

# Instructions

Entity - Instructions (Questions and Actions) - Interrogates the Instruction table

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Verb	Request	Notes	Permissions required
GET - single	/Consumer /Instructions/{instructionId}	<p>Gets an individual question or action by an Id.</p> <div data-bbox="423 464 922 533" style="background-color: #f2f2f2; padding: 5px;"><b>Example Response</b></div> <pre data-bbox="423 533 922 1967"> {   "Id": 1010,   "Sequence": 19,   "Name": "1E-Explorer-TachyonCore-BiosDetails",   "Description": "Returns details of BIOS firmware.",   "InstructionType": 0,   "ReadablePayload": "What BIOS firmware is installed?",   "Cmd": "SendAll",   "Schema": [     {       "Name": "BIOSVersion",       "Type": "string",       "Length": 512,       "RenderAs": null     },     {       "Name": "Caption",       "Type": "string",       "Length": 512,       "RenderAs": null     },     {       "Name": "Manufacturer",       "Type": "string",       "Length": 512,       "RenderAs": null     },     {       "Name": "PrimaryBIOS",       "Type": "bool",       "Length": 0,       "RenderAs": null     },     {       "Name": "ReleaseDate",       "Type": "datetime",       "Length": 0,       "RenderAs": null     },     {       "Name": "SerialNumber",       "Type": "string",       "Length": 512,       "RenderAs": null     }   ] }, "Aggregation": {   "Schema": [     {       "Name": "Manufacturer",       "Type": "string",       "Length": 512, </pre>	

```
        "RenderAs": null
      },
      {
        "Name": "BIOSVersion",
        "Type": "string",
        "Length": 512,
        "RenderAs": null
      },
      {
        "Name": "Count",
        "Type": "int64",
        "Length": 0,
        "RenderAs": null
      }
    ],
    "GroupBy": "Manufacturer,
BIOSVersion",
    "Operations": [
      {
        "Name": "Count",
        "Type": "count"
      }
    ]
  },
  "KeepRaw": true,
  "Scope": {
    "Attribute": "OsType",
    "Operator": "=",
    "Value": "Windows",
    "DataType": "String"
  },
  "ReadableScope": {
    "Attribute": "OsType",
    "Operator": "=",
    "Value": "Windows",
    "DataType": "String"
  },
  "InstructionTtlMinutes": 60,
  "ResponseTtlMinutes": 60,
  "CreatedTimestampUtc": "2018-07-
13T08:27:05.7Z",
  "SentTimestampUtc": "2018-07-13T08:
27:37.323Z",
  "Status": 6,
  "WorkflowState": 5,
  "StatusTimestampUtc": "2018-07-
13T09:28:04.61Z",
  "Export": false,
  "ExportLocation": "",
  "ParentInstructionId": null,
  "InstructionDefinitionId": 85,
  "CreatedBy": "SomeDomain\\Some.
User",
  "ResultsFilter": null,
  "PreviousResultsFilter": null,
  "ConsumerId": 1,
  "ConsumerName": "Explorer",
  "ConsumerCustomData": null,
  "ParameterJson": null,
  "OffloadResponses": false,
  "RequestedFor": null,
  "ResponseTemplateId": 1,
  "ResponseTemplateConfiguration": {
    "Name": "default",
    "TemplateConfigurations": [
      {
        "Id": "mainchart",
        "Title": "Most common
BIOS manufacturers and versions",
        "Type": "Bar",
        "X": "BIOSVersion",
```

```
        "Y": "Count",
        "Z": "Manufacturer",
        "PostProcessor":
"processingFunction",
        "Size": 1,
        "Row": 1
    }
],
    "PostProcessors": [
    {
        "Name":
"processingFunction",
        "Function":
"ProcessMultiSeries('BIOSVersion',
'Count', 'Manufacturer', '5', '5',
'false')"
    }
]
},
    "Workflow": "{\"StateMachine\":\""
State\"}",
    "Comments": null,
    "ScheduledInstructionId": null,
    "ApprovalOffloaded": false,
    "ActionedBy": null,
    "ActionReason": null
}
```

POST

/Consumer/Instructions  
/search

To search instructions based on criteria along with sorting and pagination.

#### Example Request

```
{
  "filter": {
    "Operator": "AND",
    "Operands": [
      {
        "Attribute": "Status",
        "Operator": "=",
        "Value": "5"
      },
      {
        "Attribute":
"CreatedTime",
        "Operator": ">=",
        "Value": "2016-04-
21T06:30:00Z"
      },
      {
        "Attribute":
"CreatedTime",
        "Operator": "<=",
        "Value": "2016-04-
30T19:55:00"
      }
    ]
  },
  "start": 1,
  "pageSize": 10,
  "sort": [
    {
      "Column": "payload",
      "Direction": "ASC"
    },
    {
      "Column": "CreatedTime",
      "Direction": "DESC"
    }
  ]
}
```

- filter - filter expression. To learn about how to define filter check [Using scope and filter expressions](#) page.
- start - starting index to support pagination. Begins from 1.
- pageSize - number of results to fetch
- sort - sort expression. To learn about how to define sort criteria check [Sort Definition](#) page.

Allowed filter columns:

- ReadablePayload
- Description
- CreatedTime
- Status
- DefinitionName (v1.6)
- DefinitionId (v1.6)
- ConsumerId (2.0)
- ConsumerCustomData (v1.6)

Allowed sortable columns

- ReadablePayload
- Description
- CreatedTime
- Status

**NOTE:** Only system consumer can search for other consumers' instructions. Other consumers will only see their instructions.

- Viewer
- Questioner
- Actioner
- Approver

It does not return Unauthorized (401) rather filters out instructions based on permissions.

POST

/Consumer/Instructions

Creates a question or action.

#### Example Request

```
{
  "DefinitionId": 9,
  "DefinitionName": null,
  "Scope": {
    "Attribute": "OsType",
    "Operator": "=",
    "Value": "Windows"
  },
  "Parameters": null,
  "InstructionTtlMinutes": 60,
  "ResponseTtlMinutes": 120,
  "ParentInstructionId": null,
  "KeepRaw": false,
  "Export": false,
  "ExportLocation": null,
  "ResultsFilter": {
    "Attribute":
      "NumberOfCores",
    "Operator": ">",
    "Value": "2"
  },
  "PreviousResultsFilter": null,
  "ConsumerCustomData":
    "MyCustomData",
  "OffloadResponses": false
}
```

will return:

For questions

- Questioner
- Actioner

For actions

- Actioner

Returns Unauthorized (401) if user does not have the required permissions at global level or on the parent InstructionDefinition's product pack.

### Example Response

```
{
  "Id": 199,
  "Name": "System Processor
Details",
  "Description": "Represents a
device capable of interpreting a
sequence of machine instructions on a
computer system running Windows",
  "InstructionType": 0,
  "ReadablePayload": "Get
Processor Details",
  "Cmd": "SendAll",
  "Schema": [
    {
      "Name": "Caption",
      "Type": "string",
      "Length": 256
    },
    {
      "Name":
"Description",
      "Type": "string",
      "Length": 256
    },
    {
      "Name":
"Manufacturer",
      "Type": "string",
      "Length": 256
    },
    {
      "Name":
"NumberOfCores",
      "Type": "int32",
      "Length": 0
    }
  ],
  "Aggregation": null,
  "KeepRaw": false,
  "Scope": null,
  "QuestionTtlMinutes": 60,
  "AnswerTtlMinutes": 120,
  "CreatedTimestampUtc": "2015-
10-01T08:36:38.663",
  "Status": 0,
  "AnswerCount": 0,
  "SentCount": 0,
  "ParentQuestionId": null,
  "QuestionDefinitionId": 9,
  "CreatedBy": "",
  "ResultsFilter": {
    "Attribute":
"NumberOfCores",
    "Operator": ">",
    "Value": "2"
  },
  "PreviousResultsFilter": null,
  "ConsumerId": 0,
  "ConsumerCustomData":
"MyCustomData",
  "OffloadResponses": false,
  "ParameterJson" : null
}
```

POST	/Consumer/Instructions/Targeted	<p>Creates a question or action, supplying a targeted list of devices by Fqdn</p> <p>As above with the added "Devices" Json property e.g.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><b>Example Request</b></p> <pre> {   "DefinitionId": 9,   "DefinitionName": null,   "Parameters": null,   "InstructionTtlMinutes": 60,   "ResponseTtlMinutes": 120,   "ParentInstructionId": null,   "KeepRaw": false,   "Export": false,   "ExportLocation": null,   "ResultsFilter": {     "Attribute":       "NumberOfCores",     "Operator": "&gt;",     "Value": "2"   },   "PreviousResultsFilter": null,   "ConsumerCustomData":     "MyCustomData",   "OffloadResponses": false,   "Devices": ["pedvws127.pe.local", "pedvws126.pe.local", "pedvws240.pe.local"] }</pre> </div>	<p>As above</p> <p>Note: Fqdn list is limited by MaxRequestLength which defaults to 4MB</p>
POST	/Consumer/Instructions/{instructionId}/cancel/{keepData}	<p> Cancels an instruction.</p> <ul style="list-style-type: none"> <li>• id - question to stop</li> <li>• keepData - flag to indicate if result should be deleted</li> </ul>	<p>For questions</p> <ul style="list-style-type: none"> <li>• Questioner</li> <li>• Actioner</li> </ul> <p>For actions</p> <ul style="list-style-type: none"> <li>• Actioner</li> </ul> <p>Returns Unauthorized (401) if user does not have the required permissions at global level or on the parent InstructionDefinition's product pack. Instruction's owner can also cancel.</p>
POST	/Consumer/Instructions/{instructionId}/rerun	<p>Reruns a question.</p> <p>Rerunning an action is not allowed, as it can be risky.</p>	<p>For questions</p> <ul style="list-style-type: none"> <li>• Questioner</li> <li>• Actioner</li> </ul> <p>Returns Unauthorized (401) if user does not have the required permissions at global level or on the parent InstructionDefinition's product pack.</p>
GET	/Consumer/Instructions/{instructionId}/targetlist	<p>Gets targets of given instruction</p>	<p>For questions</p> <ul style="list-style-type: none"> <li>• Questioner</li> <li>• Actioner</li> </ul> <p>Returns Unauthorized (401) if user does not have the required permissions at global level or on the parent InstructionDefinition's product pack.</p>

GET	/Consumer /Instructions/InFlight /InstructionSet/ {instructionSetId}	<p>Gets "In-Flight" instructions for a given Instruction Set.</p> <p>The result has this shape:</p> <div data-bbox="422 281 922 676" style="border: 1px solid #ccc; padding: 5px; margin: 10px 0;"> <p><b>Example Request</b></p> <pre> {   "TotalCount": 2,   "Items": [     {       "Id": 2401,       "Name": "TachyonCore- BiosDetails",       ....     }   ] }</pre> </div> <p>The "TotalCount" property contains the <b>total available In-flight instructions</b>.</p> <p>The "Items" property contains the <b>list of In-flight instructions which the user can see</b>. (and therefore its length could be less than TotalCount).</p>	Filters out the results based on permissions.
GET	/Consumer /Instructions/ {instructionId} /approxtarget	<p><b>Minimum API version - 3.3</b></p> <p>Gets approximate target for specific instruction.</p> <p>Approximate target will be calculated using the scope defined in the instruction.</p> <p>Approximate target will be calculated for the user who created the instruction, using that user's current permissions.</p>	Requires any permission on any of the instruction sets