

SET BUSINESS RULES IN DYNAMICS GP

TGP Validate Manual

TitaniumGP® Validate User Manual Version 2.3

Microsoft
Partner

Contents

What is TGP Validate?..... 3

How can TGP Validate help my business? 4

Using the Error Number Range 5

Understanding TGP’s Configuration Components..... 6

Using TGP Validate..... 7

Sample Business Rules for Item Maintenance..... 9

What is TGP Validate?

TGP Validate is an administrator tool that provides administrators with the ability to add controls and business rules to their Dynamics GP Windows. These rules are specific to the forms that the administrator chooses and are fully customizable. They can also be saved and enabled or disabled as the administrator deems appropriate.

When scripts are written in TGP Validate, TitaniumGP will automatically run that script when users press the “**Save/Post**” button. When applicable, TGP Validate will automatically ensure that all the requirements outlined in the script are met.

Administrators can use the predefined error number range to dictate how TGP Validate will respond when a GP user triggers an administrator script. The options range from a simple message pop-up to requiring a password to continue posting. With such a diverse range of options, administrators can set dynamic rules that can help their businesses operate at a higher standard.

We understand that every company is different, and as a result, will require a unique set of business rules. With TitaniumGP, you can get Dynamics GP running at the standard your company needs it to function at.

How can TGP Validate help my business?

Here are some examples of ways our customers have been able to make TGP Validate work for them. TGP Validate can be used to:

Place restrictions on which users can post transactions.

TGP Validate is an excellent tool for setting rules about which users can post transactions, or the types of transactions a user can post. In larger companies, defining these types of rules can help avoid confusion and employee overlap.

When saving SOP Transactions, automatically view the customer's current balance and the last time they placed an order.

Some of our customers use TGP Validate to check if the last order placed by the customer has or has not been fulfilled. In cases where the order hasn't been fulfilled yet, it might be possible to fulfill both outstanding orders at once, helping the company to save money on shipping costs. Employees can also double-check that the last order placed is not the same order they are entering. When used in this way, TGP Validate can help employees avoid expensive mistakes.

Validate or correct 2-digit state codes and ISO codes when entering customer addresses.

Entering a customer's address into the system correctly is an important step for ensuring that transactions occur smoothly. One of the easiest mistakes to correct is when entering a state code or ISO country code. TGP Validate can be used to present users with an error message when the state code they enter is an invalid state code, or when the state code entered is not exactly two digits. As more complex data validation rules are defined, more errors can be avoided.

TGP Validate is an administrator tool, that, when used correctly, can establish more administrator control over their company's GP environment. As rules are defined and enabled, administrators can establish system checks that will help employees avoid making as many mistakes.

Using the Error Number Range

When an administrator writes a script, they can use ranges of numbers to provide different errors for their company's GP users. TGP Validate will execute the script you have written before saving and/or posting any new data entered. Administrators can write scripts that provide an error to the GP user if the controls added aren't fulfilled.

By associating errors to different number ranges, you can control how the system will respond to new data entries. The following table shows a detailed breakdown of the existing error number ranges and the system's response to each one:

Error Number Range	
0	A message will appear with an OK button to continue the process.
1 – 2000	The system will display a message with two buttons: OK and Cancel. Based on the button the user picks, they have the option to continue or cancel the transaction.
2001 – 5000	The user will be required to enter a password to continue.
> 5001	The user will be shown a message created by the administrator but will not be allowed to continue the process.

Understanding TGP's Configuration Components

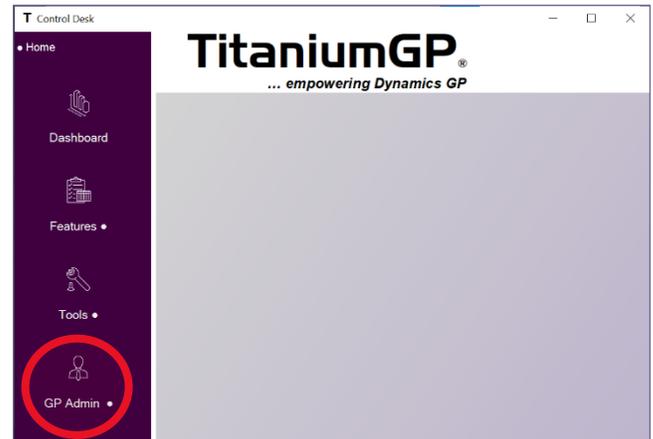
Every time an administrator uses TGP Validate to set new business rules and controls, they will access the TGP Validate interface. At the top of the screen, they will see a table with different categories. These are TGP Validate's configuration components, and each column has a distinct role. The functions of these categories are outlined below:

Configuration Components	Functions
GP FORM	This is the form the TGP Validate Script will be used for.
TARGET	The button in GP that will trigger the script and cause it to run.
ENABLED	Click this box to activate TGP Validate with all its defined configurations.
INCLUDE ALL WINDOWS	For GP Forms with multiple windows such as Sales Transaction Entry, click this box to pass values from all windows in the form to the stored procedure.
PASSING NOTIFICATION	Click this box to receive a message when TGP Validate is executed and passes without triggering an error message.
STORED PROCEDURE	This is the file with the script to be executed.
OVERRIDE PASSWORD	With the correct password, the system will allow TGP Validate to bypass error messages that would normally appear between 3001 and 5000. This is where you define what that password is, allowing administrators to require different passwords for different errors.
GENERATE SCRIPT	Click this button to generate the template script for this GP form.

Using TGP Validate

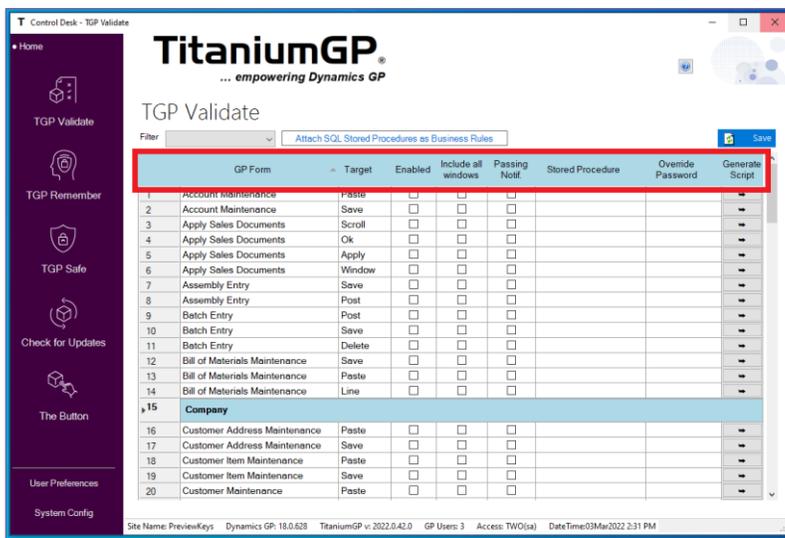
Step 1

Access TGP Validate by opening the TGP Control Desk. Click on “GP Admin” at the bottom of the left-hand column, and then click on “TGP Validate”, which will be the first option in the left-hand column on the next screen.



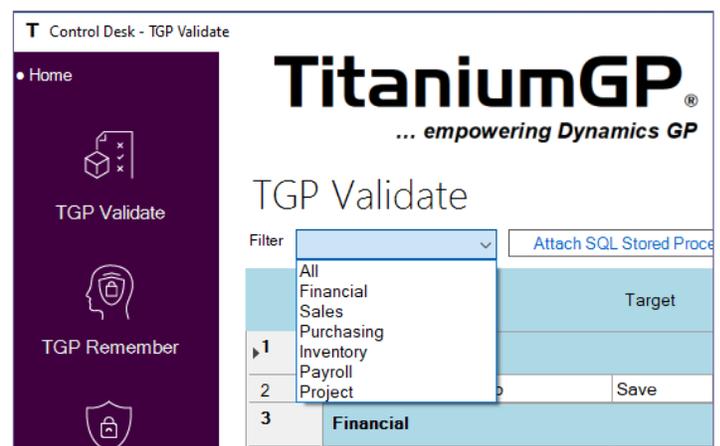
Step 2

At the top of the screen, you will see columns with different configuration components. For a more detailed breakdown of what these components do, refer to the table on Page 6.



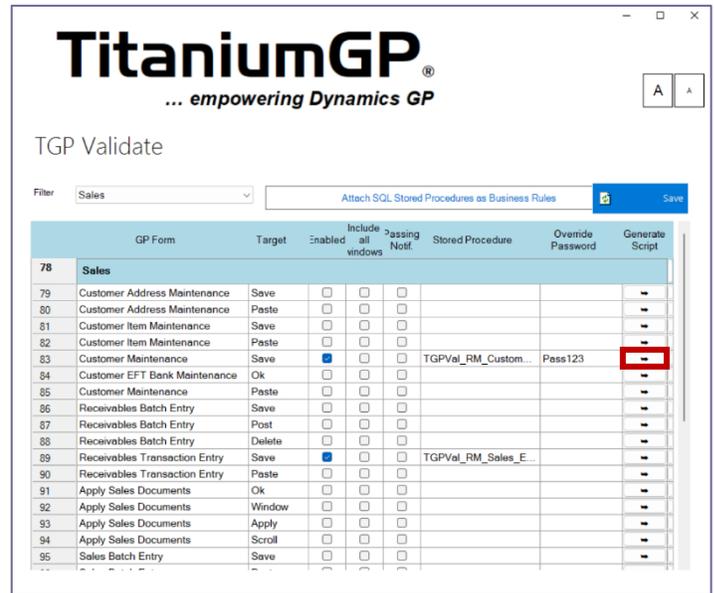
Step 3

Use the TGP Validate filter located in the top left-hand corner of the TGP Control Desk to show forms from the specific module you would like to use the business rules or controls for.



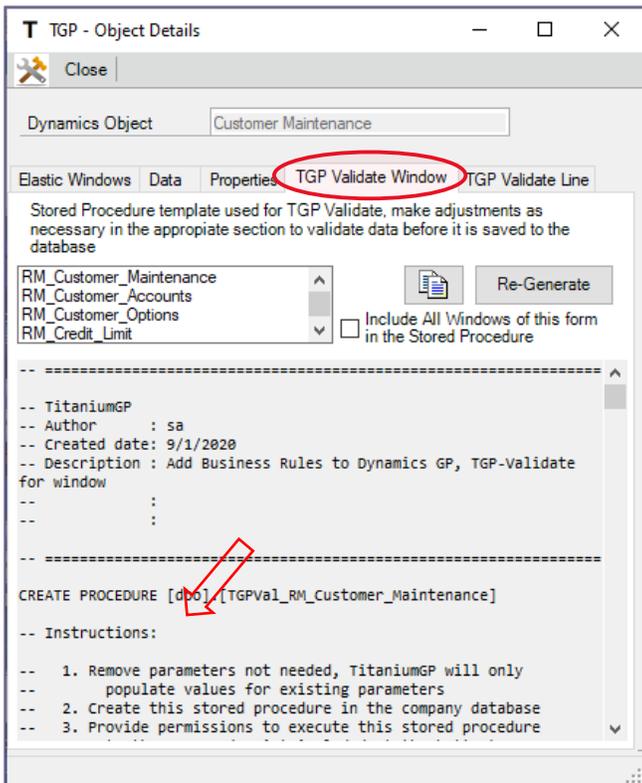
Step 4

To create a stored procedure, locate the window you would like to generate a script for, and press the **“Generate Script”** button. Let’s do an example in which we create a script for the **Customer Maintenance** → **Sales** option. To do this, set the filter settings to Sales, and then click **“Generate Script”** in the row for Customer Maintenance with the desired Target.



Step 5

TitaniumGP will open two windows at this point: the GP Window, which allows you to see the fields that can be transferred to the stored procedure, and the TGP – Object Details window. Click on the **“TGP Validate Window”** tab. This window, shown on the right, is where you’ll be getting the template for your script. There are instructions on this screen for how to write your business rules and controls. The code must be written in SQL Management Studio, but the provided template may facilitate doing so.



Sample Business Rules for Customer Maintenance

The following sample is for demo purposes. If you'd like to test it yourself, make sure to do so in the FABRIKAM test environment.

In the following example, we will set business rules to prevent GP users in your company from entering invalid state codes.

```

31 --
32 -- Verify that Country code is entered
33 --
34 IF Coalesce(@vp_CountryCode, '') = ''
35 BEGIN
36     SELECT @vp_ErrorNum = 5010
37     SELECT @vp_ErrorMessage += 'Country code cannot be empty' + Char(10)
38     GOTO ExitWithError
39 END
40
41 --
42 -- If Country code is US, validate State and Zip Code
43 --
44 IF LEFT(Coalesce(@vp_CountryCode, SPACE(10)), 2) = 'US'
45 BEGIN
46     -- State should be Upper Case
47     SELECT @vp_State = RTRIM(UPPER(COALESCE(@vp_State, '')))
48
49     -- State should be 2 characters
50 IF LEN(@vp_State) <> 2
51 BEGIN
52     SELECT @vp_ErrorNum = 50
53     SELECT @vp_Message += 'State must be 2 characters:' + @vp_State + Char(10)
54 END
55
56     -- State should be in the list
57 IF @vp_State NOT IN (
58         'AA', 'AE'
59         , 'AK', 'AL', 'AR', 'AZ', 'CA', 'CO', 'CT', 'DE', 'FL', 'GA'
60         , 'HI', 'IA', 'ID', 'IL', 'IN', 'KS', 'KY', 'LA', 'MA', 'MD'
61         , 'ME', 'MI', 'MN', 'MO', 'MS', 'MT', 'NC', 'ND', 'NE', 'NH'
62         , 'NJ', 'NM', 'NV', 'NY', 'OH', 'OK', 'OR', 'PA', 'RI', 'SC'
63         , 'SD', 'TN', 'TX', 'UT', 'VA', 'VT', 'WA', 'WI', 'WV', 'WY'
64     )
65 BEGIN
66     SELECT @vp_ErrorNum = 51
67     SELECT @vp_ErrorMessage += 'Invalid State Abreviation: [' + RTRIM(@vp_State) + '], please review' + Char(10)
68     GOTO ExitWithError
69 END
70
71 -- Verify Zip against each state, this list is provided as is
72 IF @State = 'AA' AND NOT (@Zip3 >=340 AND @Zip3 <= 340)
73 OR @State = 'AE' AND NOT (@Zip3 >=90 AND @Zip3 <= 98)
74 OR @State = 'AK' AND NOT (@Zip3 >=995 AND @Zip3 <= 999)
75 OR @State = 'AL' AND NOT (@Zip3 >=350 AND @Zip3 <= 369)
76 OR @State = 'AP' AND NOT (@Zip3 >=962 AND @Zip3 <= 966)
77 OR @State = 'AR' AND NOT (@Zip3 >=716 AND @Zip3 <= 729)
78 OR @State = 'AS' AND NOT (@Zip3 >=967 AND @Zip3 <= 967)
79 OR @State = 'AZ' AND NOT (@Zip3 >=850 AND @Zip3 <= 865)
80 OR @State = 'CA' AND NOT (@Zip3 >=900 AND @Zip3 <= 961)
81 OR @State = 'CO' AND NOT (@Zip3 >=800 AND @Zip3 <= 816)
82 OR @State = 'CT' AND NOT (@Zip3 >=60 AND @Zip3 <= 69)
83 OR @State = 'DC' AND NOT (@Zip3 >=200 AND @Zip3 <= 569)
84 OR @State = 'DE' AND NOT (@Zip3 >=197 AND @Zip3 <= 199)
85 OR @State = 'FL' AND NOT (@Zip3 >=320 AND @Zip3 <= 349)
86 OR @State = 'FM' AND NOT (@Zip3 >=969 AND @Zip3 <= 969)
87 OR @State = 'GA' AND NOT (@Zip3 >=300 AND @Zip3 <= 399)
88 OR @State = 'GU' AND NOT (@Zip3 >=969 AND @Zip3 <= 969)
89 OR @State = 'HI' AND NOT (@Zip3 >=967 AND @Zip3 <= 968)

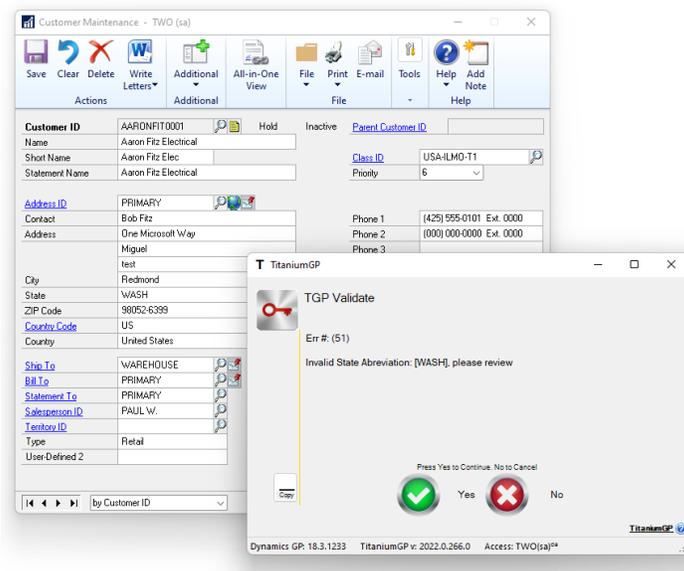
```

The first part of the code verifies that a country code has been entered. Based on the specified error numbers (highlighted in the first Figure on Page 8), failing to enter a code will result in error number 5010, which will show the user a message created by the administrator that will prevent them from continuing the process. In this case, that message is “Country code cannot be empty”.

If the country code entered is US, TGP Validate will check for valid state and zip codes.

If the state code is not two characters, it will result in error number 50, which will display the message “State must be 2 characters” and two buttons: OK and Cancel. The user has the chance to continue and correct the error or to cancel.

TGP Validate will also compare the two-character state code entered with the list of accepted state codes. If a user enters an invalid state code, the operation will result in error number 51, which will state “Invalid State Abbreviation” and “Please Review”. They will also have the buttons YES and NO, with the option to either correct the error or cancel the operation.



Finally, the code will verify the zip code provided, and will also prevent users from continuing until resolving any errors.

Execute the script in SQL Management Studio in the company database, and then go to the TGP Validate configuration window. Enter the name of the stored procedure there, provide an override password, and enable TGP Validate in the Customer Maintenance window by clicking the checkbox. Your TGP Validate configuration window will look as follows:

T Control Desk - TGP Validate
— □ ×



... empowering Dynamics GP




TGP Validate

Filter Inventory
Attach SQL Stored Procedures as Business Rules
Save

	GP Form	Target	Enabled	Include all windows	Passing Notif.	Stored Procedure	Override Password	Generate Script
13	Inventory							
14	Bill of Materials Maintenance	Save	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			→
15	Bill of Materials Maintenance	Paste	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			→
16	Bill of Materials Maintenance	Line	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			→
17	Assembly Entry	Save	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			→
18	Assembly Entry	Post	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			→
19	Inventory Batch Entry	Save	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			→
20	Inventory Batch Entry	Post	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			→
21	Inventory Batch Entry	Delete	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			→
22	Inventory Series Posting	Post	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			→
▶23	Item Maintenance	Save	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	TGPVAL_Verify_State_Zip	123456	→
24	Item Maintenance	Paste	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			→
25	Item Price List Maintenance	Save	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			→
26	Item Price List Maintenance	Paste	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			→
27	Item Quantities Maintenance	Save	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			→
28	Item Quantities Maintenance	Paste	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			→
29	Item Transaction Entry	Save	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			→
30	Item Transaction Entry	Paste	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			→
31	Item Transaction Entry	Post	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			→
32	Item Transaction Entry	Line	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			→
33	Item Transfer Entry	Save	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			→
34	Item Transfer Entry	Paste	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			→
35	Item Transfer Entry	Post	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			→
36	Item Transfer Entry	Line	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			→
37	Item Bin Transfer Entry	Save	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			→
38	Site Bin Maintenance	Save	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			→
39	Site Bin Maintenance	Paste	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			→
40	Site Maintenance	Save	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			→
41	Site Maintenance	Paste	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			→
42	Item Resource Planning Mainten...	Save	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			→

Site Name: PreviewKeys
Dynamics GP: 18.0.628
TitaniumGP v: 2022.0.42.0
GP Users: 3
Access: TWO(sa)
DateTime:04Mar2022 11:47 AM

Save your procedure and that's it! You're ready to start setting business rules and controls that work for your company. Just be careful and make sure to fully test your codes, because GP can affect multiple tables even when saving a simple value.



TITANIUMGP



Office

1041 Market St., Suite #174

San Diego, CA 92101



Hours

M-F: 8am - 5pm (PST)

S-S: Closed



Contact Us

info@TitaniumGP.com

+1 855.238.8739