IBM® OpenPages® GRC
Version 8.0.0

Task Focused UI – JSON Quick Guide 3.8

Disclaimer

Introduction of the View Designer in IBM OpenPages GRC 8.0.0.3

You can now create and design custom views on the Design tab in the View Designer. All of the capabilities in the JSON are also in the Design tab. You do not have to use or learn JSON to be able to use the View Designer.

The **JSON** tab is provided so that you can copy views. You can optionally see how a view is structured and use it for reference.

Overview

There are three view definition types in the Task Focused UI:
- Task View
- Grid View
- Creation View

Inline Guidance

Inserts customer-specific help text enclosed in a box and inline with other fields. Light formatting is not supported.

```
"name": "samplehelp",
"type": "help",
"helpTopic": "What is important",
"helpText": "Please review the controls design effectiveness and
operating … overall rating.",
"helpTopicLabels": [
    { "locale": "en_US",
      "value": "What is important"}
```

User guidance

Displays customer-specific help text and field information. Optionally lists expected fields. Light formatting is supported.

```
"guidance": {
  "nameLabels": [],
  "helpTopicLabels": [
  {"locale": "en_US",
    "value": "Issues in progress"}
  "helpTopic": "Issue in progress",
  "helpText": "In order to request the issue for closure; **all action items need to be
closed** \n\n \n\n **Requesting a New Due Date** \n\n If you want to request a due date change
please provide the requested new date in the **Requested Due Date** field"  }
  "fields": [ {"name": "System Fields:Name"},
  {"name": "OPSS-Iss:Issue Type"},
  {"name": "OPSS-Iss:Assignee", "required": true},
```

Task View header

Displays an Actions button and up to three fields, which are read only. Rules cannot be applied.

```
"header": {
  "fields": [
  {"name": "OPSS-Iss:Status", },
  {"name": "OPSS-Iss:Priority", },
  {"name": "Action Items",
    "type": "relationship",
    "nameLabels": [
      {"locale": "en_GB",
        "value": "Action Items"}, ],
    "subDisplayType": "Count",
    "objectTypeName": "SOXTask",
    "relationshipType": "children" } ],
  "actionFields": [] },
```

If the object type has workflows, the workflow controls the **Actions** button. Otherwise, you can include one field that performs an action, for example, LCTransition for lifecycle-powered objects or any other enumerated field. Button label for the field is always **Actions**.

Columns (groups)

Places fields in columns rather than horizontally down the page. Four columns is the maximum allowed.

```
{ "name": "group1",
  "type": "group",
  "nameLabels": [],
  "columns": 2,
  "fields": [ { "name": "OPSS-Iss:Priority", },
   {"name": "OPSS-Iss:Status", },
    {"name": "OPSS-Iss:Issue Type"},
```

Fields

Fields can be added in the Header, User Guidance, Main Area, and relationship fields.
Fields have a set of display types and attributes. You can also apply rules to them.

Colors

For enumerated field values

```
{
  "name": "OPSS-Risk-Qual:Residual Risk Rating",
  "enumValueColors": [
  {"enumValueName": "High", "color": "red"},
  {"enumValueName": "Low", "color": "green"},
  {"enumValueName": "Medium","color": "yellow"}]
```

Inherent Risk Rating

Very High

For value ranges for numbers, currencies, progress bars, counts (relationship fields).
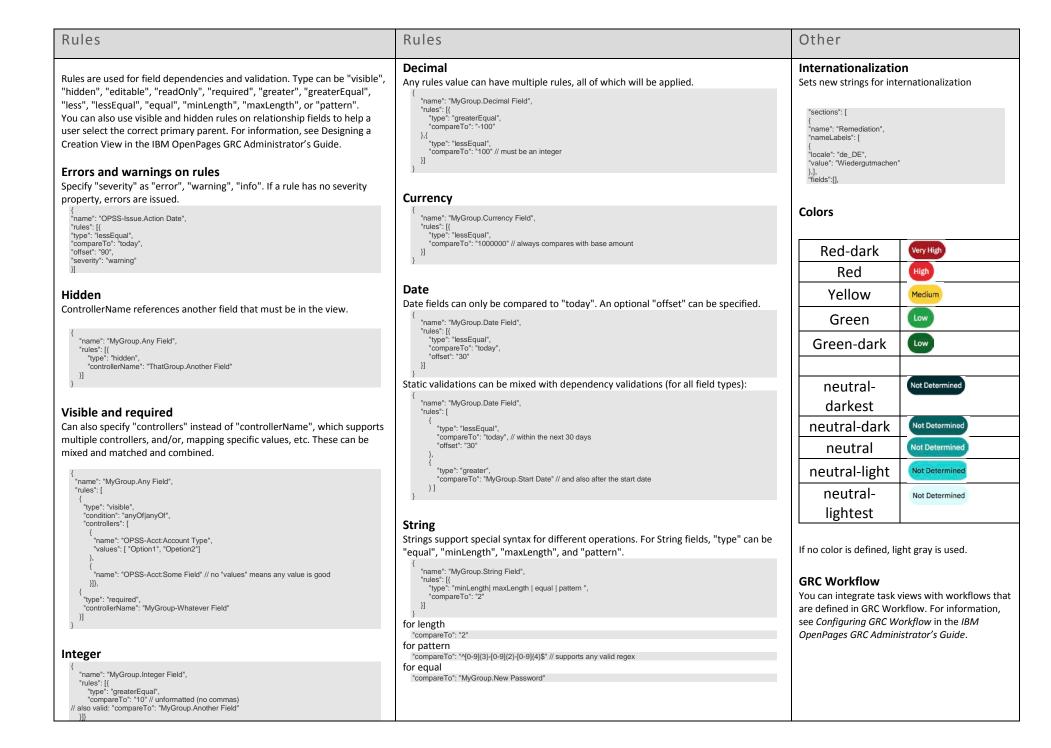
```
{
  "name": "OPSS-KRI:Value",
    "numberRangeColors": [
    {"top": 100, "color": "green"},
    {"bottom": 100, "top": 200, "color": "yellow"},
    {"bottom": 200, "color": "red"}
    ]}
```

Net Loss ✏

USD 234,234.00

URL launcher fields as buttons or links

URL launcher fields can be configured as a button or link but URL fields cannot. URL fields always display as links.

```
"name": "OPSS-QAssessment:RespQuest",
"subDisplayType":"Button"
```

View Policy

View Policy

Progress Bar

Works on numbers. Minimum and maximum must be defined at the field level.

```
{
  "name": "System Fields:Name",
  "required": true
  "Readonly":true
  "subDisplayType":"Progress",
  "numberRangeColors": [
    { "top": 30, "color": "red" },
    { "bottom": 30, "top": 80, "color": "yellow" },
    { "bottom": 80, "top": 100, "color": "green" }
]}
```

*Percent Complete

75%

Default filters on Grid Views

Use "defaultFilterRules" to add a default filter to a Grid View and overwrite Active Only, if the object type has workflows.

```
"defaultFilterRules": {
"nameLabel": "Only display approved items",
"nameLabels": [],
"name": "Only display approved items",
"rules": [
{
"type": "in",
"compareTo": "Approved",
"field": "OPSS-Risk:Status"
}
```

Relationship fields support actions and render an object's associations to other objects in various graphical formats: "grid", "card", "count", "chart", and "tree".

Risks

Example

```
{
  "name":"Descendant Issues",
  "type":"relationship",
  "subDisplayType":"Grid",              //Grid, Card, Count, Chart, Tree
  "objectTypeName":"SOXIssue",
  "filterName":"My Open Issues",        //Public filter for the onject
  "relationshipType":"descendants",     //children, parents, descendants,
  "relationshipPaths":[                 //Only valid if non direct relationship
    "SOXControl/KeyRiskIndicator/SOXIssue",
    "SOXControl/SOXIssue"],
  "actions": [
    {
      "actionType": "associate",
      "name": "Select Risk from Library",   //Name of the button
      "nameLabels": [],
      "multiSelect": true
    }
  ],
  "sortFieldName":"System Fields:Name",
  "sortDirection":"Asc",
  "fields":[
    {  "name":"System Fields:Name"}       //fields only relevant for Grid, Card, Chart
  ]
},
```

Count

Direct and Indirect parent or children with filters, provides drilldown in the grid.

```
{
  "name": "Number of Controls",
  "type": "relationship",
  "nameLabels": [],
  "subDisplayType": "Count",
  "objectTypeName": "SOXControl",
  "relationshipType": "descendants",
  "relationshipPaths": [
    "RiskAssessment/SOXProcess/SOXRisk/SOXControl"
  ],
  "numberRangeColors": [                 // Color definition based on count value
    {"top": 100, "color": "green"},
    { "bottom": 100, "top": 200, "color": "yellow"},
    {"bottom": 200, "color": "red"}
  ]
}
```

# of Controls

40

Tree

```
{
  "name": "Tree",
  "type": "relationship",
  "nameLabels": [],
  "subDisplayType": "Tree"
}
```


Chart

```
"subDisplayType":"Chart",
"chartType": "doughnut", "bar", "pie", "horizontal"
```


Files (upload, drag and drop area)

```
{
  "name": "Supporting files and artifacts",
  "type": "relationship",
  "nameLabels": [],
  "subDisplayType": "Grid",
  "objectTypeName": "SOXDocument",
  "sortFieldName": "System Fields:Name",
  "sortDirection": "Asc",
  "fields": [
    {"name": "System Fields:Name"}
  ]}
```


Actions in **Relationship fields**

Actions can be added to cards and grids. Must be direct relationships (parent or child).
actionType can be: "associate" (associates parent or child objects), "associatePrimary" (associates a primary parent object), "addNew", or "copyRecursive". Use "filterRules" and "folder" to filter related objects.

associate

```
"actions": [{
  "actionType": "associate",
  "name": " Associate Mandate/Regulation ",
  "multiSelect": true,
}]
```

associatePrimary

```
"actions": [{
  "actionType": "associatePrimary",
  "name": "Select Primary Business Entity ",
}]
```

Add New

```
"actions": [{
  "actionType": "addNew",
  "name": "New"
}]
```

Copy Recursive

You can specify the objects to copy, specify the relationship to copy, or enforce auto-naming at all levels.

```
{
  "actionType": "copyRecursive",
  "name": "Copy Process from Library",
  "nameLabels": [],
  "copyRecursive": {
    "autoNameChildren": false,
    "conflictBehavior": "overwrite",
    "types": [
      "SOXProcess",
      "SOXRisk",
      "SOXControl"
    ],
    "associations": [
      {
        "parentTypeName": "Requirement",
        "childTypeName": "SOXControl"
      }
    ]
  },
  "multiSelect": true
}]
```

Rules

Rules are used for field dependencies and validation. Type can be "visible", "hidden", "editable", "readOnly", "required", "greater", "greaterEqual", "less", "lessEqual", "equal", "minLength", "maxLength", or "pattern".
You can also use visible and hidden rules on relationship fields to help a user select the correct primary parent. For information, see Designing a Creation View in the IBM OpenPages GRC Administrator's Guide.

Errors and warnings on rules

Specify "severity" as "error", "warning", "info". If a rule has no severity property, errors are issued.

```
{
  "name": "OPSS-Issue.Action Date",
  "rules": [{
  "type": "lessEqual",
  "compareTo": "today",
  "offset": "90",
  "severity": "warning"
  }]
}
```

Hidden

ControllerName references another field that must be in the view.

```
{
  "name": "MyGroup.Any Field",
  "rules": [{
    "type": "hidden",
    "controllerName": "ThatGroup.Another Field"
  }]
}
```

Visible and required

Can also specify "controllers" instead of "controllerName", which supports multiple controllers, and/or, mapping specific values, etc. These can be mixed and matched and combined.

```
{
  "name": "MyGroup.Any Field",
  "rules": [
  {
    "type": "visible",
    "condition": "anyOf|anyOf",
    "controllers": [
      {
        "name": "OPSS-Acct:Account Type",
        "values": [ "Option1", "Opetion2"]
      },
      {
        "name": "OPSS-Acct:Some Field" // no "values" means any value is good
      }]},
  {
    "type": "required",
    "controllerName": "MyGroup-Whatever Field"
  }]
}
```

Integer

```
{
  "name": "MyGroup.Integer Field",
  "rules": [{
    "type": "greaterEqual",
    "compareTo": "10" // unformatted (no commas)
// also valid: "compareTo": "MyGroup.Another Field"
  }]}
```

Rules

Decimal

Any rules value can have multiple rules, all of which will be applied.

```
{
  "name": "MyGroup.Decimal Field",
  "rules": [{
    "type": "greaterEqual",
    "compareTo": "-100"
  },{
    "type": "lessEqual",
    "compareTo": "100" // must be an integer
  }]
}
```

Currency

```
{
  "name": "MyGroup.Currency Field",
  "rules": [{
    "type": "lessEqual",
    "compareTo": "1000000" // always compares with base amount
  }]
}
```

Date

Date fields can only be compared to "today". An optional "offset" can be specified.

```
{
  "name": "MyGroup.Date Field",
  "rules": [{
    "type": "lessEqual",
    "compareTo": "today",
    "offset": "30"
  }]
}
```

Static validations can be mixed with dependency validations (for all field types):

```
{
  "name": "MyGroup.Date Field",
  "rules": [
    {
      "type": "lessEqual",
      "compareTo": "today", // within the next 30 days
      "offset": "30"
    },
    {
      "type": "greater",
      "compareTo": "MyGroup.Start Date" // and also after the start date
    } ]
}
```

String

Strings support special syntax for different operations. For String fields, "type" can be "equal", "minLength", "maxLength", and "pattern".

```
{
  "name": "MyGroup.String Field",
  "rules": [{
    "type": "minLength| maxLength | equal | pattern ",
    "compareTo": "2"
  }]
}
```
for length
```
"compareTo": "2"
```
for pattern
```
"compareTo": "^[0-9]{3}-[0-9]{2}-[0-9]{4}$" // supports any valid regex
```
for equal
```
"compareTo": "MyGroup.New Password"
```

Other

Internationalization

Sets new strings for internationalization

```
"sections": [
{
"name": "Remediation",
"nameLabels": [
{
"locale": "de_DE",
"value": "Wiedergutmachen"
},],
"fields":[],
```

Colors

Color	Label
Red-dark	Very High
Red	High
Yellow	Medium
Green	Low
Green-dark	Low
neutral-darkest	Not Determined
neutral-dark	Not Determined
neutral	Not Determined
neutral-light	Not Determined
neutral-lightest	Not Determined

If no color is defined, light gray is used.

GRC Workflow

You can integrate task views with workflows that are defined in GRC Workflow. For information, see *Configuring GRC Workflow* in the *IBM OpenPages GRC Administrator's Guide*.

Business Entity Parent example

```
{
     "name": "Business Entities",
     "type": "relationship",
     "nameLabels": [],
     "subDisplayType": "Card",
     "objectTypeName": "Vendor",
     "relationshipType": "parents",
     "sortFieldName": "System Fields:Name",
     "sortDirection": "Asc",
     "actions": [
       {
         "actionType": "associate",
         "name": "Select Business Entity",
         "nameLabels": [],
         "multiSelect": true
       }
     ],
     "fields": [
       {
         "name": "System Fields:Name",
         "nameLabels": [],
         "required": true
       },
       {
         "name": "System Fields:Description",
         "nameLabels": []
       }
     ]
   }
```

Issue Example

```
{
     "name": "Issues",
     "collapsed": true,
     "fields": [
       {
         "name": "Issues",
         "type": "relationship",
         "nameLabels": [],
         "subDisplayType": "Grid",
         "objectTypeName": "SOXIssue",
         "relationshipType": "children",
         "sortFieldName": "System Fields:Name",
         "sortDirection": "Asc",
         "actions": [],
         "fields": [
           {
             "name": "System Fields:Name",
             "nameLabels": [],
             "readonly": true,
             "required": true
           },
           {
             "name": "System Fields:Description",
             "nameLabels": []
           },
           {
             "name": "OPSS-Iss:Priority",
             "nameLabels": []
           }

         ]
       }
```