Journyx Data Validation Tool 2 v1.0

Journyx Data Validation Tool User's Manual

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1.0 Introduction

The **Journyx Data Validation Tool 2** is a simple, configurable rules engine that allows you to automatically validate users' time, expense and custom entry data. While the Data Validation Tool is installed separately from the Journyx software for on-premise customers, it is a standard part of the Journyx solution that ensures the accurate capture of data. The tool enables the administrator to configure:

- **Basic Rules** – alert users and potentially block submission of timesheets when their time entry data does not meet specified requirements based upon group membership, Pay Types of logged time, and required hours. Similar alerts and entry blocking can be set up for expense and custom entry screens.

- **Blocking Rules** – alert users and potentially block submission of timesheets with time entered against specific Pay Types on specific types of days, such as holidays, weekends, or days in the future.

- **Dependency Rules** – create rules that allow entry of one Pay Type based on conditions being met for other Pay Types.

- **Rounding Rules** – enforce minimum/maximum increments and punch rounding for valid time entry based upon groups and Pay Types.

Basic Rules are available for time, expense and custom entry. Blocking, Dependency and Rounding Rules are only available for time entry. Journyx must be properly configured for these tools to work correctly. This document contains instructions for configuring, testing, and using this tool.

Note: It is recommended to test your configuration either in a separate test environment or while your users are locked out of your production environment before deploying this tool to the production environment for your users.

2.0 Pay Group Configuration Instructions

Before setting up your rules in the Data Validation Tool, you must first create a "Pay Group" User Custom Field, populate the field with distinct Pay Groups, and assign users to those Pay Groups. Each user must be assigned to exactly one Pay Group, as all of the users in a certain Pay Group will have the same set of Data Validation rules.

Unless your account has been given custom role access to create custom fields, you must be logged in to Journyx as an administrator to create, populate and assign the Pay Group information.

> **Note:** The Data Validation Tool is designed to work with the Journyx Payroll Rules Engine, so it assigns Data Validation rules to the same entities that the Payroll Rules Engine does: Pay Groups. If you are using the Payroll Rules Engine, you have already configured Pay Groups and can skip the Pay Group configuration section. If you would like to edit your Pay Groups or are not currently using the Payroll Rules Engine, you must perform the following steps.

2.1 Set up the "Pay Group" User Custom Field

1. Go to Configuration → Custom Fields in the Journyx system.

2. To see if the "Pay Group" User Custom Field already exists, run a search for the "Pay Group" field. If "Pay Group" appears in the search results, click on the field name to review the Pay Group values that are in use. You may then skip to step 5. If "Pay Group" does not appear, move on to step 3.

3. To create a User Custom Field named "Pay Group", go to the bottom of the page and select "User Fields" from the dropdown menu labeled "Custom Field type:". Click **Create**.

4. On the resulting Create Custom Field page, type "Pay Group" into the "Name:" field and enter a description in the "Description:" field.

5. Select the radio button labeled "Selection list" under "Element type:" and click **Save**.

6. Click on the link labeled "Manage Selection Values" next to the option "Selection list".

7. In the new window, add Pay Group values to the User Custom Field "Pay Group" that are appropriate to your organization, such as 'Exempt', 'None', 'Shift', 'Non-Exempt', 'Salary', and 'Hourly'. This is done by entering Pay Group names in the custom field labeled "New value:" and clicking **Save** after each value is entered. Be sure to create a 'None' or 'Ignore' Pay Group for Journyx Administrators and others who do not track data in the system.

Note: You should select one of the Pay Groups as the default Pay Group by activating the radio button next to the default Pay Group name. You can assign this default to all existing users by checking the checkbox next to "Apply default to existing Users that don't have this field set?".

8. Click **Save** and close the window.

2.2 Assign existing users to Pay Groups

1. Go to Management → Users → Manage Users to assign a Pay Group to individual users.

2. You can either click on the user's names to edit each user individually, or you can click on the select box next to each user and edit a group of users at once using the **Compare and Modify** button.

   Note: If you set up a default value in Section 2.1, Step 7 above, you will only need to select users for whom you wish to change the Pay Group from that default.

3. Under the "Custom Fields" section of the new Modify User page, you will find the field "Pay Group:". Use the dropdown menu in this field to specify each user's Pay Group and click **Save**.

4. Alternatively, the User Imports may be used to set the Custom Fields for multiple users. See the Help menu for the User Import Tool under Configuration → Imports → User Import for more information.

2.3 Assign new users to Pay Groups

1. Go to Management → Users → Create User to create new users.

2. Assign user information as you would normally. Under the "Custom Fields" section of the Create Users screen you will find the field "Pay Group:". Use the dropdown menu to specify the user's Pay Group.

3. Click **Save**.

3.0 Configure Data Validation Rules

There are four separate types of validation rules: basic rules, blocking rules, dependency rules and rounding rules. All of these rules can be set up under the Tools → Validation menu in the Journyx system.

Note: This product cannot prevent entry of conflicting rules. You must manage your rules carefully to be sure that there are not contradictory rules for specific Pay Groups and Pay Types.

3.1 Basic rules

Basic rules prevent users from submitting time, expense or custom data that fails to meet specifications within a pay period. Users will only be able to submit their time, expense or custom entries once their hours/amounts comply with the configured basic rules. These rules are configured by Pay Group, Pay Type, Hours/Amount, and Period. The steps for setting up basic rules are included below:

1. To create new basic rules, go to Tools→Validation→DVT2 Basic Rules for Time, Expense or Custom Entry. If you have any basic rules currently configured, they will be summarized in a list at the top of the screen. To delete or modify an existing rule, see steps 4 or 5.

2. The DVT2 Basic Rules screen contains several fields to configure validation rules. The options are included below:

    - *Assigned to*: Select the user Pay Groups to which the new rule should apply. Select multiple groups by holding down the 'Ctrl' key, or select "All pay groups" to have the rule apply to all Pay Groups (users without a Pay Group will not be affected).

    - *Action*: The options for this field are "Error (block submission)" or "Warn Only". The "Error (block submission)" option will prevent users from submitting hours/amounts that violate the rule. The "Warn Only" option will allow them to submit the information, but it will warn them that they have violated the rule.

    - *Restriction Type*: The options for this field are "Require" (available for time only) or "Allow" (available for all entry types). The "Require" option checks all entries, as well as a lack of entries, for validation. Lack of required entries will be reported as an error. The "Allow" option simply checks to see if an entry is allowed. It does not check for the lack of required entries.

    - *Modifier*: The options for this field are "Exactly", "Minimum" or "Maximum". These values are applied to the hours or numeric amount to determine when a rule is triggered.

- *Hours/Amount*: Enter the number of hours, dollars, etc. for this rule as a whole number. A decimal value may be entered for expense and custom entry amounts.

- *Minutes*: This field applies to time entry only and allows you to designate minutes, along with the hours, for this rule. Enter the value as a whole number between 1 and 60.

- *Period*: The options in this field are "Daily", "Weekly" or "Per Period". Select the period to which this rule should apply. "Weekly" and "Daily" check time entered over weekly and daily time frames, respectively. "Per Period" applies to the time period assigned to the individual user.

  Note: By default, rules are checked each time a timesheet is saved or submitted. Rules will report on empty columns in a user's timesheet if they fail to meet a required minimum, either by day or weekly total. You can bypass this by configuring your Data Validation settings to only check timesheets when they are submitted. Weekend days are ignored for daily calculations by default, although you can configure your rules to apply to weekend days as well. For configuration instructions, go to Section 4.0 of this manual.

- *Applies to:* The options for this field are "Sum selected if any", "Sum selected if multiple" or "Each selection". This option determines how the rule will be applied based on the combination of Pay Type values in the time data. For expense entry, this field applies to the Expense Code values. For custom entry, this field applies to the Location values. The "Sum selected if any" option allows you to sum and apply the rule when either one or more than one of the selected Pay Types triggers the rule. The "Sum selected if multiple" option allows you to sum and apply the rule when more than one of the selected Pay Types triggers the rule. The "Each selection" option applies the rule to each selected Pay Type individually.

- *Pay Type*: Select the Pay Types to which this rule should apply. More than one Pay Type can be selected by holding down the 'Ctrl' key. The option "All Pay Types" will have the rule analyze time entries based upon the sum of all hours for the indicated period regardless of Pay Types.

  Note: The Pay Type field only applies to time entry. For expense entry, these rules are based on selections in the Expense Code field. For custom entry, these rules are based on selections in the Location field. You may have renamed these fields in your Journyx system to track a different type of data.

- *Custom Message:* You can customize the warning or error the user sees for this rule by entering your own text in this field.

3. Once you have configured the options as desired, click **Add Rule** immediately below your selections. The new rule will appear in the list of active rules above the form.

4. To delete an existing rule, click the checkbox next to the rule you wish to delete in the rule summary list. Then click **Delete Selected**. The rule will be removed from the list.

5. To modify an existing rule, click the checkbox next to the rule you wish to modify in the rule summary list. Click **Modify Selected**. Another page will be displayed where options for the existing basic rule can be changed in the same fashion as when creating a new rule (see step 2). When you have set the new criteria, click **Save Changes**. This will save the modification and return you to the DVT2 Basic Rules page.

3.2 Blocking rules

Blocking rules prevent users from logging time against specific projects, tasks, pay types, or bill types. This type of rule is particularly useful if you wish to have a "select a value" entry displayed in the dropdown menu on user timesheets and do not wish the user to enter his or her time against this option. These rules will apply to every user within the Pay Groups that you select. The steps for setting up blocking rules are included below:

1. To create new blocking rules, go to Tools→Validation→DVT2 Blocking Rules. If you have any blocking rules currently configured, they will be summarized at the top of the screen. To delete or modify an existing rule, see steps 4 or 5.

2. The DVT2 Blocking Rules screen contains several fields for configuring blocking rules. The options are included below:

   - *Assigned to:* Select the user Pay Groups to which this rule should apply. Select multiple groups by holding down the 'Ctrl' key, or select "All pay groups" to have the rule apply to all Pay Groups.

   - *Action*: The options for this field are "Error (block submission)", "Warn Only" or "Make Changes". The "Error (block submission)" option will prevent users from submitting hours/amounts that violate the rule. The "Warn Only" option will allow them to submit the information, but it will warn them that they have violated the rule. The "Make Changes" option will remove the record(s) that violate the rule.

   - *Restriction Type:* The options for this field are "Always Disallow", "Disallow Future Time", "Disallow on Weekends", "Allow on Weekends", "Disallow on Holidays", "Allow on Holidays", "Allow on Holidays and Weekends" or "Disallow on Holidays and Weekends". The "Always Disallow" option allows you to block all time logged against a specific column values (e.g., a "Select One" default value that appears as the default in a new row but should never be saved in a time entry). The "Disallow Future Time" blocks entry of time against specific column values on future dates. The "Disallow on Weekends" blocks entry of time against specific column values on weekend days. The "Allow on Weekends" allows

entry of time against specific column values on weekend days. The "Disallow on Holidays" blocks entry of time against specific column values on days loaded with a holiday via the Journyx Holiday Schedule feature. The "Allow on Holidays" allows entry of time against specific column values on days loaded with a holiday via the Journyx Holiday Schedule feature. The "Allow on Holidays and Weekends" allows entry of time against specific column values on days loaded with a holiday via the Journyx Holiday Schedule feature or on weekend days. The "Disallow on Holidays and Weekends" blocks entry of time against specific column values on days loaded with a holiday via the Journyx Holiday Schedule feature or on weekend days.

- *Column Type and Values*: Select any time entry column values that will be disallowed for users in the Pay Group(s). Select multiple values by holding down the 'Ctrl' key.

- *Custom Message*: You can customize the warning or error the user sees for this rule by entering your own text in this field.

   Note: These fields will be labeled as you have customized them for your system. You are not required to select an item from every list.

   Journyx Recommendation: To make users manually select a project for all of their time entries, administrators should enforce a "Select one" rule. For this rule, the Pay Group should be set to "All Pay Groups" and the Excluded Project, Excluded Pay Type, and Excluded Time Bill Type fields are set to "Select One" (or the user-defined selection field equivalent).

3. Once you have configured the options as desired, click **Add Rule** immediately below your selections. The new rule will appear in the list of rules above the form.

4. To delete an existing rule, click the checkbox next to the rule or rules you wish to delete in the rule summary list. Then click **Delete Selected**. The rule will be removed from the list.

5. To modify an existing rule, click the checkbox next to the rule you wish to modify in the rule summary list. Click **Modify Selected**. Another page will be displayed where options for the existing blocking rule can be changed in the same fashion as when creating a new rule (see step 2). When you have set the new criteria, click **Save Changes**. This will save the modification and return you to the DVT2 Blocking Rules page.

3.3 Dependency rules

Dependency rules are rules that allow entry of one Pay Type based on conditions being met for other Pay Types. These rules will apply to every user within the Pay Groups that you select. The steps for setting up dependency rules are included below:

1. To create new dependency rules, go to Tools→Validation→DVT2 Dependency Rules. If you have any dependency rules currently configured, they will be summarized in a list at the top of the screen. To delete or modify an existing rule, see steps 4 or 5.

2. The DVT2 Dependency Rules screen contains several fields to configure dependency rules. The options are included below:

   - *Assigned to:* Select the user Pay Group to which this rule should apply. More than one group can be selected by holding down the 'Ctrl' key, or select "All pay groups" to have the rule apply to all Pay Groups.

   - *Action:* The options for this field are "Error (block submission)" or "Warn Only". The "Error (block submission)" option will prevent users from submitting hours that violate the rule. The "Warn Only" option will allow them to submit the information, but it will warn them that they have violated the rule.

   - *Allow Pay Types:* Select the Pay Types that you want to allow users to log time to after they have met the conditions of logging time to other Pay Types.

   - *If:* The options for this field are "Sum selected if any", "Sum selected if multiple" or "Each selection". This option determines how the rule will be applied based on the combination of Pay Type values in the time data. The "Sum selected if any" option allows you to sum and apply the rule when either one or more than one of the selected Pay Types triggers the rule. The "Sum selected if multiple" option allows you to sum and apply the rule when more than one of the selected Pay Types triggers the rule. The "Each selection" option applies the rule to each selected Pay Type individually.

   - *Pay Type*: Select the Pay Type to which this rule should apply. More than one type can be selected by holding down the 'Ctrl' key, or select "All Pay Types" to have the rule apply to all Pay Types. If the condition for these Pay Types is satisfied, the user will be allowed to log time against the "Allow" Pay Types that were previously selected.

   - *Condition*: The options for this field are "is greater than", "is at least", "is exactly", "is no more than" or "is less than". These options are enforced based on the hour and minute values include in the rule.

   - *Hours*: Enter the number of hours for the rule as a whole number.

   - *Minutes*: Enter the minutes for the rule as a whole number from 1 to 60.

   - *Calculated*: The options for this field are "Daily", "Weekly" or "Per Period". Select the period to which this rule should apply. "Weekly" and "Daily" check time entered over weekly

and daily time frames, respectively. "Per Period" applies to the time period assigned to the individual user.

- *Custom Message:* You can customize the warning or error the user sees for this rule by entering your own text in this field.

3. Once you have configured the options as desired, click **Add Rule** immediately below your selections. The new rule will appear in the list of active rules above the form.

4. To delete an existing rule, click the checkbox next to the rule you wish to delete in the rule summary list. Then click **Delete Selected**. The rule will be removed from the list.

5. To modify an existing rule, click the checkbox next to the rule you wish to modify in the rule summary list. Click **Modify Selected**. Another page will be displayed where options for the existing dependency rule can be changed in the same fashion as when creating a new rule (see step 2). When you have set the new criteria, click **Save Changes**. This will save the modification and return you to the DVT2 Dependency Rules page.

3.4 Rounding rules

Rounding rules check that the amount entered for any one line is either in whole hours or in minute increments divisible by a specified number. For example, a minute increment rule for 15 minute increments will allow a user to enter amounts such as 1:00, 1:15, 1:30, and 1:45 but not 1:05 or 1:42 (this rule also applies to decimal values). These rules can also be used to establish a time rounding policy for all users who punch in and out. These rules will apply to every user within the Pay Groups that you select. The steps for setting up rounding rules are included below:

1. To create new rounding rules, go to Tools→Validation→DVT2 Rounding Rules. If you have any rounding rules currently configured, they will be summarized in a list at the top of the screen. To delete or modify an existing rule, see steps 4 or 5.

2. The DVT2 Rounding Rules screen contains several fields to configure rounding rules. The options are included below:

- *Assigned to:* Select the user Pay Group to which this rule should apply. More than one group can be selected by holding down the 'Ctrl' key, or select "All pay groups" to have the rule apply to all Pay Groups.

- *Restriction type:* The options for this field are "Round Off", "Round Down", "Round Up", "Increment – block submission" or "Increment – warn only". Select a rounding value to determine how Journyx will handle entries logged in hour or minute increments that do not meet the rule. "Round Off" warns the user and rounds the time to the nearest hour/minute increment as indicated in the rule. "Round Down" and "Round Up" warn the user and round

the time down or up to the nearest hour/minute increment as indicated in the rule. "Increment – block submission" will warn the user that time entries do not meet the criteria, but it will not change the entries. The user will be required to correct the entries before submitting the timesheet for approval. "Increment – warn only" will warn the user that time entries do not meet the criteria, but it will not change the entries. This setting will allow the user to submit the timesheet without correcting the errors.

- *Hours:* Enter the hours for the rule as a whole number.

- *Minute Increment*: Enter the minutes for the rule as a whole number from 1 to 60.

- *Pay Type*: Select the Pay Type to which this rule should apply. More than one type can be selected by holding down the 'Ctrl' key, or select "All Pay Types" to have the rule apply to all Pay Types.

- *Custom Message:* You can customize the warning or error the user sees for this rule by entering your own text in this field.

3. Once you have configured the options as desired, click **Add Rule** immediately below your selections. The new rule will appear in the list of active rules above the form.

4. To delete an existing rule, click the checkbox next to the rule you wish to delete in the rule summary list. Then click **Delete Selected**. The rule will be removed from the list.

5. To modify an existing rule, click the checkbox next to the rule you wish to modify in the rule summary list. Click **Modify Selected**. Another page will be displayed where options for the existing rounding rule can be changed in the same fashion as when creating a new rule (see step 2). When you have set the new criteria, click **Save Changes**. This will save the modification and return you to the DVT2 Rounding Rules page.

4.0 Set Data Validation Rule Preferences

To set the Data Validation Tool preferences, go to Tools → Tool Settings. The preferences are located on the "Tool Settings" screen.

There are five tool preferences for the Data Validation Tool:

- *Apply rules based on user:* This setting allows you to apply your Data Validation Rules to users based on either their Pay Groups or Groups. The setting defaults to the Pay Group field. However, you could switch to the Group field if, for example, your Pay Groups are set up for the Payroll Rules Engine and don't match up with the way you want to apply your rules to groups of users.

- *Skip hours per day requirements on weekends?*: If you want to apply hour/amount rules to every day of the week (including weekends), uncheck this checkbox. The default behavior is to ignore weekend days when checking for daily data validation rules.

- *Validate hours on save (in addition to submit)?*: If you want the rules to be checked only when users attempt to submit their time, expenses or custom entries, disable this checkbox. The default behavior is to check data validation rules every time the user saves a sheet.

- *First day of week for week rules in semi-monthly periods*: This setting allows you to choose which day of the week should be used as the start day for weekly rules when users are assigned to a semi-monthly period.

- *Ignore weekly and period rules on submit*?: This setting can be used for submitting sheets outside of the normal period timeframe (e.g., mid-week for closing out a month). It can be turned on to allow sheets to be submitted outside the normal end-of-period timeframe. Then it can be turned off to return to the usual validation.

Click **Save** after modifications have been made.

5.0 Support Instructions

All issues with the Data Validation Tool should be reported directly to the Journyx Support Department via email to support@journyx.com. In any error report, please include enough information for the Journyx Support Team to reproduce the error. Generally, that will include a screen shot or the text of the error message, the steps that you took that caused the error and a copy of your debug.log file if you are not hosted in the Journyx cloud.