

Simple Example: Period

On the screen it looks like this:

PERIOD
From 9 September 2021 to 30 September 2021

B I U
From 9 September 2021 to 30 September 2021

Period Summary

1
+

Tag Page Name

Inception Date
9 September 2021

Expiry Date
30 September 2021

Inception Time
+ Add

Expiry Time
+ Add

Time Qualifier
+ Add

The presence of defined data is indicated by the "luggage label" tag, but otherwise the contract reads as before.

When editing, the placeholders are highlighted.

To the right, a pane appears allowing the defined data tags to be defined perfectly.

The corresponding data from `/api/risks/$IC/lineitem/Period` looks like this (some tags removed for readability):

```
[
  {
    "mrcHeading": "Period",
    "mrcSection": "RiskDetails",
    "originalHeading": "PERIOD",
    "tagPages": [
      {
        "pageID": "B9638693-95ED-48D2-9C2E-A1B2885FE640",
        "title": "",
        "sectionIDs": []
      }
    ],
    "index": 5,
    "placeholders": [
      {
        "originalValue": "9 September 2021",
        "value": "9 September 2021",
        "tags": [
          "Page:B9638693-95ED-48D2-9C2E-A1B2885FE640",
          "Inception_Date"
        ]
      }
    ]
  }
]
```

```
[
  {
    "phType": "Date",
    "name": "DefinedData0"
  },
  {
    "originalValue": "30 September 2021",
    "value": "30 September 2021",
    "tags": [
      "Page:B9638693-95ED-48D2-9C2E-A1B2885FE640",
      "Expiry_Date"
    ],
    "phType": "Date",
    "name": "DefinedData1"
  }
],
"locked": false,
"elements": [
  {
    "index": 0,
    "text": "From [[DefinedData0]] to [[DefinedData1]]"
  }
]
]
```

Preparing a payload for /api/risks/\${RiskID}/editLineItem

Updates to a single line item should be performed via the editLineItem API endpoint. The structure of the payload is:

- op : edit
- _rev : revision of the risk document
- index : the line item index
- attributes : { locked : true or false }
- tagPages : an array of tag pages; the simple case is [{ pageID : GUID, title : blank, sectionIDs : [] }]
- elements : an array of elements, covered in other documentation
- placeholders : an array of placeholders, covered in other documentation

To transform from the results of /api/risks/\${RiskID}/lineitem/\${MRCHeading}

- Choose the first item in the array (the endpoint allows for multiple line items for a heading)
- Initialise a new object with op : edit
- Set _rev to be the revision of the risk document
- Copy into the object the index. Additionally, copy tagPages, elements, placeholders if they existed, or initialise as blank arrays
- Adjust or fill in the tagPages, elements, and placeholders as required

Here is a simple example payload for adjusting index 11, Premium :

```
{
  "op": "edit",
  "_rev": "18-c00efb31be8313aa232bbb881a0a3eaa",
  "index": 11,
  "elements": [
    {
      "index": 0,
      "text": "The premium will [[DefinedData0]]"
    }
  ],
  "tagPages": [
    {
      "sectionIDs": [],
      "title": "",
      "pageID": "BC77BFAC-A684-45EB-99FF-321D05850000"
    }
  ],
  "placeholders": [
    {
      "originalValue": "USD 12,500",
      "value": "USD 12,500",
      "phType": "DefinedData",
      "name": "DefinedData0",
    }
  ]
}
```

```

    "tags": [
      "Page:BC77BFAC-A684-45EB-99FF-321D05850000",
      "Premium_Amount"
    ]
  }
}

```

Tag Pages

Tag Pages exist to group defined data tags. This is particularly important when a Sectioned Risk has values per section.

In the following example, we have a risk with two sections: Hull and Cargo. The screen and multi-section data are:

Sections

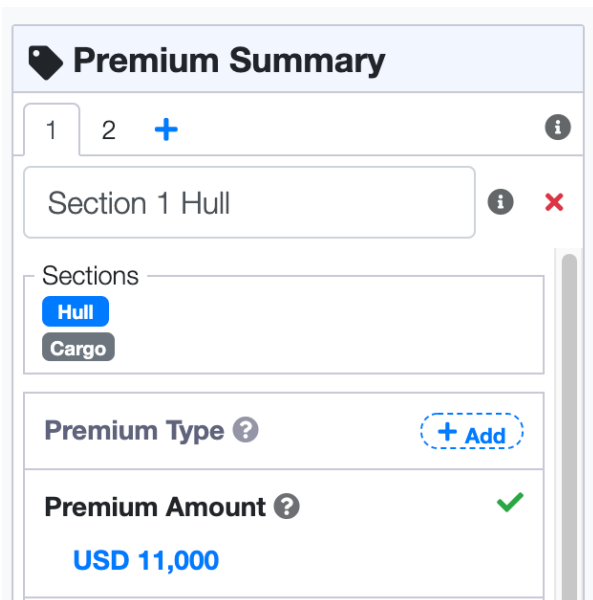
[Manage Sections](#)

ID	Name
1	Hull
2	Cargo

```

{
  "_id": "ICC3856DC2-A758-4982-9375-8E3CF703481F::MS",
  "_rev": "1-1c47a463fcbbb8b5bc63de79f2603a80",
  "associatedRootID": "ICC3856DC2-A758-4982-9375-8E3CF703481F",
  "channels": [
    "blackpool_MARINE"
  ],
  "createdAt": "2021-10-12 12:09:56",
  "sections": [
    {
      "index": 1,
      "multiSectionId": "1",
      "multiSectionName": "Hull"
    },
    {
      "index": 2,
      "multiSectionId": "2",
      "multiSectionName": "Cargo"
    }
  ],
  "type": "RWMultiSectionStorer",
  "updatedAt": "2021-10-12 12:09:56"
}

```



The data entry screen uses tab pages and highlights "pills" to identify the related section.

The tagPages JSON is then:

```

"tagPages": [
  {
    "title": "Section 1 Hull",
    "sectionIDs": [
      "1"
    ],
    "pageID": "BC77BFAC-A684 ... 0000"
  },
  {
    "title": "Section 2 Cargo",
    "sectionIDs": [
      "2"
    ],
    "pageID": "46D32E14-6DF7 ... 6E4F"
  }
],

```

B I U ↺ ↻ Section 1 <u>USD 11,000</u> Section 2 <u>USD 22,000</u>	<pre> "placeholders": [{ "originalValue": "USD 11,000", "name": "DefinedData0", "value": "USD 11,000", "phType": "DefinedData", "tags": ["Page:BC77BFAC-A684 ... 0000", "Premium_Amount"] }, { "originalValue": "USD 22,000", "name": "DefinedData1", "value": "USD 22,000", "phType": "Amount", "tags": ["Page:46D32E14-6DF7 ... 6E4F", "Premium_Amount"] }], </pre>
--	---

Pre-Defined Tags

Our spreadsheet "List of MRC Headings and Tags with validations.xlsx" is kept up to date with the tags. At time of writing, the 57 defined tags are as follows. In each case, the tag listed below is recorded in the JSON with spaces replaced by underscore, so "Premium Amount" becomes "Premium_Amount" and "Tax %" becomes "Tax_%".

MRC Heading	Tag	Validation Rule	Example
Period	Inception Date	Must be a valid date in format DD Month YYYY	1 January 2021
	Expiry Date	Must be a valid date in format DD Month YYYY	31 December 2021
	Inception Time	Must be a valid time, separated by either : or . and optionally followed by am or pm	12:01 a.m.
	Expiry Time	Must be a valid time, separated by either : or . and optionally followed by am or pm	12:01 a.m.
	Time Qualifier	Must be one of the permitted list of values (see list in next column), including 'Local Standard Time'	
Premium	Premium Amount	Must be entered as a currency followed by an amount in the format CCY N.NNN.NNN.NN	GBP 1,000,000
	Premium Rate %	Must be a percentage, decimals permitted	70.5%
	Premium Type	Must be one of the permitted list of values (see list in next column)	
	Premium Period Qualifier	Must be one of the permitted list of values (see list in next column)	
	Premium Application Basis	Must be a percentage, decimals permitted, or 'for order'	100% or for order
	Adjustment Basis	Free text, no validation	Turnover or actual sales
	Adjustment Basis Amount	Must be entered as a currency followed by an amount in the format CCY N.NNN.NNN.NN	GBP 1,000,000
	Adjustment Rate %	Must be a percentage, decimals permitted	0.25%
	Adjustment Date	Must be a valid date in format DD Month YYYY	31 December 2021
	Instalment Frequency	Must be a number (i.e. 1, 2, 4, 12) or Annual, Quarterly, Half-Yearly, Monthly	Annual/Quarterly/Half-Yearly/Monthly or a number
	Instalment Number	Must be a whole number	1
Premium Payment Terms	Instalment Amount	Must be entered as a currency followed by an amount in the format CCY N.NNN.NNN.NN	GBP 1,000,000
	Instalment Due Date	Must be a valid date in format DD Month YYYY	31 January 2021
	Instalment Frequency	Must be a number (i.e. 1, 2, 4, 12) or Annual, Quarterly, Half-Yearly, Monthly	Annual/Quarterly/Half-Yearly or a number
	Instalment Number	Must be a whole number	1
	Instalment Amount	Must be entered as a currency followed by an amount in the format CCY N.NNN.NNN.NN	GBP 250,000
Taxes payable by insured and administered by insurer(s)	Instalment Due Date	Must be a valid date in format DD Month YYYY	31 January 2021
	Settlement Terms	Free text, no validation	90 days
	Tax %	Must be a percentage, decimals permitted	2.5%
	Tax Amount	Must be entered as a currency followed by an amount in the format CCY N.NNN.NNN.NN	GBP 10,000
	Tax Country	Must be one of the permitted list of values (see list in next column)	
Taxes payable by insurers and administered by insured or their agent	Tax Rate Basis	Must be one of the permitted list of values (see list in next column)	
	Tax Type	Must be one of the permitted list of values (see list in next column)	
	Tax %	Must be a percentage, decimals permitted	2.5%
	Tax Amount	Must be entered as a currency followed by an amount in the format CCY N.NNN.NNN.NN	GBP 10,000
	Tax Country	Must be one of the permitted list of values (see list in next column)	
Basis of Written Line	Tax Rate Basis	Must be one of the permitted list of values (see list in next column)	
	Tax Type	Must be one of the permitted list of values (see list in next column)	
	Basis of Written Line	Must be one of the permitted list of values (see list in next column)	
	Basis of Signed Line	Must be one of the permitted list of values (see list in next column)	
	Order Hereon	Must be a percentage, decimals permitted, or 'As per total signed lines'	0-100% (of 0-100%) OR 'As per total signed lines'
Total brokerage	Brokerage %	Must be a percentage, decimals permitted	15.0%
	Brokerage Amount	Must be entered as a currency followed by an amount in the format CCY N.NNN.NNN.NN	GBP 10,000
Retail brokerage	Brokerage %	Must be a percentage, decimals permitted	15.0%
	Brokerage Amount	Must be entered as a currency followed by an amount in the format CCY N.NNN.NNN.NN	GBP 10,000
Wholesale brokerage	Brokerage %	Must be a percentage, decimals permitted	15.0%
	Brokerage Amount	Must be entered as a currency followed by an amount in the format CCY N.NNN.NNN.NN	GBP 10,000
Other deductions from premium	Deduction Type	Must be one of the permitted list of values (see list in next column)	
	Deduction %	Must be a percentage, decimals permitted	2.5%
	Deduction Amount	Must be entered as a currency followed by an amount in the format CCY N.NNN.NNN.NN	GBP 10,000
	Deduction Basis	Must be one of the permitted list of values (see list in next column)	
Tax payable by insurer(s)	Tax %	Must be a percentage, decimals permitted	2.5%
	Tax Amount	Must be entered as a currency followed by an amount in the format CCY N.NNN.NNN.NN	GBP 10,000
	Tax Country	Must be one of the permitted list of values (see list in next column)	
	Tax Rate Basis	Must be one of the permitted list of values (see list in next column)	
	Tax Type	Must be one of the permitted list of values (see list in next column)	
Allocation of Premium to Coding	Risk Code	Must be one of the permitted list of values (see list in next column)	
	Fill Code	Free text, no validation	Foreign Insurance Legislation code
	Risk Code %	Must be a percentage, decimals permitted	75.0%

	FIL Code %	Must be a percentage, decimals permitted	75.0%
Settlement Due Date	Settlement Due Date	Must be a valid date in format DD Month YYYY	31 January 2021
Endorsement Effective Date	Endorsement Effective Date	Must be a valid date in format DD Month YYYY	31 January 2021

Sending a Data-Defined Risk to /api/risks/save

The payload for /api/risks/save is a JMRC object. It can have a full set of Defined Data tags within it.

Note that this endpoint requires five elements as query parameters:

- UMR e.g. B0999JC1210211537
- contractType e.g. Cyber Cover
- insuranceType e.g. Insurance
- insuredName e.g. Westwood Trading Inc
- teamChannel e.g. blackpool_MARINE

```
{
  "MRCContract": {
    "lineItems": [
      {
        "index": 0,
        "elements": [],
        "mrcSection": "RiskDetails",
        "nameVariation": "NonMRCHeading",
        "originalHeading": "RISK DETAILS",
        "mrcHeading": "NonMRCHeading",
        "originalSection": "self",
        "placeholders": []
      },
      ...
      {
        "index": 5,
        "elements": [
          {
            "index": 0,
            "text": "From [[DefinedData0]] to [[DefinedData1]]."
          }
        ],
        "subItems": [],
        "tagPages": [
          {
            "pageID": "B9638693-95ED-48D2-9C2E-A1B2885FE640",
            "title": "",
            "sectionIDs": []
          }
        ],
        "placeholders": [
          {
            "value": "11 October 2021",
            "phType": "Date",
            "name": "DefinedData0",
            "tags": [
              "Page:B9638693-95ED-48D2-9C2E-A1B2885FE640",
              "Inception_Date"
            ],
            "originalValue": "11 October 2021"
          },
          {
            "value": "31 October 2021",
            "phType": "Date",
            "name": "DefinedData1",
            "tags": [
              "Page:B9638693-95ED-48D2-9C2E-A1B2885FE640",
              "Expiry_Date"
            ],
            "originalValue": "31 October 2021"
          }
        ]
      }
    ]
  }
}
```

Error Cases

Incorrect data will be rejected, without an error message detailing what is wrong. Here are examples of what will be rejected.

Instalment_Number requires an integer. The endpoint will error if it is sent a decimal point. Most tags have a required format; only a few allow free text.

```
{
  "originalValue": "90909.12",
  "value": "90909.12",
  "phType": "DefinedData",
  "name": "DefinedData1",
  "tags": [
    "Page:3EF0336E-1D59-40DF-85D4-FDFD6E20406",
    "Instalment_Number"
  ]
}
```

Dates require the month as at least three letters, so "4 October 2021", not "4/10/2021".

If the index points to the wrong MRC Heading, then otherwise acceptable values will be rejected.

Tags need to be from the pre-defined list, so "Review_Date" will be rejected.

The Page: tag for each placeholder needs to match a value in the tagPages array.

The data validation is fussy. It will not allow, for instance, leading or trailing spaces, a space before the % sign, two spaces between currency and amount, currency in lowercase etc.

<pre>{ "originalValue": "4/10/2021", "value": "4/10/2021", "tags": ["Page:B9638693-95ED-48D2-9C2E-A1B2885FE640", "Inception_Date"], "phType": "Date", "name": "DefinedData0" },</pre>
<pre>"index": 4, "placeholders": [{ "originalValue": "7 October 2021", "value": "7 October 2021", "tags": ["Page:B9638693-95ED-48D2-9C2E-A1B2885FE640", "Inception_Date"], "phType": "Date", "name": "DefinedData0" }, </pre>
<pre>{ "originalValue": "31 October 2021", "value": "31 October 2021", "tags": ["Page:B9638693-95ED-48D2-9C2E-A1B2885FE640", "Review_Date"], "phType": "Date", "name": "DefinedData1" }</pre>
<pre>"tagPages": [{ "pageID": "B9638693-95ED-48D2-9C2E-A1B2885FE640", "title": "", "sectionIDs": [] }], "placeholders": [{ "originalValue": "11 October 2021", "value": "11 October 2021", "tags": ["Page:00000000-0000-0000-0000-000000000000", "Inception_Date"], "phType": "Date", "name": "DefinedData0" }, </pre>
<pre>{ "originalValue": " usd 12,500", "value": " usd 12,500", "phType": "DefinedData", "name": "DefinedData0", "tags": ["Page:BC77BFAC-A684-45EB-99FF-321D05850000", "Premium_Amount"] }, { "originalValue": "1.23 % ", "value": "1.23 % ", "phType": "DefinedData", "name": "DefinedData1", "tags": ["Page:BC77BFAC-A684-45EB-99FF-321D05850000", "Premium_Rate_"] } }</pre>