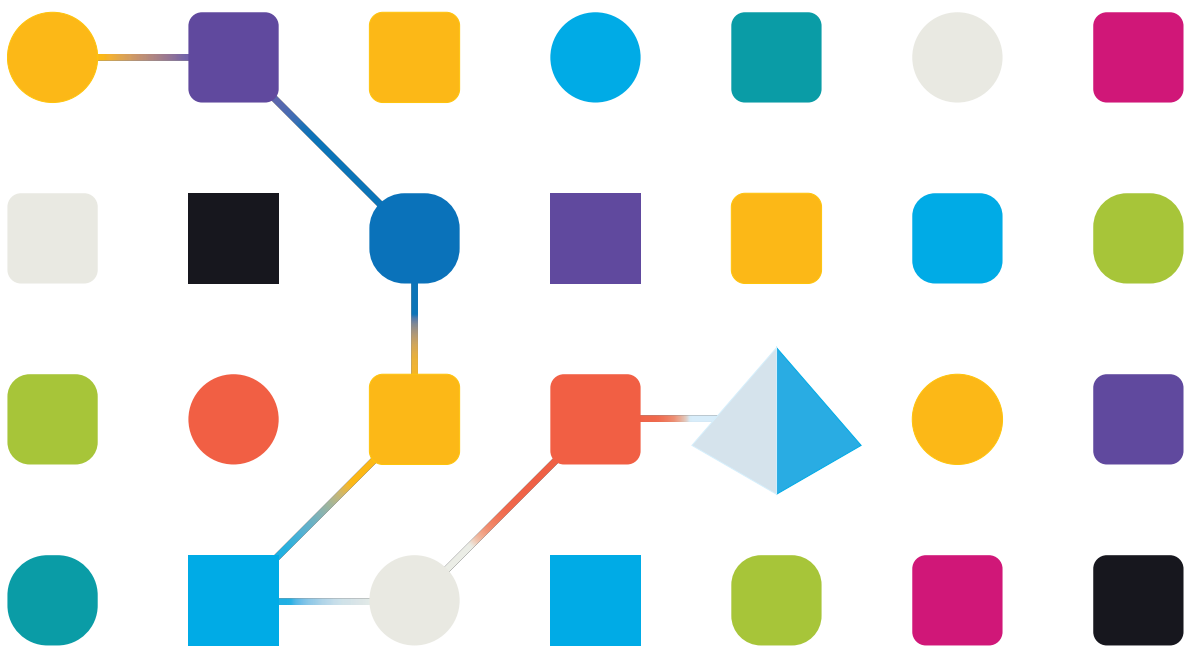


blueprism[®]

Interact Forms 4.2

User Guide

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Interact Forms

This guide details how to get the best out of Interact Forms, this includes using rules and the use of regular expressions.

Rules allow you to manipulate how a form is displayed by creating a simple 'if-then' structure to, for example, hide or show a field depending on a given condition.

Regular expressions (regex) can be used to control the data being entered into Interact Forms by your users.

When creating an Interact Form you often need to control the data fields to restrict what your users can enter, for example a National Insurance or Social Security number. Restricting data entry helps to guide your users to put the required information in, in the correct format.

There are multiple elements that can be used when creating Interact Forms, only the Text element offers full regex capabilities, whilst the other elements offer other, simple restrictions to control the data input.




JavaScript must be enabled in your internet browser to use the full functionality of Interact.

In this guide

- [Elements](#)
- [Regular expressions](#)
- [Rules](#)

Elements

This section details each element and the controls that can be applied to restrict the data input into the fields within an Interact Form.

To add a new element, click the **Create field** icon  within the form editor and select the element capture type from:

- Text
- Date
- Upload
- Horizontal rule
- Radio group
- Table
- Number
- Time
- Paragraph
- Dropdown
- Checkbox group

Text

If you need to create a field that ensures a user types the correct information in the correct format, then the text element is the best solution.

As standard the text element supports the use of simple regular expressions which can be controlled by setting values for the fields detailed in the table below.

Field	Description
Minimum character length	The minimum amount of characters that can be typed into the field.
Maximum character length	The total maximum number of characters that can be entered into the field.
Allowed characters	The character set that the user can use. This uses simple regular expressions and so a user can type '[A-F]' forcing the user to only enter the characters between A to F, in uppercase. You can enter some of the other regular expressions such as the ' ' meaning 'or'. So, if you enter '[A-F] [a-f]' a user can enter the characters between A to F either in upper or lowercase. See the image below.
Non-allowed characters	This works in a very similar way to the Allowed characters. Here you can specify the characters that you do not allow in the text field. For example, it could be as something as simple as '&' to restrict the use of an ampersand when people are writing text.
Initial Value	The initial value allows you to specify the initial value that the user will see when they access the Form.
Mask Data on Submission	This is an important button when the information being submitted is sensitive and you do not want other people to see the data. For example, personal information about date of birth is a private piece of information. So, if you tick Mask Data on Submission the user will see dots appear as they type the information. This information is masked for everyone using Interact. When the data is forwarded into Blue Prism it can be 'seen' by the digital worker for processing in the automation.

Create text


Reset all
Cancel

Define the details of your desired capture field

☐ Mask data on submission

Initial state *

Optional ▾

Label *

Automation ID *

Description

150 Characters remaining

Placeholder

☒ Simple

☐ Regex

Minimum character length

Maximum character length

Allowed characters

Non-allowed characters

Initial value


Create another


Create field

Number

The number element has numerous features to control how your users enter their data and how it is displayed.

Create number

 Reset all

 Cancel

Define the details of your desired capture field

Initial state *

Optional

Label *

Automation ID *

Description

150 Characters remaining

Placeholder

Prefix character

☐

Only allow whole numbers

Decimal point place

☐


Show commas

Minimum value

Maximum value


Step

Initial value



Create another



Create field

Field	Description
Prefix Character	<p>Adds a prefix character in the form display. This is useful for when entering monetary values.</p> <p> The prefix character is not sent through to your automations.</p> <div> <p>Prefix character</p> <p>£</p> </div>
Only Allow Whole Numbers	Restricts the user to enter only whole numbers in the data field.
Decimal Point Place	Specifies the number of decimal places you want for the data entered. You can have up to a maximum of fifteen decimal point places.
Show Commas	<p>Enters a comma whenever the number gets over a thousand.</p> <p>This is the UK format with a comma used as a separator between thousands and a decimal point for fractions, for example, £25,000. As opposed to a lot of European countries where the comma and decimal point are swapped.</p>
Minimum Value	Sets a minimum value for the number to be entered by the user into the field.
Maximum Value	Sets a maximum value for the number to be entered by the user into the field
Step	Defines a step value. Working in conjunction with the 'arrow' in the data entry field, where a user toggling the 'arrows' will force the number to step in the defined steps.
Initial Value	Sets an initial value for number in the field.

Date

The date element has a range of features to control how your users enter their data and how it is displayed. The blank Form below illustrates the options.

Create date

 Reset all  Cancel

Define the details of your desired capture field

Initial state *

Optional

Label *

Automation ID *

Description

150 Characters remaining

Date format *

MM/DD/YYYY

Placeholder

Allow dates

☒ Any

☐ Only past

☐ Only future

Past date restriction


Future date restriction

Initial value *

Create another

Create field

Field	Description
Date Format	Define the format of the date. Three options are available which are US format MM/DD/YYYY, UK format DD/MM/YYYY and the International format YYYY/MM/DD.
Allow Dates	Controls whether you allow dates only in the past, only in the future, or any dates. For example, when entering a date of birth, it would only be dates in the past and not the future that would be required.
Initial Value	<p>A drop-down menu that offers five choices: None, Today, Today +, Today -, and Custom Date.</p> <p>An Initial Value must be set. If you have no restrictions, this can be set to None. However, you can also restrict the initial value to Today or Today + or – a number of days. So, for setting an Initial Value of a fortnight ago, you would enter Today -, and then in the new field enter 14 days.</p> <div data-bbox="347 714 983 1012"> <p>Initial value *</p> <p>Today -</p> <p>Days from today's date *</p> <p>14</p> </div> <p>If that doesn't give you the date as an Initial Value you require, you can select Custom Date and specify a specific date, for example the last day of the 20th Century.</p> <div data-bbox="347 1120 983 1420"> <p>Initial value *</p> <p>Custom date</p> <p>Custom date *</p> <p>12/31/1999</p> </div>
Past Date Restriction	Using the Past Date Restriction you can create a window on the dates that the user of the Form can access, for example setting 14 days will create a window of just 14 days in the past that the user can access.
Future Date Restriction	Using the Future Date Restriction you can create a window on the dates that the user of the Form can access, for example setting 14 days will create a window of just 14 days in the future that the user can access.

 When using the **Past date restriction** or **Future date restriction** field in conjunction with **Today-** or **Today+**, the date restriction must include the total number of days. The number of days for the window and the number of days past or future.

Time

There is only one field that can be used to control the user entry in the time element field which is the Initial Value.

This field will set a default value in the display that the user can then change as required, see below.

Create time

Define the details of your desired capture field

[Reset all](#) [Cancel](#)

Initial state *

Optional

Label *

Automation ID *

Description

150 Characters remaining

Initial value

00:00:00

[x](#) [🕒](#)

[x](#) Create another

Create field

Upload


The upload element only has one controlling aspect which is the extension of the file being uploaded.

If Image is chosen as the file type, then you can select from one to three file types: JPG, PNG or GIF.

If File is chosen, then you can add a list of extensions that you want to support in the Form. These need to be added without the leading '.' and separated by commas. You cannot load executables, those with '.exe' extension.

The screenshot shows the 'Create upload' form with the following fields and options:

- Initial state ***: A dropdown menu with 'Optional' selected.
- Label ***: A text input field.
- Automation ID ***: A text input field.
- Description**: A large text area with a '150 Characters remaining' indicator.
- Input type**: Two radio buttons, 'File' (selected) and 'Image'.
- Accepted extensions (comma separated) ***: A text input field.
- Max size (Mb) ***: A dropdown menu.
- Create another**: A button with a plus icon and the text 'Create another'.
- Create field**: A button at the bottom right.
- Reset all** and **Cancel**: Buttons at the top right.

 By default, the maximum file upload size is restricted to a maximum of 5 Mb and the image size is restricted to 1920 x 1080px.

The maximum size can be increased by a system administrator by changing the value defined in the Hub configuration file on the server. The value specified in the **Max size** field on the Create upload page cannot be greater than the value defined in the configuration file (by default, this is 5).

Paragraph

The paragraph allows the Form designer to add text into the Form to assist the user in submitting the correct information in the correct format. The form allows the designer to incorporate different formats to the text to emphasize the important parts of the text.

The paragraph can be deployed in a hidden state initially and then only revealed depending upon a rule condition being met, or updated when a digital worker has updated the Form from in an automation.

The 'Create paragraph' form is titled 'Create paragraph' and includes 'Reset all' and 'Cancel' buttons. Below the title is the instruction 'Define the details of your desired capture field'. The form contains two main sections: 'Label *' and 'Paragraph *'. The 'Label *' section has a note 'Note: The label will be displayed within form rules only.' and a text input field containing 'Information'. The 'Paragraph *' section has a rich text editor with bold, italic, underline, link, and unlink icons. The text in the editor reads: 'To use this form, the **USER** needs to supply the following information: **First Name**, **Family Name**, Curriculum Vitae, Qualifications and **National Insurance Number**. Items marked in **BOLD** are mandatory items that must be supplied before the form can be submitted.' Below the text is a character count '245 Characters remaining'. At the bottom, there are two toggle buttons: 'Hidden' (selected) and 'Create another'. A 'Create field' button is at the bottom right.

Horizontal rule

The horizontal line element is used to separate a form into sections to ease its readability. The line can be padded to control the space before and after, with a maximum of 999px either side of the line.



The 'Create horizontal rule' form is titled 'Create horizontal rule' and includes 'Reset all' and 'Cancel' buttons. Below the title is the instruction 'Define the details of your desired capture field'. The form contains two sections: 'Top padding (px)' and 'Bottom padding (px)', each with a numeric input field. At the bottom, there is a 'Create another' button and a 'Create field' button at the bottom right.

Dropdown

The Dropdown element allows the designer to configure a drop-down menu that the user can select from.

For a single selection, a list can be provided which will enable a user to select one item from the list. For a multiple selection the user can either choose any number of items, a minimum number of items, or a maximum number of items. This is dependent on the values configured in the Minimum selection and Maximum selection fields.

Create dropdown

 Reset all  Cancel

Define the details of your desired capture field

Initial state *

Optional

Label *

Automation ID *

Description

150 Characters remaining

Selection type

☒ Single

☐ Multiple

Minimum selection

Maximum selection

Options

Created 1 from 250 option(s)

Default	Label	Value	Actions
<input type="checkbox"/>			Remove ↓ ↑

[Add option](#)

Create another

Create field

Radio group

The radio group element, like the Dropdown element, allows users to select a single item – this element does not allow for multiple entries to be selected.

The designer of the form controls what the user sees by listing the chosen items and if required can choose a default value.

Create radio group

Define the details of your desired capture field

Initial state *

Optional

Label *

Automation ID *

Description

150 Characters remaining

Options

Created 1 from 10 option(s)

Default	Label	Value	Actions
<input type="checkbox"/>			Remove ↓ ↑

[Add option](#)

Create another

Create field

When the form is deployed to Interact, the radio group buttons display in a visually different way to that shown on in the Play test area. They display as a horizontal button bar within the Interact website. For example:

Employee details

Collect basic information about the new Blue Prism employee

First name *

Last name *

Region based in

☐ EMEA
☐ APAC
☐ US

Employee details

Collect basic information about the new Blue Prism employee

First name *

Last name *

Region based in



EMEA APAC US

[Next](#)

Checkbox group

The options available to the Form designer for the Checkbox group are the same as the Dropdown element. It is possible to choose between either a single selection or multiple selections. Similarly the number of items that can be chosen can be set using the Minimum selection and the Maximum selection values.

Create checkbox group



Define the details of your desired capture field

Initial state *

Optional ▾

Label *

Automation ID *

Description

150 Characters remaining

Selection type

☒ Single

☐ Multiple

Minimum selection


Maximum selection

Options

Created 1 from 10 option(s)

Default	Label	Value	Actions
<input type="checkbox"/>			Remove ↓ ↑

[Add option](#)



 Create another

Create field



Table

The table element allows the designer to control the number of rows in a table that the user sees.

The designer constructs the number of columns that they need and assigns column headings. A maximum of fifteen columns can be added to a table. The user can then add or delete rows to the table as controlled through the settings on the table element.

The designer can set the Initial Row Count, the Minimum Number of Rows, and the Maximum Number of Rows.

Create table



Define the details of your desired capture field

Initial state *

Optional

Label *

Automation ID *

Description

150 Characters remaining

Initial row count

Minimum number of rows

Maximum number of rows

Columns

Created 1 from 15 column(s)

Allow empty value	Label	Value	Actions
<input type="checkbox"/>			Remove ↓ ↑

Add column

Create another

Create field

Regular expressions

If you choose the regex option in the Form designer, you can program the structure for the data that appears.

The table below illustrates the more common characters that can be used in the regex field and gives you some examples of the matching performed.

Field	What does it do?	Example	Matches
^	Matches beginning of line	This marks the start of your regex entry	
\$	Matches end of line	This marks the end of your regex entry	
.	Matches any character	<code>^a.c\$</code>	abc, a2c, axc
 	OR character	<code>^abc xyz\$</code>	abc or xyz
[...]	Matches anything contained in brackets	<code>^[A-E]\$</code>	Can only use uppercase A to E
[^...]	Matches anything not contained in brackets	<code>^[^A-E]\$</code>	Cannot use uppercase A to E
{x}	The exact 'x' amount of times to match	<code>^[A-E]{2}\$</code>	Can only use uppercase A to E and must contain at least 2 characters
{x,y}	Match between 'x' and 'y' times	<code>^[A-E]{2,4}\$</code>	Can only use uppercase A to E and must contain at least 2 characters and no more than 4
{x,}	Match 'x' amount of times or more	<code>^[A-E]{2,}\$</code>	Can only use uppercase A to E and must contain at least 2 characters but no limit on total number
+	Matches character before + one or more times	<code>^ab+c\$</code>	Matches abc, or abbbc
?	Matches the character before the ? zero or one times	<code>^ab?c\$</code>	Matches ac, or abc
!	Switches the matching of a character to be not allowed	<code>^(?!000)[0-8][0-9]{2}\$</code>	Three digits between 001 to 899 allowed, but specifically 000 is not allowed

Example: National Insurance Number

`^[A-CEGHJ-PR-TW-Z]{1}[A-CEGHJ-NPR-TW-Z]{1}[0-9]{6}[A-D]{1}$`


Here is an explanation of this regex

- `^` the beginning of string
- `[A-CEGHJ-PR-TW-Z]{1}` matches the first letter, it cannot be D, F, I, Q, U or V
- `[A-CEGHJ-NPR-TW-Z]{1}` matches the second letter, it cannot be D, F, I, O, Q, U or V
- `[0-9]{6}` must be six digits
- `[A-D]{1}` matches last letter which can only be A, B, C or D
- `$` the end of the string

This is what a valid National Insurance Number looks like.

National Insurance Number

This is what an invalid national insurance number looks like.

 **National Insurance Number**

Invalid National Insurance Number entered.

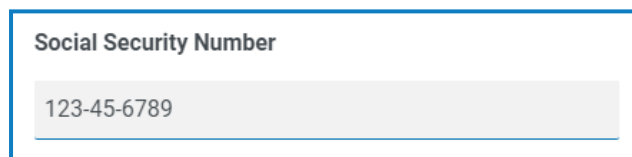
Example Social Security Number

`^(?!000|666)[0-8][0-9]{2}-(?!00)[0-9]{2}-(?!0000)[0-9]{4}$`

Here is an explanation of this regex

- `^` – the beginning of string
- `(?!000|666)` – does not allow either 000 or 666 to be entered
- `[0-8][0-9]{2}` – matches the first digit between 0 and 8, and the next two digits between 00 and 99
- `-` – the user has to type a hyphen as a separator
- `(?!00)[0-9]{2}` – matches two digits between 01 and 99, specifically stopping 00 from being entered
- `-` – the user has to type a hyphen as a separator
- `(?!0000)[0-9]{4}` – matches four digits between 0001 and 9999, specifically stopping 0000 from being entered
- `$` – the end of the string

This is what a valid Social Security Number looks like.



A screenshot of a form field labeled "Social Security Number". The field contains the text "123-45-6789". The field has a light gray background and a blue border.

This is what an invalid Social Security Number looks like.



A screenshot of a form field labeled "Social Security Number". The field contains the text "000-45-6789". Above the text, there is an error message: "Invalid Social Security Number entered." The field has a light gray background and a blue border. The text "000-45-6789" is highlighted with a red wavy underline.

Rules

Rules allow the designer of the form to create simple if-then structure to manipulate fields and pages in a form depending on a specified conditions being met.


Rules Examples

To best illustrate the use of rules we have an example Interact form covering an onboarding process. We have defined some simple rules to show how they can be used in Interact. The form looks as follows:


The screenshot displays the 'Onboarding Blue Prism' form interface. At the top, the title 'Onboarding Blue Prism' is followed by a version indicator '0.1'. To the right of the title are several icons: 'Editor', 'Play test', 'Collapse all', 'Expand all', '2 Pages', '13 Fields', and '55 Rules'. Below the title bar, there is a section titled 'Employee details' with a subtext 'Collect basic information about the new Blue Prism employee'. This section contains three input fields: 'First name' (Mandatory), 'Last name' (Mandatory), and 'Region based in' (Optional). A rule configuration box is visible at the bottom, stating: 'If 'Region based in' equals 'EMEA' then 'Line Manager (EM...'. The form is designed with a blue and white color scheme and includes a vertical timeline on the left side.

The first example rule is controlling the fields or pages that a user can see. So even if you give a user access to a Form through the standard Hub user management, you can hide specific fields for a user that they will not be able to access.

In our example below, though the user Marion Smith has access to the Form, she cannot access the Payroll Details field. This ensures that Marion cannot add payroll details for new starters, whereas other users of the form can.



If 'Submitter'


Cancel


Condition *

is

Value *

Type to find another one

Marion Smith



Then

Elements group *

☒ Fields

☐ Pages

☐ Default elements

Field *


Payroll Details

Condition *

state is

State *

hidden

 Create another

Create rule

Our second example is probably the most common use of rules. In the form we have a field that allows the user to select whether the new starter being onboarded is based in the United Kingdom or the United States. If they select United Kingdom, then we want the user to enter the National Insurance Number, if the user selects United States then a Social Security Number should be visible.

This requires two rules as you cannot hide the fields initially, so you have to 'hide' the fields depending on the option chosen. Here are our two rules.

The image displays two side-by-side screenshots of the Blue Prism Rules configuration interface. Both screenshots show a rule titled "If 'Office Location'".

Left Screenshot:

- Condition *:** equals
- Value *:** United Kingdom
- Then:**
 - Elements group *:** Fields (selected)
 - Field *:** Social Security Number
 - Condition *:** state is
 - State *:** hidden
- Buttons: Create another, Create rule

Right Screenshot:

- Condition *:** equals
- Value *:** United States
- Then:**
 - Elements group *:** Fields (selected)
 - Field *:** National Insurance Number
 - Condition *:** state is
 - State *:** hidden
- Buttons: Create another, Create rule

The first rule states that if the Office location is set to United Kingdom then hide the Social Security Number, the second rule is the reverse, hiding National Insurance Number when United States is selected.

This then ensures that the user only sees a single field for entering the appropriate number for the geographical location.



Both fields in the form are set to an optional state. If they were set to mandatory then the user would need to complete the field, even when they couldn't see it.

Our final example rule is to unhide a page in the form. We have in our form a hidden page, this is the Payroll Details page. This page is only visible when the Payroll Details field is set to Yes as illustrated below.

The screenshot shows the 'If' rule configuration window in Blue Prism. The window is titled 'If 'Payroll Details'' and has a 'Cancel' button in the top right corner. It is divided into two main sections: 'Condition' and 'Then'.

Condition Section:

- Condition ***: A dropdown menu with 'equals' selected.
- Value ***: A dropdown menu with 'Yes' selected.

Then Section:

- Elements group ***: Three radio buttons are present: 'Fields' (unselected), 'Pages' (selected), and 'Default elements' (unselected).
- Page ***: A dropdown menu with 'Payroll Details' selected.
- Condition ***: A dropdown menu with 'state is' selected.
- State ***: A dropdown menu with 'visible' selected.

At the bottom of the window, there are two buttons: 'Create another' (with a close icon 'x') and 'Create rule'.

This rule works in conjunction with the first rule we described. As Marion doesn't have access to the Payroll Details field, she cannot ever get to the second page.

Rules Logic

The rules logic vary depending on the element that is being used within the Form. The table below shows for the specific element type the rule logic that can be applied.

Element	IF options	Then Options	States
Text	Contains, Does not contain, Equals, Does not equal	State is Set value	Optional Mandatory Read only Hidden
Number	Equals, Does not equal, Is less than, Is less than or equal to, Is more than, Is more than or equal to	State is Set value	Optional Mandatory Read only Hidden
Date	Equals, Does not equal, Is after, Is before, Is in month, Is not in month, Is in year, Is not in year	State is Set value	Optional Mandatory Read only Hidden
Time	Equals, Does not equal, Is after, Is before	State is Set value	Optional Mandatory Read only Hidden
Upload	File size is greater than, Files size is less than, File type is, File type is not	State is	
Dropdown	Single choices: Equals, Does not equal Multiple choices: Contains, Does not contain, Selection quantity is, Selection quantity is not, Selection quantity is less than, Selection quantity is less than or equal to, Selection quantity is more than, Selection quantity is more than or equal to	State is Set value(s) to	Optional Mandatory Read only Hidden
Radio Group	Equals, Does not equal	State is	Optional Mandatory Read only Hidden
Checkbox Group	Single choices: Equals, Does not equal Multiple choices: Contains, Does not contain, Selection quantity is, Selection quantity is not, Selection quantity is less than, Selection quantity is less than or equal to, Selection quantity is more than, Selection quantity is more than or equal to	State is Set value(s) to	Optional Mandatory Read only Hidden
Table	Number of rows added equals, Number of rows added is more than, Number of rows added is less than	Not selectable	

For the default items the following apply.

Field	Description
Pages	Can only be added into a Then and allows State changes of Hidden and Visible.
Submitter	Can only be added into an If and allows <i>is</i> and then a defined <i>submitter</i> to be provided.
Submission	Can only be added into a Then and either send for approval or not. The two options are <i>Needs approval</i> or <i>Doesn't need approval</i> .
Priority	Can only be added into a Then and the option available is <i>is</i> where a priority can be set than overrides the default set on the form basic information page.
SLA	Can only be added into a Then and the option available is <i>is</i> where a SLA can be set than overrides the default set on the Form basic information page.