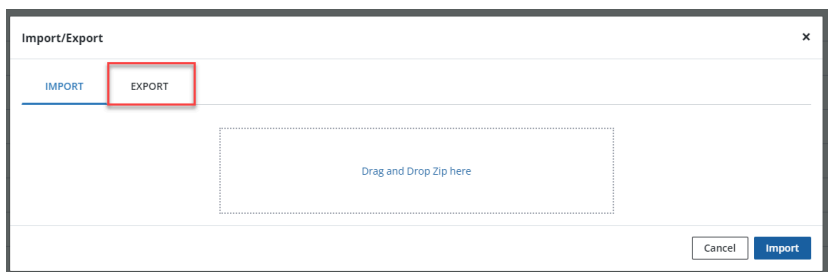
CCM will build a list of information to export. Once generated, each ruleset and template will be displayed.

NOTE: This will take several moments, do not navigate away until the list is generated.
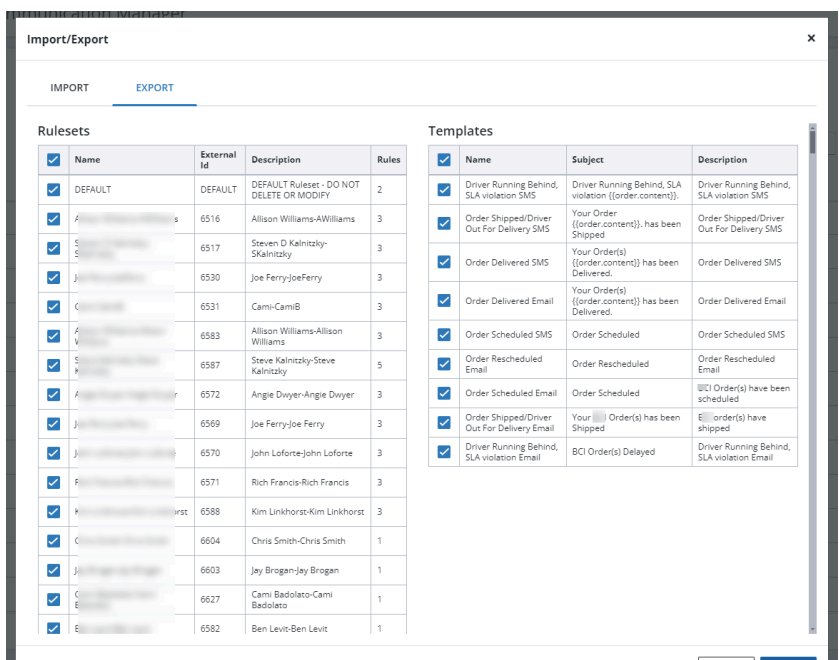

Click **Export**, then choose a location to save the exported ZIP file. The file will contain the following three files mentioned under [Exporting and Importing](#).

Import

CCM allows you to import all rules, rulesets, and templates that have been configured in the application. While possible, this method is not recommended for bulk edits.

To import the data, navigate to the Customer Communication Ruleset page and select **Import/Export**.

Make any relevant changes to the files, ensuring that the changes are made in all three files before uploading.
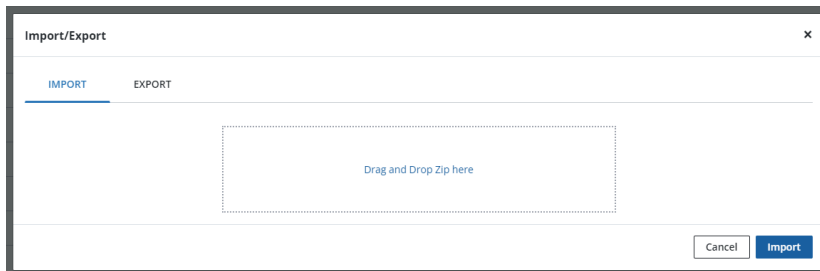
When you are ready to import, create a ZIP archive with the three files mentioned in [Exporting and Importing Rulesets](#).

Configuring Tracking Portal

The tracking portal link can be provided to the end recipients of messages. This link can be clicked on whenever the end recipient wants and will provide an up-to-date view of the ETA for delivery and within X minutes of the delivery, will show a map with the current truck position.

This portal can be configured in several ways, adding logos, changing colors or font sizes and even changing the icons on the map.

To configure the portal, select the Configuration icon on the left-hand panel and then select **Portal**.

Branding

Enter the link to the logo for the top of the portal. If no logo is required, leave this blank.

Colors

Colors for the portal and map are set by default but can be changed here.
- Primary Color
- Secondary Color
- Accent Color
- Warning Color
- **Background Color Start:** the color for the portal can be a gradient, so this represents the color at the top of the portal
- **Background Color End:** this represents the color at the bottom of the portal if there is a gradient being used. If the start and end are the same color, the portal background will be a single color
- **Top Bar Color:** Color of the top bar behind the logo or in place of the logo
- Context Summary Link Color
- **Fab Color:** the color of the floating buttons displayed over the map
- **Fab Icon Color:** the color of the icon on the floating buttons

Fonts and Sizes

This section allows you to change the font sizes for different pieces of the portal. The Font URL or Font Family should not be changed from the default
- **Card Title Size:** sets the font size for the word delivery in the header of the card
- **Card Subtitle Size:** sets the font size for the number under the word delivery
- **Card Content Title Size:** sets the font size for the headers on the card
- **Card Context Title Size:** sets the font size for the other text on the card
- **Topbar Height:** this sets the height of the top bar of the tracking portal where the logo resides. Default is 150px.
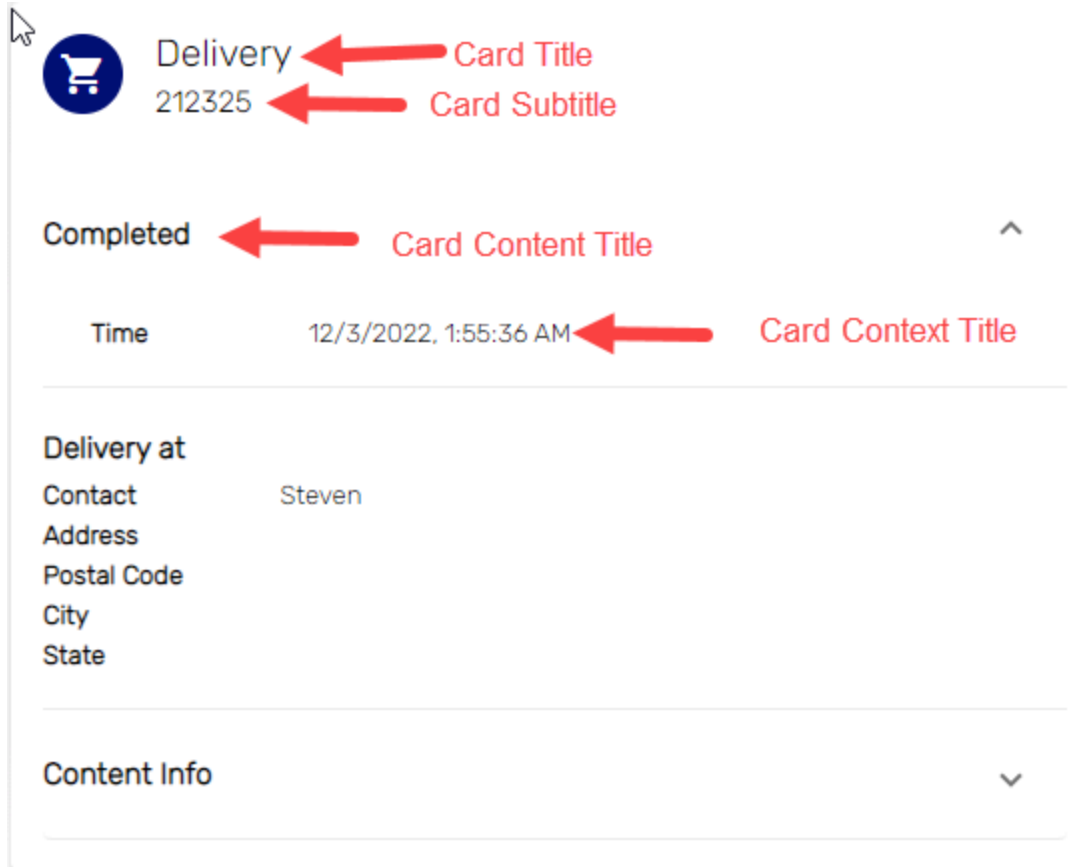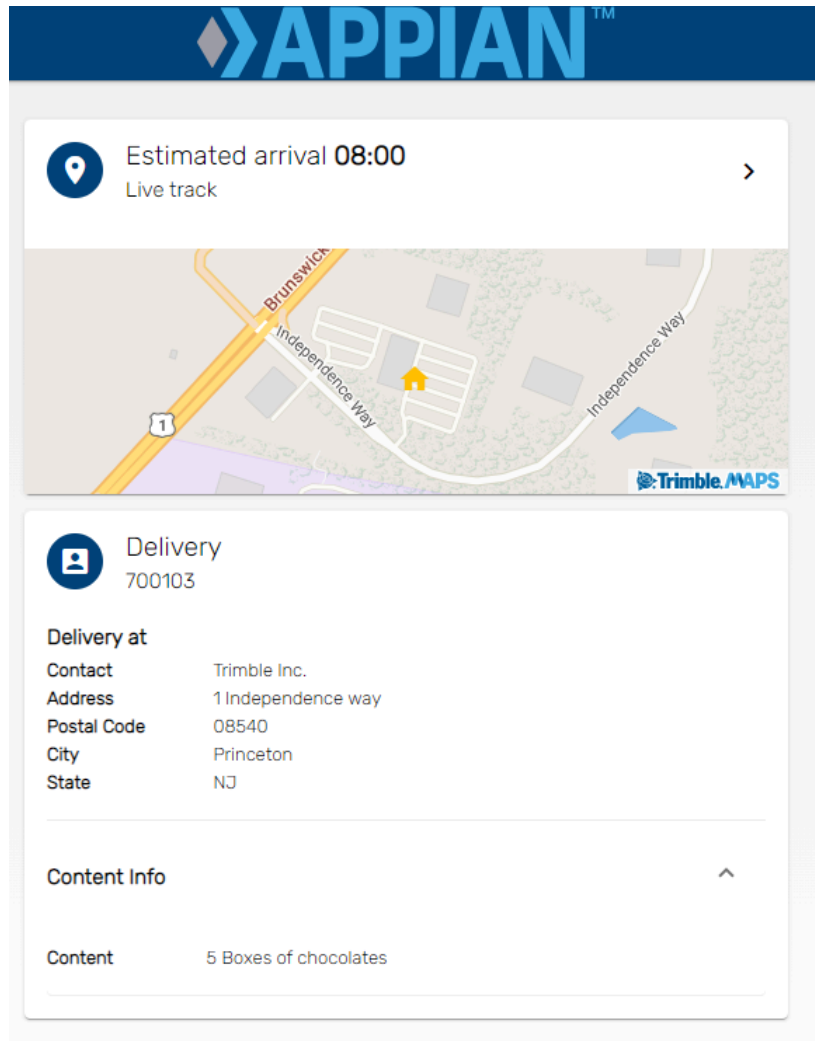
Icons

This section allows you to change the icons displayed on the portal and the map.

- **Summary Card Icon:** this icon is displayed at the top of the content card.
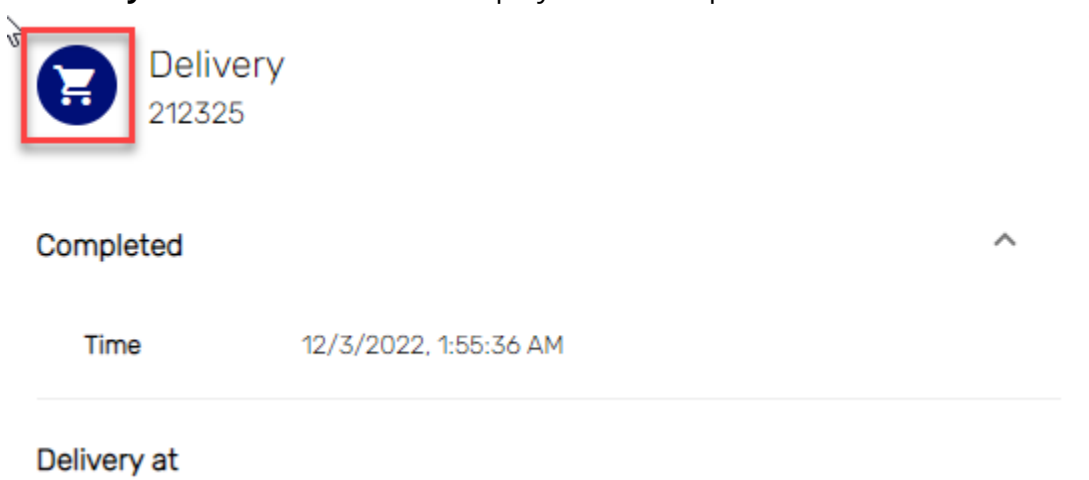
- LiveTrack Card Icon
- **Vehicle Icon:** Icon representing the vehicle on the tracking map.
- **Destination Icon:** Icon representing the end recipient displayed on the tracking map.

Misc

- **Center Logo:** indicates whether the logo provided should be centered on the topbar.
- **Topbar Shadow:** indicates whether there is a faint shadow underneath the top bar.
- **Expand Content Summary:** indicates whether the content summary which contains information like order numbers should be expanded or collapsed by default.

Appendix

Specific Email Provider Notes

O365 (Outlook/Microsoft)

- Microsoft provides an article outlining [how to set up multifunction devices or applications to send email using O365](#).
- SMTP User Name and From Address have to match or Microsoft rejects the traffic and email will not be sent.