

# Forms and Macros

Forms / Macros are an industry standard way of providing structured templates to ensure both consistency and reduced communication costs when messaging Drivers. The following document provides detail on how to configure Forms on the Web Portal for use between Integrations, Web Portal, Vehicles and Drivers

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Cutting costs may be the top priority of today's businesses, but streamlining processes is close behind. DriverTech helps with both. How? With forms. Our state-of-the-art functionality allows your dispatchers and drivers to communicate efficiently and cost-effectively.

- **Save money** - The cost of electronic messages is determined by the number of characters (alpha and/or numeric) sent over the air. With DriverTech's unique forms functionality, your company pays only for the information that populates open fields, not for the field descriptors. Descriptors are housed with both the dispatcher and the driver. Unique information used to populate a form at origin, populates the same form at destination.
- **Save minutes** - There's no need to reinvent the wheel every time a dispatcher communicates instructions to a driver (or a driver responds to a dispatcher's request). Forms condense the process. The DriverTech system provides all the options you need to create user-friendly forms that accomplish exactly what you want them to accomplish with minimum effort on the part of drivers and dispatchers.
- **Save now** - Think about communication. Think about what you need to improve the transfer of information. Think about what your forms can do for you. For example:
  - **Goal:** Perhaps you need to cut down on the number of back-and-forth messages used to accomplish a single task.  
*Option* : Create a form that includes mandatory fields. If those fields are not complete, the form cannot be sent. An error message appears reminding the driver to provide the requested information
  - **Goal:** Perhaps you need to reduce the number of typos in the information received from your driver.  
*Option* : Create fields tied to the truck's computer system that automatically populate such information as odometer readings and fuel consumption.

Identify the purpose of your form. Identify the fields necessary to accomplish that purpose. Then, use this guide to create the forms you want with the parameters you need.

Read the field descriptions in the next section before you begin to structure your forms. Maximize your results. You may find solutions to problems you have yet to identify!

## Viewing details of existing Forms

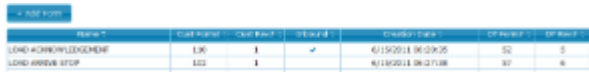
# Creating and Maintaining Forms via the Web Portal

Existing form details can be viewed by clicking anywhere on a Form Row within the table causing the detail to be populated into a read-only view the of edit fields

## Creating New Forms

From the FleetWatcher menu, choose **Management** then **Forms**. You will be presented with a table of current forms (if any exist). You may select a current form from the table for viewing.

To add a new form, select **Add Form** button which is above the grid.



Form Name	Cust Form #	Cust Rev #	Inbound	Form Definition	Form Preview	Form Result
LOAD ACKNOWLEDGEMENT	530	1	<input checked="" type="checkbox"/>	401502018 06/03/18	52	5
LOAD ARRIVAL STOP	532	1	<input checked="" type="checkbox"/>	401502018 06/02/18	57	6

The opening screen has three fields and a check box that allow you to add a new form to your form library.

### New Form Information Screen:



The screen displays a form titled "Form Name" with a text input field. Below it are two radio buttons: "Outbound" (selected) and "Inbound". To the right is a "Preview" button. At the bottom are "Save", "Cancel", and "Preview" buttons. A large text area for the form definition is visible in the center.

- **Form Name:** Title of the form which will be displayed to users.
- **Cust Form #:** Customers Form number associated with this form.
- **Cust Rev #:** Customers Form Revision number associated with this form.
- **Inbound** (check box): Specifies whether a form is outbound or inbound; outbound is the default.
- **Form Definition:** Field where you define the structure of the new form.
- **Preview Results:** After you enter the FDL into the text box you may preview the form by clicking the "Preview" button at bottom center. The preview will appear to the right.

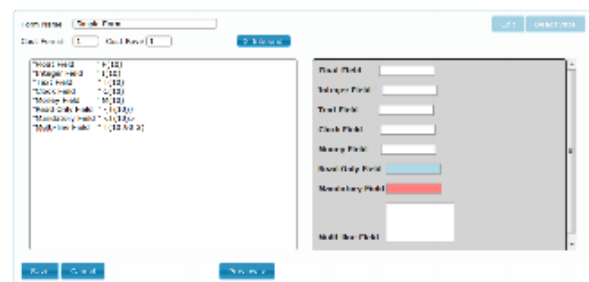
### Using the Form Definition Field

With your purpose identified and necessary fields specified, you are ready to build your form. The process is easy. Simply choose the types of fields you want included from the **Fields Description** section and customize them using options from the **Field Definition Language (FDL)** section.

Exhibit 5 is an example of how the process works. The instructions given in the **Form Definition** field define the final product shown in the **Form Preview**. The steps involved are explained below. By applying the pad option, embedded blanks, and the strip option to the field descriptions, you can design your form to match the look you want.

### Steps for Creating a new Form

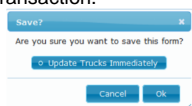
1. Determine the order and placement of the fields for your form.
2. Decide what parameters you want placed on the information for each field.
3. Select appropriate **Field Descriptions**.
4. Customize the **Field Descriptions** using **FDL**.
5. Click **Preview** Button (bottom center) to see your form displayed in the preview pane.
6. Make any appropriate changes to the **Form Definition** field so the final product is exactly the way you want it to be.
7. Click **Save** button (bottom left).



The screen shows a list of field descriptions on the left, including "Field Head", "Field Body", "Field Footer", "Field Title", "Field Sub Title", "Field Sub Body", "Field Sub Footer", "Field Sub Title", "Field Sub Body", "Field Sub Footer", "Field Sub Title", "Field Sub Body", "Field Sub Footer". The preview pane on the right shows a form with fields for "Field Head", "Field Body", "Field Footer", "Field Title", "Field Sub Title", "Field Sub Body", "Field Sub Footer", "Field Sub Title", "Field Sub Body", "Field Sub Footer", "Field Sub Title", "Field Sub Body", "Field Sub Footer".

You will be presented with the following confirmation. If you select **"Update Trucks Immediately"** (false by default) your instructing the system to push the new form out to all vehicles right now.

If you don't select **"Update Trucks Immediately"** then the new form will be communicated to the fleet on-demand or during each ELD's individual communication transaction.



The dialog box asks "Are you sure you want to save this form?". It has two buttons: "Update Trucks Immediately" (selected) and "Cancel". There is also an "OK" button.

## Editing and Disabling Forms

# Field Definition Language (FDL) Specification

To edit a preexisting form, select the desired form by clicking on it in the spreadsheet list, then click [edit] . Make the desired changes, then click [save] .

You can also choose to disable a form. This will remove the form either from the drop-down for forms in the portal Mail application or on the in-cab unit, if it has been selected as an Inbound message. Click [deactivate] to deactivate a form.

Forms are built using fields. In the **Field Descriptions** section of the guide, we outline all the fields available to you. In the **Create a Form** section, we show you how the process works.

In this section, we explain the **Field Definition Language (FDL)** used to customize your form fields to suit your purposes.

The table below summarizes the **FDL Characters** you use in your formulas to define input controls.

## Form and Field Configuration Limitations

The **Maximum Number of Forms** (both Inbound and Outbound) is 127

The **Maximum Number of Characters within a Form** (the FDL which describes a form) is 4000 characters.

- The Number of Fields on a form is only limited by how many you can specify within 4000 characters FDL limit.
- Text fields within a form can store up to 2000 characters.
- Other fields such as integer, numeric, date, time are limited by their own precision. For example an unsigned integer can store values from 0 to 4294967295.
- Auto-Fill fields within a form are limited to a total of 32.

## FDL Character Overview

FDL Character	Character Application and Handling
" "	Characters enclosed in double quotes become static text.
< >	Fields enclosed in angle brackets are mandatory.
{ }	Text that is book-ended by curly brackets is read-only.
[ ]	Straight brackets automate the process of populating a field.
*	The asterisk, or star symbol, hides the information inserted in a field.
#	The pound sign represents a number (any number) in a mask-field formula.
?	The question mark represents any alpha character in a mask-field formula.
~	The tilde (or swung dash) can be used in a mask-field formula to represent any keyboard character.
+	The plus sign is used in mask-field formulas to represent either plus or minus signs.
I	The upper-case letter I is used to designate unsigned integers.
i	The lower-case letter i is used to designate signed integers.
T	Upper-case T designates text fields.
R	Upper-case R establishes an auto-reply field.
L	Upper-case L defines a list.

## Defining the Size of Input Fields

Many of the input boxes can be sized by placing the character width in parentheses just after the FDL character indicating the field type.

FDL Definition	Application
T(35)	35 characters per field
L(10)	10 characters per line

## Maximum input character functionality

In addition, you can define the maximum number of characters that can be entered in a field. To use this feature, you must also use the size option. For example, to create a text field with a size of 20 characters and maximum input of 10 characters, you would use the following T(20:10).

The table below shows sample field widths and input maximums for the FDL field types that support the maximum input character functionality.

FDL Definition	Field Width	Max Input Characters	When a formula includes bracketed information, the term length may appear both inside and outside the brackets as highlighted by the superscript numbers in the sample format below: $T(\text{length}^1) [P=\text{length}^2, \text{padChar}, \text{justification}(\text{Left}, \text{Right})]$ The term functions as follows:
T(10:8)	10	8	

L(6:2)	6	2	<div><div>length<sup>1</sup> = Length reserved on the back end</div><ul style="list-style-type: none"><li>length<sup>2</sup> = Length on the ELD</li></ul></div> <div>When length appears only once in a formula, the field width is the same for the back end as it is for the ELD.</div>
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# Field Definition Language (FDL) Specification

## FDL Field Detail

Field Modifiers	Format Type	Example	Notes	
Standard Fields				
Fields not defined as Mandatory or Read-Only work as regular input or description form fields. These are the most common and are defined below in this table. Any standard field can be modified to operate as a Mandatory or Read-Only using the following characters:				
Mandatory Modifier	< field() >	<T(10)>	Mandatory fields are obvious on a form only when they are described as mandatory, or when a user attempts to send a form without completing such a field and receives an error message.  TIP! It is helpful (but not required) to provide information about which fields are Mandatory by including a note at the top of your form stating An * indicates a required field; then use the static text functionality to include an * next to each mandatory field	
Read-Only Modifier	{ field( ) }	{T(10)}	There is no need to identify read-only text on your form. Should a driver attempt to change a read-only field, an error message appears to explain the field's status	
Field Descriptions				
Each field description includes the following information:				
<ul style="list-style-type: none"><li>Field Type: Gives the field's function and explains how the field is used.</li><li>Format Type: Explains how the field is constructed.</li><li>Example: Shows the formula for applying the format. In some cases, more than one option is possible.</li><li>Example Result: Shows a sample of how the field will appear on the final form (when applicable). May also include hints for using the function.</li></ul>				
The descriptions are designed for modularity. We meet with you to assess your requirements, bundle the options you need together, then provide you with the formulas for the other options so you can modify your set as your company evolves. Noted below are characteristics that are common to multiple formulas and helpful in achieving the end results you want.				
<ul style="list-style-type: none"><li>Pad Option: If the text for a field contains fewer characters than the field allows, the pad option lets you fill out the field with whatever character-type you choose.</li><li>Embedded Blanks: This feature allows you to insert blank spaces in predetermined positions.</li><li>Strip Option: With this feature you can remove any symbolic characters (e.g., \$, @, #, /, *) from the text.</li></ul>				
Also common to multiple formulas are brackets. When a formula includes brackets, the term length may appear both inside and outside the brackets as highlighted by the superscript numbers in this formula: T(length <sup>1</sup> )[P=length <sup>2</sup> ,padChar, justificationLeftRight]. The term functions as follows:				
<ul style="list-style-type: none"><li>length<sup>1</sup> : Length reserved on the back end</li><li>length<sup>2</sup> : Length on the ELD</li></ul>				
When length appears only once in a formula, the field width is the same for the back end as it is for the ELD.				
Field Type	Format Type	Example	Example Result	Notes
Static Text (Comments)	"Static text here"	"Name"	Name	Name fields composed of static text are closed fields.  Generally, static text is used to identify the form (title) and delineate sections (heads and sub-heads), to explain the form's use, and to indicate the information to be provided in associated open fields
Free Form (Text Box)	T(length) T(length:MaxChars) T(length:MaxChars:height) T[P=length, padChar, justificationLeftRight]	T(10) T(10:8) T(30:200:10) T[P=10, , R] T[P=10, , L]	ABCDEFGHJI 12345678__  ABcd123 ABcd123__	This is a multi-line text field. In the example, 30 equals the width of the text box, 200 equals the maximum number of characters allowed in the box, and 10 equals the length of the box.
Mask Field (multi-purpose)	T[M=maskChars]	T[M=###] T[M=+###] T[M=???] T[M=##### ~~~]	123 -123 ABC A1,?+=#(b 123ABC*, \$	Using value: -1234 Using value: ABCDE Using value: A1,?+=#(b Using value: 123ABC*, \$
Mask Field Options (deprecated)	T[M=padChar, maskChars   stripOption]	T[M=0,##-??-~] T[M=###.#   S] T[M=???-??   S]	01-0a-0* 123.4 ABC-DE	Using value: 1234 Using value: ABCDE
Numeric / Decimal	T(length)[F=N, number s to the left of decimal, numbers to the right of decimal, padChar]	T[F=N, 3, 2, ] T[F=N, 3, 0, ]	123.45 _12	

A blank or space is the default pad character.  
The user defines which character is used for padding, and that character is placed in the slot at the end of the formula.

		T[F=N, 5,0,0]	00123	
		T[F=N,3,3]	__1.234	
<b>Alpha</b>	T[M=?...]	T [M=?????]	ABCDE	
This field accepts only alpha characters.				
<b>Unsigned Integer</b>	T(length)[F=l   P=length,padChar, justificationRightLeft]	T(10)[F=I   P=10, , L]  T(10)[F=I   P=10, , R]  T(10)[F=I   P=10,0, R]	12345_ _ _ _ _ _  _ _ _ _ _12345  0000012345	
This field accepts numbers only. Sign characters (+ or ) are not accepted. Trailing or leading spaces are allowed with "space" ( ) as the pad character.				
<b>Signed Integer</b>	T(length)[F=i   P=length,padChar, justificationRightLeft]	T(10)[F=i   P=10, , L]  T(10)[F=i   P=10, , R]	12345_ _ _ _  _ _ _ _12345	
This field accepts numbers and an optional positive or negative sign (+ or ) as the leading character. Trailing blanks are accepted, but embedded blanks are not.				
<b>Full Field Integer</b>	T[M=###...##]	T[M=#####]	12345	
This field accepts numbers only. Leading and trailing spaces are not accepted. The user can either fill in the entire field, or leave the entire field blank.				
<b>Monetary</b>	T[M=\$####.##]	T[M=\$###. ##]	\$_ 7.45 _	
	T(length)[F=N, numbers to the left of decimal,2,padChar]	T(6)[F=N, 3,2, ]	_ _7.45	
This field has a dollar sign (\$) fixed as the first character. The field accepts numbers and a decimal point with two digits.				
<b>Date</b>	T(length)[F=D   S ]  <ul style="list-style-type: none"><li>F = Format</li><li>D = Long Date</li><li>S = Strip slash (optional)</li></ul>	T(10)[F=D]  T(10)[F=D   S ]	10/22/1995  10221995	Long Date: This field accepts numbers in a long date format (mm/dd/yyyy). The entire field must be filled in.  Long Date without Slash
This field accepts numbers in a long date format (mm/dd/yyyy). The entire field must be filled in.				
<b>TIP!</b> For all Date fields (Long, Mid, or Short), the digits sent OTA are determined by the field definition. For example, a field that displays at the mobile unit as mm/dd/yyyy is sent OTA as mmddyyyy if the field is defined with the strip option, or as mm/dd/yyyy if the strip option is not applied.				
	T(length)[F=d   S ]  <ul style="list-style-type: none"><li>F = Format</li><li>d = Mid Date</li><li>S = Strip slash (optional)</li></ul>	T(8)[F=d]  T(8)[F=d   S ]	10/22/95  102295	Mid Date: This field accepts numbers in the date format (mm/dd/yy). If the field is not filled, six blanks with two slashes (_/_/_/_) are stored, or if the strip option is applied, six blanks ( _ _ _ _ _ ) are stored.  Mid Date without Slash
<b>Also See:</b> <a href="#">Auto-Fill DateTime</a>				
<b>Time (24 hr clock)</b>	T(length)[F=C   S ]  <ul style="list-style-type: none"><li>F = Format</li><li>C = Clock</li><li>S = Strip colon (optional)</li></ul>	T(5)[F=C]  T(5)[F=C   S ]	21:45  2145	Time (24hr)  Time (24hr) without Colon
This field accepts a 24-hour time entry in the hh:mm format.				
<b>Date and Time</b>				<b>See:</b> <a href="#">Auto-Fill DateTime</a>
<b>Library Content (File reference)</b>	T(length:MaxChars) [F=BL]	T(10:30) [F=BL]		The content of the field contain both the file name to be launched within the library and an optional description. The file name is separated from the optional description with a '-' character (i.e. <file name>-<description>). If no description is provided then the file name will be used for the button description. Here are some examples:  <ul style="list-style-type: none"><li>xyz.pdf</li><li>xyz.pdf~Press Button</li></ul>
This field is used to link library content to a form. This field is displayed as a button on a form and when pressed it launches the content in the library.				
<b>Phone # (w/area code)</b>	T[M=### - ### - ####]	T[M=### - ### - ####]	123-456-789	
This field accepts a phone number entry with an area code in the format nnn-nnn-nnnn				

<b>Item List</b>  This field accepts any item belonging to an associated list of items. An item is a string of characters which cannot include embedded commas. An item list actually occurs as part of the form definition and displays as a drop-down box. An item list may contain an arbitrary number of items.  <b>TIP!</b> Various pre-configured lists of commonly used terms are available for your use in various list types can be referenced using the following values:  <ul style="list-style-type: none"> <li><b>L1:</b> Y, N</li> <li><b>L2:</b> Weekdays - <i>Sunday, Monday, Tuesday, ...</i></li> <li><b>L3:</b> Months - <i>January, February, March, April, ....</i></li> <li><b>L4:</b> US State Abbreviations - <i>AL, AK, ..., WY</i></li> <li><b>L5:</b> Canadian Province Abbreviations - <i>AB, BC, ..., YT</i></li> <li><b>L6:</b> Mexican State Abbreviations - <i>AG, BJ, ..., ZT</i></li> <li><b>L7:</b> Combined list of US State, Canadian Province, and Mexican State abbreviations</li> </ul>	L( <i>length</i> ; <i>Item1</i> , <i>Item2</i> , <i>ItemN</i> )  <b>Warning!</b> Value of <i>length</i> must be at least the maximum character length of the longest item in the collection	L(6:1234, ABCD, AA11BB)		A list of trucks might include items such as Peterbilt, Volvo, or Freightliner. Character strings can be alpha or numeric, or a combination of both.
<b>Item List L1: Y or N</b>  This field holds a single character: either <b>Y</b> or <b>N</b> . The field can be constructed to show one or the other as the default	T( <i>length</i> )[F=L1]	T(1) [ F=L1 ]	Y	Y/N via defined list type: <b>L1</b>
<b>Item List L2: Weekday Abbreviation</b>  This field accepts a three-character day abbreviation (Sun, Mon, Tue,..., Sat)	T( <i>length</i> )[F=L2]	T(3) [ F=L2 ]	Sun	Weekdays via defined list type: <b>L2</b>
<b>Item List L3: Month Abbreviation</b>  This field accepts a three-character month abbreviation (Jan, Feb,...,Dec)	T( <i>length</i> )[F=L3]	T(3) [ F=L3 ]	Jan	Months via defined list type: <b>L3</b>
<b>Item List L4: US States Abbreviation</b>  This field accepts a two-character US State abbreviation (AL,AK,...,WY)	T( <i>length</i> )[F=L4]	T(2) [ F=L4 ]	AL	States via defined list type: <b>L4</b>
<b>Item List L5: Canadian Province Abbreviation</b>  This field accepts a two-character Canadian Province abbreviation (AB, BC,...,YT)	T( <i>length</i> )[F=L5]	T(2) [ F=L5 ]	AB	Canadian Provinces via defined list type: <b>L5</b>
<b>Item List L6: Mexican State Abbreviation</b>  This field accepts a two-character Mexican Province abbreviation (AG,BJ,...,ZT)	T( <i>length</i> )[F=L6]	T(2) [ F=L6 ]	AG	Mexican Provinces via defined list type: <b>L6</b>
<b>Item List L7: North American State or Province Abbreviation</b>  This field accepts a two-character US State, Canadian Province, or Mexican State abbreviation	T( <i>length</i> )[F=L7]	T(2) [ F=L7 ]	AL	North American State or Province via defined list type: <b>L7</b>

## Auto-Fill or Auto-Population of Data

Its often valuable to more accurate to have form data automatically populated instead of requiring manual entry. Below are various data elements which support auto-population

<b>Odometer (in miles)</b> This formula automatically populates a text field with the truck's lifetime odometer reading at the time the form is pulled up. The odometer reading can be displayed with or without the <b>MI</b> (miles) designation (#o = with, #O = without)	T( <i>length</i> )[#O   P= <i>length</i> , <i>padChar</i> , <i>left or right justification</i> ]  <ul style="list-style-type: none"> <li><b>#O:</b> &lt;Odometer&gt;</li> <li><b>#o:</b> &lt;Odometer&gt; MI</li> </ul>	T(11) [ #O ] T(11) [ #o ] T(11) [ #O   P=11, 0, R ] T(11) [ #o   P=11, 0, R ]	75000.0 75000.0 MI 000075000.0 000075000.0 MI	
<b>Fuel (in gallons)</b> This formula automatically populates a text field with the truck's lifetime fuel consumption at the time the form is accessed. Fuel consumption can be shown with or without <b>GAL</b> appended (#f = with, #F = without)	T( <i>length</i> )[#F   P= <i>length</i> , <i>h</i> , <i>padChar</i> , <i>left or right justification</i> ]  <ul style="list-style-type: none"> <li><b>#F:</b>&lt;Total Fuel&gt;</li> <li><b>#f:</b>&lt;Total Fuel&gt; GAL</li> </ul>	T(11) [ #F   P=11, 0, R ] T(11) [ #f   P=11, 0, R ]	0000050000.0 0000050000.0	
<b>Date and Time</b>  This formula creates a text field that automatically populates with the current date and time at the time the form is accessed.  <b>Warning!</b> <i>The value in this field is not validated after being set or modified.</i> If using this to capture DateTime from the Driver you may consider making the field <b>ReadOnly</b> which will cause it to be populated when the form is selected, or re-selected, (to set 'current dateTime') and not allow modification thereafter	T( <i>length</i> )[#T]  D[#T]  d[#T]  S[#T]  C[#T]	T(20) [ #T ] T(20) [ #T   S ]  d[ #T ] d[ #T   S ]  S[ #T ] S[ #T   S ]  C[ #T ] C[ #T   S ]	17:02 04/07/2009 170204072009  04/07/2009 04072009 04/07/09 040709 04/07 0407 17:02 1702	Date and Time (24hr) Date and Time (24hr) without Colon, Space, or Slash  Long Date Long Date without Slash  Mid Date Mid Date without Slash  Short Date Short Date without Slash  Time (24hr) Time (24hr) without Colon
<b>Location</b>  This formula defines a text field that automatically populates the vehicle's current position by latitude and longitude.	T( <i>length</i> )[#P]	T(20) [ #P ]	40.7293, -111.9654	
<b>Trailer(s) - BiDirectional updates to and from HOS</b>  This formula defines a text field that automatically populates the vehicle's current hooked trailer(s). Up to 3 possible hooked trailers.  This formula defines a text field that automatically populates the last supplied Trailer(s). The Trailer(s) value comes from either the last entered Trailer(s) Value on the drivers HOS logs, or the last form/macro with a Trailer(s) auto-fill field. The value comes from either HOS logs or a form/macro depending on which occurred last. You will need device software 6.07.xx or newer for this functionality to work.	T( <i>length</i> )[#H1]  T( <i>length</i> )[#H2]  T( <i>length</i> )[#H3]  T( <i>length</i> )[#H]	T(10) [ #H1 ] T(10) [ #H2 ] T(10) [ #H3 ] T(30) [ #H ]	13000 23000 33000 13000,23000,33000	Trailer 1 Trailer 2 Trailer 3 All 3 trailers or up to 3 trailers (if exist) comma separated

<b>Trailer(s) - UniDirectional update of HOS</b>  This formula defines a text field that saves/updates trailer(s) entered by a driver. Up to 3 possible hooked trailers.  Unlike its BiDirectional counterpart, this field will not retrieve an updated value from HOS and can only be updated by the Driver. <i>Also see the "Auto-Fill Variables" section below.</i>	T(length)[@H1]  T(length)[@H2]  T(length)[@H3]   T(length)[@H]	T(10)[@H1]  T(10)[@H2]  T(10)[@H3]   T(30)[@H]	13000  23000  33000   13000,23000,33000	Trailer 1  Trailer 2  Trailer 3   All 3 trailers or up to 3 trailers (if exist) comma separated
<b>BOL (Bill of Lading / Shipping document number) - BiDirectional updates to and from HOS</b>  This formula defines a text field that automatically populates the last supplied BOL. The BOL value comes from either the last entered BOL on the drivers HOS logs, or the last form/macro with a BOL auto-fill field. The value comes from either HOS logs or a form/macro depending on which occurred last. You will need device software 6.07.xx or newer for this functionality to work.	T(length)[#B]	T(20)[#B]	B101L  B101L, B202L, B303L	Single or Multiple BOL(s) values
<b>BOL (Bill of Lading / Shipping document number) - UniDirectional update of HOS</b>  Unlike its BiDirectional counterpart, this field will not retrieve an updated value from HOS and can only be updated by the Driver. <i>Also see the "Auto-Fill Variables" section below.</i>	T(length)[@B]	T(20)[@B]	B101L  B101L, B202L, B303L	Single or Multiple BOL(s) values

## Auto-Fill: Variables

An auto-fill variable is typically used to transfer value(s) between a forward and return form. For example: if the load# that is on the forward form needs to be populated on the return form, then an auto-fill variable can be used to facilitate this.

### Storing data

Data is 'stored' into a specific position of an array using the @ char  
For example, to store data into position 1 of the array you would use @1, for position 4 you would use @4

### Retrieving data

Data is 'retrieved' from a specific position of an array using the # char  
For example, to retrieve data from position 1 of the array you would use #1, for position 4 you would use #4

T(length)[@n]	T(20)[@1]		Stores form field value into array element 1  Storage Array is limited to 30 elements beginning at 1: @1, @2, @3, ... @30
T(length)[#n]	T(20)[#1]		Retrieves value from array element 1 into form field  Storage Array is limited to 30 elements beginning at 1 and data retrieved using the # char: #1, #2, #3, ... #30  <b>Note:</b> <ul style="list-style-type: none"> <li>You can retrieve the value (#n) stored in a variable to more than one field.</li> <li>You do not have to match field types when retrieving variables, however less problems will arise if they do match. For instance if you store a date fields value in a variable and retrieve it in a text field this is acceptable. However some combinations are <b>not</b> possible: <ul style="list-style-type: none"> <li>Date field to integer</li> <li>Text field to integer (except if the value is a number)</li> <li>Etc.</li> </ul> </li> </ul>

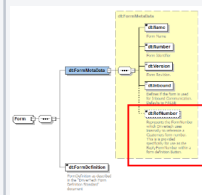
## Auto-Reply with Specific Macro/Form

This form definition syntax makes it possible to automate part of the information on a driver's reply form.

[R=<form#>]	[R=20]		<Form#> is the DriverTech inbound form number. This is not the Customer Form Number. You can obtain the DriverTech form number via the "Edit Forms" screens in FleetWatcher or in the Web Services response to an Insert or update  This form definition syntax imposes itself on a driver's response. The reply automatically reflects the information designated by the <Form#> parameter (such as the "DriverTech inbound form number 20" in the example above). This parameter must exist for the auto-reply within the form to work
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[click to enlarge images](#)

Via Webservice API - [Admin Service](#):



Via Web Portal - Management -> Forms:

- Forms and Macros
- FleetWatcher, How do I make a form or macro?
- Forms and Macros: Configure a Load Offer allowing the Driver to Accept or Reject