



# Step-by-Step Guide to Validation XML File

The ConnectIt-Workflow Validation module configuration is held in an XML file in the folder where it was installed. By default this is the Program Files\Hilltops IT\ConnectIt-Workflow folder. By amending the details in this file, you are able to control the many different ways in which ConnectIt-Workflow will validate the QuoteWerks documents which you are working with.

The sections in this document firstly provide an example Validation XML file, secondly they explain the Validation XML file tag values in detail before finally providing a full appendix of all the valid entries for the Validation XML File element tag values.

## Table of Contents

|                                               |    |
|-----------------------------------------------|----|
| Table of Contents.....                        | 1  |
| Example Validation XML file.....              | 2  |
| The Validation XML File in Detail .....       | 3  |
| Appendix A – Glossary of Terms .....          | 13 |
| Appendix B – XML File Element Tag Values..... | 14 |



## Example Validation XML file

An example Validation XML file extract is shown below – the Rule warns that the DocDueDate has passed on all INVOICE documents when the User opens them.

```
<?xml version="1.0" standalone="yes"?>
<Rules>
  <xs:schema id="Rules" xmlns="" xmlns:xs="http://www.w3.org/2001/XMLSchema"
xmlns:msdata="urn:schemas-microsoft-com:xml-msdata">
  <xs:element name="Rules" msdata:IsDataSet="true" msdata:Locale="en-US">
    <xs:complexType>
      <xs:choice minOccurs="0" maxOccurs="unbounded">
        <xs:element name="Rule">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="Name" type="xs:string" />
              <xs:element name="DocumentType" type="xs:string" />
              <xs:element name="DocumentStatus" type="xs:string" />
              <xs:element name="ValidationLevel" type="xs:string" />
              <xs:element name="Field" type="xs:string" />
              <xs:element name="FieldType" type="xs:string" />
              <xs:element name="Macro" type="xs:string" />
              <xs:element name="ItemLine" type="xs:string" />
              <xs:element name="Argument" type="xs:string" />
              <xs:element name="ArgumentMacro" type="xs:string" />
              <xs:element name="Event" type="xs:integer" />
              <xs:element name="UserFieldName" type="xs:string" />
              <xs:element name="ErrorLevel" type="xs:string" />
              <xs:element name="CaseSensitive" type="xs:integer" />
              <xs:element name="Append" type="xs:string" />
              <xs:element name="CustomMessage" type="xs:string" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:choice>
    </xs:complexType>
  </xs:element>
</xs:schema>
<Rule>
  <Name>Document Due Date must be less than 9 days away</Name>
  <DocumentType>INVOICE</DocumentType>
  <DocumentStatus>All</DocumentStatus>
  <ValidationLevel>DocHeader</ValidationLevel>
  <Field>DocDueDate</Field>
  <FieldType>Date</FieldType>
  <Macro>9</Macro>
  <ItemLine></ItemLine>
  <Argument></Argument>
  <ArgumentMacro>&Today</ArgumentMacro>
  <Event>4</Event>
  <UserFieldName>Document Due Date</UserFieldName>
  <ErrorLevel>2</ErrorLevel>
  <CaseSensitive></CaseSensitive>
  <Append>False</Append>
  <CustomMessage>False</CustomMessage>
</Rule>
</Rules>
```



## The Validation XML File in Detail

When you open the file for the first time, it will look like the example below:

```
<?xml version="1.0" standalone="yes"?>
<Rules>
<xs:schema id="Rules" xmlns="" xmlns:xs="http://www.w3.org/2001/XMLSchema"
mlns:msdata="urn:schemas-microsoft-com:xml-msdata">
  <xs:element name="Rules" msdata:IsDataSet="true" msdata:Locale="en-US">
    <xs:complexType>
      <xs:choice minOccurs="0" maxOccurs="unbounded">
        <xs:element name="Rule">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="Name" type="xs:string" />
              <xs:element name="DocumentType" type="xs:string" />
              <xs:element name="DocumentStatus" type="xs:string" />
              <xs:element name="ValidationLevel" type="xs:string" />
              <xs:element name="Field" type="xs:string" />
              <xs:element name="FieldType" type="xs:string" />
              <xs:element name="Macro" type="xs:string" />
              <xs:element name="ItemLine" type="xs:string" />
              <xs:element name="Argument" type="xs:string" />
              <xs:element name="ArgumentMacro" type="xs:string" />
              <xs:element name="Event" type="xs:integer" />
              <xs:element name="UserFieldName" type="xs:string" />
              <xs:element name="ErrorLevel" type="xs:string" />
              <xs:element name="CaseSensitive" type="xs:integer" />
              <xs:element name="Append" type="xs:string" />
              <xs:element name="CustomMessage" type="xs:string" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:choice>
    </xs:complexType>
  </xs:element>
</Rules>
```

### Example Rules here...

```
</xs:schema>
</Rules>
```

All your editing should take place between the last two lines of the above, changing or adding to the example Rules.

The example Rules perform the following Validation:

QUOTE Document Type validation:

- Sold To Company name must not be blank (Critical)
- Sold To Contact name must not be blank (Critical)
- Sold To Address Line 1 must not be blank (Warning only)
- Unit Price must not be less than or equal to zero (Warning only)
- Sales Rep must be "Paul Fielding" or "Janice Simmonds" (Critical)



#### ORDER Document Type validation:

- Ship Via must be DHL, UPS or FEDEX (Warning only)
- Due Date must not be blank and must be a date (Critical)
- Bill To Company name must not be blank (Critical)
- Bill To Contact name must not be blank (Critical)
- Bill To Address Line 1 must not be blank (Critical)
- Cust PO # must not be blank (Critical)
- Sales Rep must be "Paul Fielding" or "Janice Simmonds" (Critical)
- All product/service lines must have a Vendor, i.e. Vendor must not be blank (Critical)

#### INVOICE Document Type validation:

- Must not have "hidden" product/service lines, i.e. Exclude Line = Yes, Print Line = No (Warning only)
- Due Date must not be blank and must be a date (Critical)
- Bill To Company name must not be blank (Critical)
- Bill To Contact name must not be blank (Critical)
- Bill To Address Line 1 must not be blank (Critical)
- Cust PO # must not be blank (Critical)
- Sales Rep must be "Paul Fielding" or "Janice Simmonds" (Critical)

The layout for a Rule is as follows. We strongly recommend that you use the snippet below as a starting point – note that the file tags are case sensitive so the rule must be exactly as below, plus all tags must be included for every Rule.

```
<Rule>
  <Name></Name>
  <DocumentType></DocumentType>
  <DocumentStatus></DocumentStatus>
  <ValidationLevel></ValidationLevel>
  <Field></Field>
  <FieldType></FieldType>
  <Macro></Macro>
  <ItemLine></ItemLine>
  <Argument></Argument>
  <ArgumentMacro></ArgumentMacro>
  <Event></Event>
  <UserFieldName></UserFieldName>
  <ErrorLevel></ErrorLevel>
  <CaseSensitive></CaseSensitive>
  <Append></Append>
  <CustomMessage></CustomMessage>
</Rule>
```

To create a Rule, you have to put an appropriate value between the ">" and "<" of each pair. In the following sections, there is a brief explanation of what is required in the Validation XML file, followed by some examples.

#### Name

```
<Name></Name>
```

This is a name for you to identify the rule by, e.g. Item Description not blank:

```
<Name>Item Description not blank</Name>
```



## Document Type

```
<DocumentType></DocumentType>
```

This refers to the Document Type(s) that the rule will be applied to. The rule will only run on the Document Types specified. The options for completing the tag can be seen below:

```
<DocumentType>All</DocumentType>
```

This means that the Rule will run against all Document Types – “QUOTE”, “ORDER” and “INVOICE”.

```
<DocumentType>ORDER</DocumentType>
```

This means that the Rule will run against ORDER type documents only.

```
<DocumentType>QUOTE|ORDER</DocumentType>
```

This means that the Rule will run against QUOTE and ORDER Document Types only. Any combination of Document Types may be used – QUOTE, ORDER or INVOICE – separated by the pipe “|” symbol. Note that no spaces should be used.

## Document Statuses

```
<DocumentStatus></DocumentStatus>
```

This refers to the Document Status(es) that the Rule will be applied to. The Rule will only run on the Document Statuses specified. Firstly, the Document Status options are explored, assuming that the Document Type has been set as “All” or just a single Document Type – “QUOTE”, “ORDER” or “INVOICE”. Multi-Document Type options will be explored next.

```
<DocumentStatus>All</DocumentStatus>
```

This means that the Rule will run against the QuoteWerks document, whatever the Document Status is set to – “Open”, “Closed”, “Won”, etc.

```
<DocumentStatus>Won</DocumentStatus>
```

This means that the Rule will run against documents with a Document Status of “Won” only.

```
<DocumentStatus>Open,Won</DocumentStatus>
```

This means that the Rule will run against documents with a Document Status of “Open” or “Won”. Note that no spaces should be used.

If you require the Rule to run on more than one Document Type, i.e. you have used the pipe “|” separator, then the pipe separator needs to be used in the Document Status too. So, assuming that the Rule is to be run on QUOTE and ORDER Document Types; the DocumentType tag needs to be set as follows:

```
<DocumentType>QUOTE|ORDER</DocumentType>
```

In the Document Status tag, it is necessary to specify which Document Statuses are valid for QUOTE Document Types, and which are valid for ORDER Document Types using the pipe “|” and comma separators, as below:



<DocumentStatus>All|All</DocumentStatus>

The combination of the Document Type and Document Status tags results in the Rule being run against all QUOTE and all ORDER Document Types. Note that no spaces should be used.

<DocumentStatus>All|Open</DocumentStatus>

This means that the Rule will be run against all QUOTE Document Types, but only ORDER Document Types with a Document Status of "Open". Note that no spaces should be used.

<DocumentStatus>Open|Open</DocumentStatus>

This means that the Rule will be run against QUOTE and ORDER Document Types with a Document Status of "Open" only. Note that no spaces should be used.

<DocumentStatus>Open,Won|Open,Won</DocumentStatus>

This means that the Rule will be run against QUOTE and ORDER Document Types with a Document Status of "Open" or "Won". Note that no spaces should be used.

### Validation Level

<ValidationLevel></ValidationLevel>

This tag tells ConnectIt-Workflow if it is dealing with a Document Header field (fields on the Sold to/ Ship to, Sale info, Notes and Custom tabs) or a Document Item field (fields on the grid within the Document Items tab).

<ValidationLevel>DocHeader</ValidationLevel>

This Rule refers to a Document Header field, i.e. a field on the Sold to/ Ship to, Sale info, Notes or Custom tab.

<ValidationLevel>DocItem</ValidationLevel>

The rule refers to a Document Item field, i.e. a field on the grid on the Document Items tab.

### Field

This is the field that the Rule refers to in QuoteWerks.

**Note that this must be the underlying QuoteWerks field name and not the user-renamed field name. To get the underlying QuoteWerks field name for Document Header fields, hold the Ctrl key and double click on the required field to see the "Default Label Name".**

**For Document Item fields, click the QuoteWerks View menu | Customise Columns option, select the column you require and click rename. The underlying field name is in quote marks in the taskbar of the pop-up window that appears.**



## Field Type

```
<FieldType></FieldType>
```

This tells ConnectIt-Workflow what type of data to expect in the field which is being validated. Note that this is the data expected in the field, so if you want to validate that a value in a text field (for example CustomText01) is a date, then "Date" should be entered into this field. Below are the options for completing the tag:

```
<FieldType>Text</FieldType>
```

The field type that the validation is running on must be a "Text" value. Note that this would include numbers with spaces, i.e. phone numbers with a space.

```
<FieldType>Numeric</FieldType>
```

The field type that the validation is running on must be a "Numeric" value.

```
<FieldType>Date</FieldType>
```

The field type that the validation is running on must be a "Date" value.

## Macro

```
<Macro></Macro>
```

This tag sets which of the validation Rules is applied. Below are some examples; for a full list of the options available, please refer to the Appendices at the end of this document.

```
<Macro>1</Macro>
```

The field must not be blank.

```
<Macro>11</Macro>
```

The field value must be greater than a specific value.

## Item Line

```
<ItemLine></ItemLine>
```

This tag only needs to be completed if the Validation Level is "DocItem". This tag allows you to specify which rows of the Document Items grid are validated. Below are some examples; for a full list of the options available, please refer to the Appendices at the end of this document.

```
<ItemLine>0</ItemLine>
```

The Rule will be run against all Document Item rows.

```
<ItemLine>1</ItemLine>
```

The Rule will be run against all Product/Service lines only.



## Argument

<Argument></Argument>

This tag allows you to enter extra information that the specified Macro may require. We strongly recommend that you study the Macro validation Rules that are available and the Rules set up in the example XML file supplied in order to understand what needs to be entered here. Further examples are also available in the ConnectIt Knowledgebase: <http://www.connectit-online.co.uk/kb/>.

Note that the value entered here must be the same data type as that entered in the FieldType tag.

The following Macros require you to enter a value here:

**3 – Must equal a specific value** – in this case the argument should be the value(s) that the field must equal

<Argument>11</Argument>

The field must equal 11.

<Argument>Fedex|UPS|DHL</Argument>

Where a field's value could be one of a number of values, the values should be separated by the pipe"|" character. This Argument specifies that the field must equal either "Fedex", "UPS" or "DHL"

**4 – Must not equal a specific value** – as above, but the field must not equal the Argument Value(s).

**7 – Must begin with** – the field must begin with the value entered here.

<Argument>000</Argument>

The field must begin with "000".

<Argument>Please find attached</Argument>

The field must begin with "Please find attached".

**8 – Must end with** – as above, but the field must end with the value specified.

**9 – Must be less than** – the field must be less than the value entered here.

<Argument>b</Argument>

The field must be alphabetically lower than "b" (assumes a FieldType of "Text").

<Argument>11</Argument>

The value must be less than 11 (assumes a FieldType of "Numeric").

<Argument>03/03/2009</Argument>

The field must be before the specified date (assumes a FieldType of "Date").

**10 – Less than or equal** – as above, but the field must be less than or equal to the value.





**11 – Must be greater than** – as above, but the field must be greater than the value.

**12 – Must be greater than or equal** – as above, but the field must be greater than or equal to the value.

### Argument Macro

```
<ArgumentMacro></ArgumentMacro>
```

This tag allows you to specify a dynamic value as an Argument for a Macro. Below are the options for completing the tag:

```
<ArgumentMacro>&amp;Today</ArgumentMacro>
```

The current system date will be used for the Rule Argument.

```
<ArgumentMacro>&amp;FirstDayOfThisWeek</ArgumentMacro>
```

The date on the first day of the current week will be used for the Rule Argument.

```
<ArgumentMacro>&amp;FirstDayOfNextWeek</ArgumentMacro>
```

The date on the first day of next week will be used for the Rule Argument.

```
<ArgumentMacro>&amp;FirstDayOfThisMonth</ArgumentMacro>
```

The date on the first day of this month will be used for the Rule Argument.

```
<ArgumentMacro>&amp;FirstDayOfNextMonth</ArgumentMacro>
```

The date on the first day of the next month will be used for the Rule Argument.

```
<ArgumentMacro>&amp;NoDaysFromToday</ArgumentMacro>
```

A number of days is required to be entered into the Argument tag.

```
<Argument>10</Argument>
```

The value that is placed in the Argument tag will be replaced by a date the number of days specified from the current system date, e.g. if 10 is entered, then the date 10 days from the date the rule is run will be entered as an argument. Note that negative values are also supported to run the Rule against, thus a number of days before the current system date or the following Argument Macro can be used.

```
<ArgumentMacro>&amp;NoDaysBeforeToday</ArgumentMacro>
```

As above, but calculates the number of days before the current system date from the Argument tag value entered.



## Event

```
<Event></Event>
```

This tag allows you to specify the QuoteWerks event that will trigger ConnectIt-Workflow to validate the current open document. Below are some examples; for a full list of the options available, please refer to the Appendices at the end of this document.

```
<Event>15</Event>
```

The Rules are run against the QuoteWerks Document before the user can save the document.

```
<Event>12</Event>
```

The Rules are run against the QuoteWerks Document before the user can print the document.

## User Field Name

```
<UserFieldName></UserFieldName>
```

As specified above in the Field tag, the QuoteWerks default must be entered. This tag allows you to enter the name that appears in your QuoteWerks if you have renamed any of your Document Header field labels or Document Items grid column captions. It will be the value specified here which is used for any Warning or Critical error messages that ConnectIt-Workflow displays.

```
<UserFieldName></UserFieldName>
```

If the value is left blank, then the QuoteWerks default is used.

```
<UserFieldName>My Field Name</UserFieldName>
```

To make any Warning or Critical error messages that ConnectIt-Workflow displays more meaningful to the QuoteWerks users, enter the appropriate field name here.

## Error Level

```
<ErrorLevel></ErrorLevel>
```

This allows you to specify a level for the error message that is displayed: warning or critical. A warning message gives the user the option to ignore the errors within the document and continue; a critical error does not allow the user to continue without correcting the error, i.e. the user will not be allowed to save or print a Document until the errors are corrected.

```
<ErrorLevel>1</ErrorLevel>
```

The Error Level is Critical and the user is not allowed to continue until the error is corrected.

```
<ErrorLevel>2</ErrorLevel>
```

The Error Level is just a Warning and the user is allowed to ignore the error.



## Case Sensitive

<CaseSensitive></CaseSensitive>

This tag only applies to Rules with Macro tag values of 3 (must equal), 4 (must not equal), 7 (must begin with) and 8 (must end with). For all others, it may be left blank.

<CaseSensitive>>true</CaseSensitive>

Case sensitivity will be on.

<CaseSensitive>>false</CaseSensitive>

Case sensitivity will be off.

## Append

<Append></ Append>

This tag applies to most macros where an argument has been supplied. It controls the ability to correct the QuoteWerks document field value to the argument value.

<Append></ Append> or <Append>False</ Append>

Using the above values, the QuoteWerks document will not be changed and the error message will be displayed.

<Append>True</ Append>

The argument specified for the rule will replace the current QuoteWerks field value. If multiple arguments are specified the first value will be used.

There is also a third way to use append, if you use a value that is not blank, "True" or "False". The value in the append tag will be used to replace the current QuoteWerks field value.

For example:

<Append>11</ Append>

The above will result in 11 replacing the current QuoteWerks value.

## Custom Message

<CustomMessage></CustomMessage>

If you would like to specify your own error messages for a rule you can using the CustomMessage tag. This tag applies to all rules.

<CustomMessage>False</CustomMessage>

The standard ConnectIt error message will be displayed.

<CustomMessage>True</CustomMessage>

You then need to enter you custom error message into the <UserFieldName></UserFieldName> tag.

For example:

<CustomMessage>True</CustomMessage> and



<UserFieldName>Validation failed on required product VR127</UserFieldName>

The above will result in "Validation failed on required product VR127" being displayed to the user if the rule fails.



## Appendix A – Glossary of Terms

The glossary of terms below defines the terms used in the Validation module documentation.

| Term            | Meaning                                                                                                                                         |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Rule            | A combination of a chosen Event, Level, Field, Expression and Value which checks that the QuoteWerks user is adhering to business best practice |
| Document Type   | The type of the document which is open in QuoteWerks (as specified by the "DocType" value on the Document Items tab)                            |
| Document Status | The status of the document which is open in QuoteWerks (as specified by the "DocStatus" value on the Sale Info tab)                             |
| Event           | The trigger caused by a user's action in QuoteWerks                                                                                             |
| Level           | Whether the rule should be applied to a Document Header or a Document Item field                                                                |
| Item Lines      | (Document Items only.) The row(s) which the validation Rule should be executed against                                                          |
| Field           | The QuoteWerks field which the Rule is to be executed against                                                                                   |
| User Field      | The name of the QuoteWerks field which the user sees (i.e. label caption)                                                                       |
| Macro           | The validation rule type to be executed                                                                                                         |
| Field Type      | The expected data type in the specified Field                                                                                                   |
| Argument        | The specific value to use for the rule                                                                                                          |
| Error Level     | Whether the error should stop the user from continuing or just warn of a potential problem with the document                                    |
| Case Sensitive  | Whether Text Field Type checks should be case sensitive                                                                                         |



## Appendix B – XML File Element Tag Values

### DocType – Document Type

| File Value | Notes                                           |
|------------|-------------------------------------------------|
| All        | The Rule applies to all document types          |
| QUOTE      | The Rule applies to QUOTE document types only   |
| ORDER      | The Rule applies to ORDER document types only   |
| INVOICE    | The Rule applies to INVOICE document types only |

### DocStatus – Document Status

| File Value   | Notes                                                          |
|--------------|----------------------------------------------------------------|
| All          | The Rule applies to all Document Statuses                      |
| [Other text] | The Rule applies to Documents with this particular Status only |

### ValidationLevel – Validation Level

| File Value | Notes                                                                                                      |
|------------|------------------------------------------------------------------------------------------------------------|
| DocHeader  | Fields on the Sold to / Ship to, Sales Info, Notes or Custom tabs, i.e. those in the DocumentHeaders table |
| DocItem    | Fields on the Document Items tab grid, i.e. those in the DocumentItems table                               |

### Field

| File Value   | Notes                                                                  |
|--------------|------------------------------------------------------------------------|
| [Field Name] | The name of the QuoteWerks field which the Rule should execute against |

### FieldType – Field Type

| File Value | Notes                                     |
|------------|-------------------------------------------|
| Text       | The expected data type is a string value  |
| Numeric    | The expected data type is a numeric value |
| Date       | The expected data type is a date value    |

### Event

| File Value | Notes                                                                                                                                    |
|------------|------------------------------------------------------------------------------------------------------------------------------------------|
| 0          | AfterContactSelection - when a contact has been selected for use in the document                                                         |
| 1          | AfterConvertDocument - when a document has been converted to a different type                                                            |
| 2          | AfterDeleteDocument - when a document has been deleted                                                                                   |
| 3          | AfterNewDocument - when a new document has been initialized                                                                              |
| 4          | AfterOpenDocument - when a document was opened                                                                                           |
| 5          | AfterRenameDocument - when a document was renamed                                                                                        |
| 6          | AfterSaveDocument - when a document was saved                                                                                            |
| 7          | AfterShippingSelection - when the shipping charge calculation form has closed                                                            |
| 8          | BeforeContactSelection - when a contact is about to be selected to copy into the document                                                |
| 9          | BeforeConvertDocument - when a document is about to be converted to a different type; a critical error cancels this event                |
| 10         | BeforeDeleteDocument - when a document is about to be deleted; a critical error cancels this event                                       |
| 11         | BeforePreviewAction - when a printing action is about to be initiated from the Print Preview window; a critical error cancels this event |



|    |                                                                                                                                                                                   |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 12 | BeforePrint - when a document is about to be printed/e-mailed/faxed/previewed; a critical error cancels this event                                                                |
| 13 | BeforePrintDocument - when printing directives have been selected and the option to either print, preview, or email is about to be initiated; a critical error cancels this event |
| 14 | BeforeRenameDocument - when a document is about to be renamed; a critical error cancels this event                                                                                |
| 15 | BeforeSaveDocument - when a document is about to be saved; a critical error cancels this event                                                                                    |
| 16 | BeforeShippingSelection - when the shipping charge calculation form is about to be opened; a critical error cancels this event                                                    |

### ItemLine – Item Line

| File Value | Notes                                                                                                      |
|------------|------------------------------------------------------------------------------------------------------------|
| 0          | All lines on the Document Items tab grid                                                                   |
| 1          | All Product / Service lines on the Document Items tab grid                                                 |
| 2          | All Comment lines on the Document Items tab grid                                                           |
| 4          | All Sub Total lines on the Document Items tab grid                                                         |
| 8          | All Group Header lines on the Document Items tab grid                                                      |
| 16         | All Running Sub Total lines on the Document Items tab grid                                                 |
| 64         | All Percent Discount lines on the Document Items tab grid                                                  |
| 128        | All Percent Charge lines on the Document Items tab grid                                                    |
| 201        | All lines marked for printing on the Document Items tab grid                                               |
| 501        | The first line on the Document Items tab grid                                                              |
| 1001       | The first Product / Service line on the Document Items tab grid                                            |
| 1002       | The first Comment line on the Document Items tab grid                                                      |
| 1004       | The first Sub Total line on the Document Items tab grid                                                    |
| 1008       | The first Group Header line on the Document Items tab grid                                                 |
| 1016       | The first Running Sub Total line on the Document Items tab grid                                            |
| 1064       | The first Percent Discount line on the Document Items tab grid                                             |
| 1128       | The first Percent Charge line on the Document Items tab grid                                               |
| 301        | All lines on the Document Items tab grid apart from the first line                                         |
| 2001       | All Product / Service lines on the Document Items tab grid apart from the first Product / Service line     |
| 2002       | All Comment lines on the Document Items tab grid apart from the first Comment line                         |
| 2004       | All Sub Total lines on the Document Items tab grid apart from the first Sub Total line                     |
| 2016       | All Running Sub Total lines on the Document Items tab grid apart from the first Running Sub Total line     |
| 2064       | All Percent Discount lines on the Document Items tab grid apart from the first Percent Discount line       |
| 2128       | All Percent Charge lines on the Document Items tab grid apart from the first Percent Charge line           |
| 401        | All lines marked for printing on the Document Items tab grid apart from the first line marked for printing |

### Macro

| File Value | Notes                                                                                                                               |
|------------|-------------------------------------------------------------------------------------------------------------------------------------|
| 1          | The field value must not be blank                                                                                                   |
| 2          | The field value must be blank                                                                                                       |
| 3          | The field value must equal a specific value; rules with optional values should have the values separated by pipe " " characters     |
| 4          | The field value must not equal a specific value; rules with optional values should have the values separated by pipe " " characters |
| 5          | The field value must be numeric value                                                                                               |
| 6          | The field value must be date value                                                                                                  |
| 7          | The field value must begin with a specific value; rules with optional values should have the                                        |



|      |                                                                                                                                    |
|------|------------------------------------------------------------------------------------------------------------------------------------|
|      | values separated by pipe " " characters                                                                                            |
| 8    | The field value must end with a specific value; rules with optional values should have the values separated by pipe " " characters |
| 9    | The field value must be less than a specific value                                                                                 |
| 10   | The field value must be less than or equal to a specific value                                                                     |
| 11   | The field value must be greater than a specific value                                                                              |
| 12   | The field value must be greater than or equal to a specific value                                                                  |
| 13   | The Document must contain a line item that equals the specific value                                                               |
| 1001 | The line must have the Exclude attribute set (DocumentItems only)                                                                  |
| 1002 | The line must have the Hide Price attribute set (DocumentItems only)                                                               |
| 1004 | The line must have the Don't Print attribute set (DocumentItems only)                                                              |
| 1008 | The line must have the Sub Item attribute set (DocumentItems only)                                                                 |
| 1016 | The line must have the Optional attribute set (DocumentItems only)                                                                 |
| 1032 | The line must have the Alternate Price Overridden attribute set (DocumentItems only)                                               |
| 1064 | The line must have the Print Picture attribute set (DocumentItems only)                                                            |
| 2001 | The line must not have the Exclude attribute set (DocumentItems only)                                                              |
| 2002 | The line must not have the Hide Price attribute set (DocumentItems only)                                                           |
| 2004 | The line must not have the Don't Print attribute set (DocumentItems only)                                                          |
| 2008 | The line must not have the Sub Item attribute set (DocumentItems only)                                                             |
| 2016 | The line must not have the Optional attribute set (DocumentItems only)                                                             |
| 2032 | The line must not have the Alternate Price Overridden attribute set (DocumentItems only)                                           |
| 2064 | The line must not have the Print Picture attribute set (DocumentItems only)                                                        |

### ArgumentMacro – Argument Macro

The Argument Macro value may be an absolute or one of the macro values defined below. Note that the macro values may also be pipe separated.

| File Value           | Notes                                                     |
|----------------------|-----------------------------------------------------------|
| &Today               | The current system date                                   |
| &FirstDayOfThisWeek  | The date on Monday of this week                           |
| &FirstDayOfNextWeek  | The date on Monday of next week                           |
| &FirstDayOfThisMonth | The 1st day of this month                                 |
| &FirstDayOfNextMonth | The 1st day of next month                                 |
| &NoDaysFromToday     | A specified number of days from the current system date   |
| &NoDaysBeforeToday   | A specified number of days before the current system date |

### Argument

The Argument values must relate to the Field Type specified for the Rule.

| File Value | Notes                                                                                                    |
|------------|----------------------------------------------------------------------------------------------------------|
| Text       | [Any Text Value] – rules with optional values should have the values separated by pipe " " characters    |
| Numeric    | [Any Numeric Value] – rules with optional values should have the values separated by pipe " " characters |
| Date       | [Any Date Value] – rules with optional values should have the values separated by pipe " " characters    |





### ErrorLevel – Error Level

| File Value | Notes                                                                                                                           |
|------------|---------------------------------------------------------------------------------------------------------------------------------|
| 1          | Critical – the Rule must be adhered to, the user will not be allowed to continue (if the trigger event can be cancelled)        |
| 2          | Warning – the Rule is a prompt only and the user will be asked if they wish to continue (if the trigger event can be cancelled) |

### CaseSensitive – Case Sensitive

| File Value | Notes                                             |
|------------|---------------------------------------------------|
| true       | True – the text check will be case sensitive      |
| false      | False – the text check will not be case sensitive |

