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RAPID Service

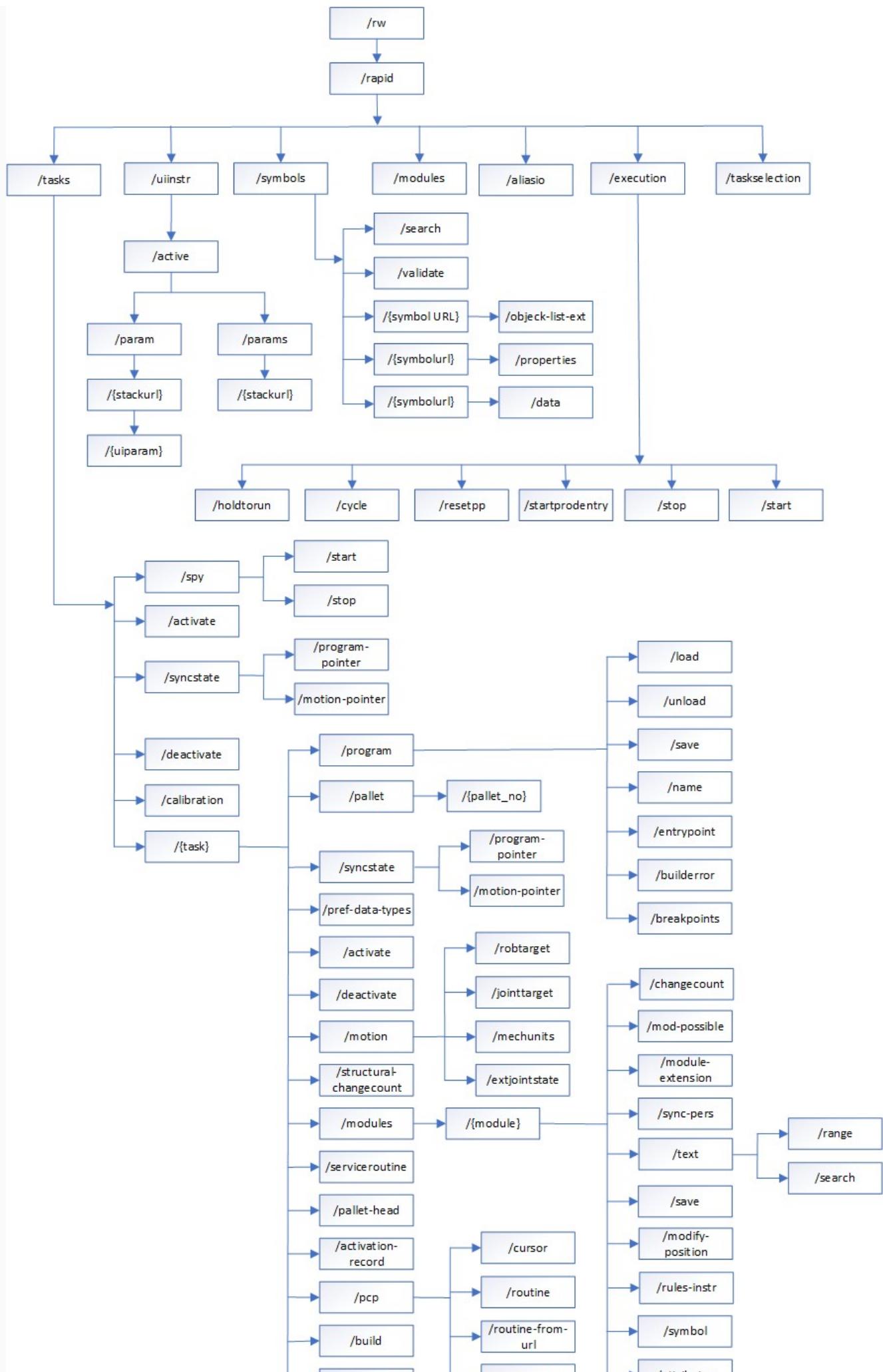


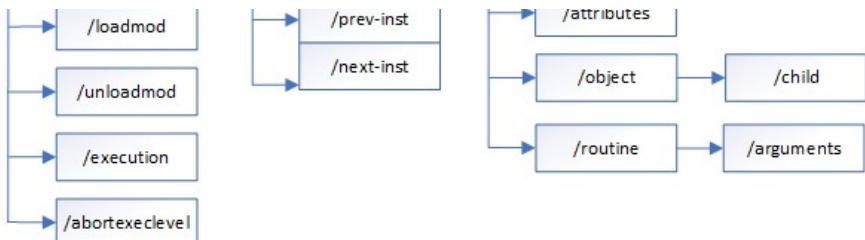
Robot Web Services

3HAC073675-001 Revision:I

https://developercenter.robotstudio.com/api/RWS/Swagger_Doc/RAPID_Service.yaml

RAPID Service





Schemes

HTTPS



Operations on RAPID Execution

Operations on RAPID Execution



GET

/rw/rapid/execution Get RAPID Execution State



"Returns the rapid execution state.

Use /rw/rapid/execution;ctrexecstate to filter ctrexecstate value."

The resource can be subscribed (RAPID execution state) using /subscription with resource uri /rw/rapid/execution;ctrexecstate

Sample response for RAPID execution state subscription

```

<?xml version="1.0" encoding="utf-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
  <base href="https://localhost/">
</head>
<body>
  <div class="state">
    <a href="subscription/4" rel="group"/>
    <a href="ws://localhost/poll/4" rel="self"/>
    <ul>
      <li class="rap-ctrexecstate-ev" title="ctrexecstate">
        <a href="/rw/rapid/execution;ctrexecstate" rel="self"/>
        <span class="ctrexecstate">stopped</span>
      </li>
    </ul>
  </div>
</body>
</html>
  
```

The resource can also be subscribed (RAPID execution cycle) using /subscription with resource uri /rw/rapid/execution;rapidexeccycle

Sample response for RAPID execution cycle subscription

- [once](#)

The resource can be subscribed (RAPID hold to run) using /subscription with resource uri /rw/rapid/execution;hdtrun

Sample response for RAPID hold to run subscription

```

<?xml version="1.0" encoding="utf-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
  
```

```

<head>
    <base href="https://localhost/">
</head>
<body>
    <div class="state">
        <a href="subscription/4" rel="group"/>
        <a href="ws://localhost/poll/4" rel="self"/>
    </div>
</body>
</html>

```

A hold to run change event for RAPID hold to run subscription look like

```

<?xml version="1.0" encoding="utf-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
    <base href="https://localhost/">
</head>
<body>
    <div class="state">
        <a href="subscription/4" rel="group"/>
        <a href="ws://localhost/poll/4" rel="self"/>
        <ul>
            <li class="rap-hdtr-ev" title="holdtorun">
                <a href="/rw/rapid/execution;hdtrun" rel="self"/>
                <span class="hdtr-State">HdTREvent WaitEntered</span>
            </li>
        </ul>
    </div>
</body>
</html>

```

Parameters

[Try it out](#)

Name	Description
continue-on-err string (query)	{1 0} Default value is 0. In case input is 1, the API continues execution even if any error occurs in between.

continue-on-err

Responses

Response content type

application/xhtml+xml;v=2.0 ▾

Code	Description
200	Standard response for successful HTTP requests

[Example Value](#) | [Model](#)

Code	Description
	<pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost/rw/rapid//"/> </head> <body> <div class="state"> <li class="rap-execution" title="execution"> stopped forever </div> </body> </html></pre>

400

The request cannot be fulfilled due to bad syntax

406

The server can only generate a response that is not accepted by the client

OPTIONS /rw/rapid/execution Get Forms ^

"Get a list of actions that can be invoked on a 'rap-execution' type resources."

Parameters **Try it out**

No parameters

Responses Response content type application/xhtml+xml;v=2.0 ▼

Code	Description
200	<p>Standard response for successful HTTP requests</p> <p>Example Value Model</p> <pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost//"/> </head></pre>

Code	Description
	<pre> <body> <div class="state"> <form id="subscribe" method='post' action="subscription"> <fieldset class="sub-ctrlexecstate"> <input type="checkbox" name="resources" value="1"/> <input class="res" type="text" name="1" value="/rw/rapid/execution;ctrlexecstate" maxlength="500"/> <select class="priority" name="1-p"> <option value="0" selected="selected"> </option> <option value="1"> </option> </select> </fieldset> <fieldset class="sub-ctrlexeccycle"> <input type="checkbox" name="resources" value="1"/> <input class="res" type="text" name="1" value="/rw/rapid/execution;rapidexeccycle" maxlength="500"/> <select class="priority" name="1-p"> <option value="0" selected="selected"> </option> <option value="1"> </option> </select> </fieldset> <fieldset class="sub-hdtr-ev"> <input type="checkbox" name="resources" value="1"/> <input class="res" type="text" name="1" value="/rw/rapid/execution;hdtrun" maxlength="500"/> <select class="priority" name="1-p"> </pre>

400

The request cannot be fulfilled due to bad syntax

406

The server can only generate a response that is not accepted by the client

POST

/rw/rapid/execution/start Start RAPID Execution



"Start rapid execution.

The v=2.1 is supported from RW version 7.2.

The API with v=2.1 supports mastership as URL parameter.

Controller supports UTF-8 character for this API from RW7.1

This API requires mastership on "edit" domain.

In case of explicit mastership, client needs to take the mastership only on "edit" domain before running this API. If the client explicitly holds mastership on "motion" domain then the API won't execute successfully."

Parameters

[Try it out](#)

Name	Description
mastership string (query)	{implicit explicit} by default mastership is explicit <input type="text" value="mastership"/>
request-body object	Data parameter(s) Example Value Model

Name	Description
(body)	<code>regain=string&execmode=string&cycle=string&condition=string&stopatbp=string&alltaskbytsp=string</code>

Parameter content type

`application/x-www-form-urlencoded;v=2.0` ▾

Responses

Response content type

`application/json`

Code Description

204

The request has been successfully processed, but is not returning any content

400

The request cannot be fulfilled due to bad syntax

415

The server will not accept the request, because the media type is not supported

OPTIONS

/rw/rapid/execution/start Get Forms



"Operations on start rapid execution."

Parameters

[Try it out](#)

No parameters

Responses

Response content type

`application/xhtml+xml;v=2.0` ▾

Code Description

200

Standard response for successful HTTP requests

Code	Description
Example Value Model	
<pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost/"> </head> <body> <div class="state"> <form id="start" method='post' action="rw/rapid/execution?action=start"> <select name="regain"> <option value="continue"> </option> <option value="regain"> </option> <option value="clear"> </option> </select> <select name="execmode"> <option value="continue"> </option> <option value="stepin"> </option> <option value="stepover"> </option> <option value="stepout"> </option> <option value="stepback"> </option> <option value="steplast"> </option> <option value="stepmotion"> </option> </select> <select name="cycle"> <option value="once"> </option> <option value="forever"> </option> <option value="asis"> </option> </select> <select name="condition"> <option value="callchain"> </option> <option value="none"> </option> </select> <select name="stopatbp"> <option value="disabled"> </option> <option value="enabled"> </option> </select> <select name="alltaskbytsp"> <option value="true"> </option> <option value="false"></pre>	

406

The server can only generate a response that is not accepted by the client

POST

[/rw/rapid/execution/stop Stop RAPID Execution](#)

^

"Stop rapid execution."

Parameters	Try it out
Name	Description
request-body object (body)	Data parameter(s) Example Value Model <div style="background-color: black; color: white; padding: 5px; margin-top: 10px;"> stopmode=string&usetsp=string </div>

Parameter content type

[application/x-www-form-urlencoded;v=2.0](#)

Name	Description
Responses	<p>Response content type application/json ▾</p>
Code	Description
204	The request has been successfully processed, but is not returning any content
400	The request cannot be fulfilled due to bad syntax
415	The server will not accept the request, because the media type is not supported

OPTIONS	/rw/rapid/execution/stop Get Forms	^
"Options on stop rapid execution."		
Parameters	Try it out	
No parameters		
Responses	Response content type application/xhtml+xml;v=2.0 ▾	
Code	Description	
200	Standard response for successful HTTP requests	
Example Value Model		
<pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost/"> </head></pre>		

Code	Description
	<pre><body> <div class="state"> <form id="stop" method='post' action="rw/rapid/execution/stop"> <select name="stopmode"> <option value="cycle"> </option> <option value="instr"> </option> <option value="stop"> </option> <option value="qstop"> </option> </select> <select name="usetsp"> <option value="normal"> </option> <option value="alltsk"> </option> </select> </form> </div> </body> </html></pre>

406

The server can only generate a response that is not accepted by the client

POST

/rw/rapid/execution/startprodentry Start RAPID Execution from Production Entry



"Start rapid execution from production entry.
Mastership is required."

Parameters

[Try it out](#)

Name	Description
mastership string (query)	{implicit explicit} by default mastership is explicit

mastership

Responses

Response content type

application/json



Code	Description
204	The request has been successfully processed, but is not returning any content

Code	Description
400	The request cannot be fulfilled due to bad syntax
403	The request was a legal request, but the server is refusing to respond to it
415	The server will not accept the request, because the media type is not supported

OPTIONS

/rw/rapid/execution/startprodentry Get Forms



"Options on start rapid execution from production entry."

Parameters

Try it out

No parameters

Responses

Response content type

application/xhtml+xml;v=2.0 ▾

Code	Description
200	Standard response for successful HTTP requests
	Example Value Model <pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost/" /> </head> <body> <div class="state"> <form id="startprodentry" method='post' action="rw/rapid/execution/startprodentry"> </form> </div> </body> </html></pre>
406	The server can only generate a response that is not accepted by the client

POST	/rw/rapid/execution/resetpp Reset RAPID Program Pointer to Main	Try it out
"Reset rapid program pointer to main. Mastership is required."		
Parameters		
Name	Description	
mastership <i>string</i> (query)	{implicit explicit} by default mastership is explicit	<input type="text" value="mastership"/>
Responses		Response content type application/json ▾
Code	Description	

Code	Description
204	The request has been successfully processed, but is not returning any content
400	The request cannot be fulfilled due to bad syntax
403	The request was a legal request, but the server is refusing to respond to it
415	The server will not accept the request, because the media type is not supported

OPTIONS /rw/rapid/execution/resetpp Get Forms ^

"Options on start RAPID execution from production entry"

Parameters **Try it out**

No parameters

Responses Response content type application/xhtml+xml;v=2.0 ▼

Code	Description
200	Standard response for successful HTTP requests

Example Value | Model

```
<?xml version="1.0" encoding="UTF-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<base href="https://localhost/">
</head>
<body>
<div class="state">
<form id="resetpp" method='post' action="rw/rapid/execution/resetpp">
</form>
</div>
</body>
</html>
```

Code	Description
406	The server can only generate a response that is not accepted by the client

POST

/rw/rapid/execution/cycle Set Number of Execution Cycles



"Sets the number of execution cycles.
Mastership is required."

Parameters

[Try it out](#)

Name	Description
------	-------------

mastership
string
(query)

mastership

request-body
Data parameter(s)

object
(body)

Example Value | Model

cycle:string

Parameter content type

application/x-www-form-urlencoded;v=2.0 ▾

Responses

Response content type

application/json



Code	Description
------	-------------

204
The request has been successfully processed, but is not returning any content

400
The request cannot be fulfilled due to bad syntax

Code	Description
403	The request was a legal request, but the server is refusing to respond to it
415	The server will not accept the request, because the media type is not supported

OPTIONS
/rw/rapid/execution/cycle
Get Forms
^

"Options on execution of cycles."

Parameters
Try it out

No parameters

Responses
Response content type
application/xhtml+xml;v=2.0 ▾

Code
Description

200
Standard response for successful HTTP requests

Example Value
| Model

```
<?xml version="1.0" encoding="UTF-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<base href="https://localhost/" />
</head>
<body>
<div class="state">
<form id="setcycle" method='post' action="rw/rapid/execution/cycle">
<select name="cycle"> <option value="once">
</option> <option value="forever">
</option> </select>
</form>
</div>
</body>
</html>
```

406
The server can only generate a response that is not accepted by the client

POST

/rw/rapid/execution/holdtorun Set Hold to Run Cmd



"Sets the hold to run execution state.

Supported in VC only.

Login as Local Client.

Mastership is required.

The Hold-To-Run control prevents RAPID-program execution to start until the holdtorun state is changed to Press.

In the state Pressed the client must poll the Hold-To-Run control every 2 second, otherwise the program execution will stop. This is done by setting the holdtorun state to Held.

If the client want's to stop the program execution immediately it must change the state to Release.

Rapid program should run in motors on state.

Operation mode should be Manual(Reduced Speed) or Manual Full Speed."

Parameters

Try it out

Name	Description
------	-------------

mastership string (query)	{implicit explicit} by default mastership is explicit
---------------------------------	---

mastership

request-body	Data parameter(s)
--------------	-------------------

object (body)	Example Value Model
------------------	-----------------------

state=string

Parameter content type

application/x-www-form-urlencoded;v=2.0 ▾

Responses

Response content type

application/json ▾

Code	Description
------	-------------

204	The request has been successfully processed, but is not returning any content
-----	---

The request has been successfully processed, but is not returning any content

Code

Description

Operations on Modules

Operations on Modules

The request cannot be fulfilled due to bad syntax

GET

/rw/rapid/modules Get Mod Possible All

The request was a legal request, but the server is refusing to respond to it

"Returns a list of targets that are currently synchronized and can be modified."

The server will not accept the request, because the media type is not supported

Parameters

Try it out

No parameters

OPTIONS /rw/rapid/execution/holdtorun Get Forms

"Options on start RAPID execution from production entry."

Responses

Response content type

application/xhtml+xml;v=2.0 ▾

Parameters

Try it out

Code

Description

No parameters

200

Standard response for successful HTTP requests

Example Value Model

Responses

```
<?xml version="1.0" encoding="UTF-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<base href="https://127.0.0.1/rw/rapid/">
</head>
<body>
<div class="state">
<a href="modules" rel="self"></a>
<ul>
<li class="rap-mod-possible-all" title="mod-possible-all">
<span class="module-name">MainModule</span>
<span class="task-name">T_ROB1</span>
<span class="start-row">17</span>
<span class="start-col">15</span>
<span class="end-row">17</span>
<span class="end-col">17</span>
</li>
<li class="rap-mod-possible-all" title="mod-possible-all">
<span class="module-name">MainModule</span>
<span class="task-name">T_ROB2</span>
<span class="start-row">18</span>
<span class="start-col">15</span>
<span class="end-row">18</span>
<span class="end-col">17</span>
</li>
</ul>
</div>
</body>
```

400

The request cannot be fulfilled due to bad syntax

Code	Description
Code	Description
406	
200	The server can only generate a response that is not accepted by the client Standard response for successful HTTP requests
Example Value Model	
POST	/
"Modify the po	
User needs to	
Parameters	
Name	
406	
mastership	The server can only generate a response that is not accepted by the client
string	{implicit explicit} by default mastership is explicit. Supported from RW7.2
(query)	
	mastership
request-body	Data parameter(s)
object	Example Value Model
(body)	
	checklimit:string&checkdeactaxes:string
	Parameter content type
	application/x-www-form-urlencoded;v=2.0 ▾
Responses	Response content type application/json ▾
Code	Description
204	The request has been successfully processed, but is not returning any content
400	The request cannot be fulfilled due to bad syntax

Code	Description
415	The server will not accept the request, because the media type is not supported

OPTIONS

/rw/rapid/modules Get Forms



"Options that can be invoked on rapid modules."

Parameters

Try it out

No parameters

Responses

Response content type

application/xhtml+xml;v=2.0 ▾

Code**Description**

200

Standard response for successful HTTP requests

Example Value | Model

```
<?xml version="1.0" encoding="UTF-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<base href="https://localhost/rw/rapid/">
</head>
<body>
<div class="state">
<form id="modify-all-position" method='post' action="modules">
</form>
</div>
</body>
</html>
```

400

The request cannot be fulfilled due to bad syntax

406

Operations on RAPID Symbols

The server allows to generate a response that is not accepted by the client.

GET

/rw/rapid/symbols Get RAPID Symbols Resources



"Returns symbols resource."

Parameters

Try it out

No parameters

Responses

Response content type

application/xhtml+xml;v=2.0 ▾

Code

Description

200

Standard response for successful HTTP requests

Example Value | Model

```
<?xml version="1.0" encoding="UTF-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<base href="https://127.0.0.1/rw/rapid/">
</head><body>
<div class="state">
<a href="symbols" rel="self"></a>
<ul>
</ul>
</div>
</body></html>
```

406

The server can only generate a response that is not accepted by the client

POST

/rw/rapid/symbols/search Search RAPID Symbols

^

Search rapid symbols.

Shared modules belong to global scope and its symbol can be searched through RAPID block URL.
The dataparam "typurl" is available from RW version 7.1 onwards.

Parameters

Try it out

Name

Description

request-body

Data parameter(s).At least one data parameter should be provided.

Name	Description
object (body)	<p>Example Value Model</p> <pre>view=string&vartyp=string&blockurl=string&recursive=string&posl=string&posc=string&stack=string&onlyused=string&skipshared=string&regexp=string&symtyp=string&dattyp=string</pre> <p>Parameter content type</p> <p>application/x-www-form-urlencoded;v=2.0 ▾</p>
Responses	<p>Response content type</p> <p>application/xhtml+xml;v=2.0 ▾</p>
Code	Description
200	<p>Standard response for successful HTTP requests</p> <p>Example Value Model</p> <pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://127.0.0.1/rw/rapid/"> </head> <body> <div class="state"> <li class="rap-sympropvar-li" title="RAPID/T_ROB1/user/reg5"> RAPID/T_ROB1/user/reg5 reg5 var true num 0 false false false RAPID/num 20 <li class="rap-sympropvar-li" title="RAPID/T_ROB1/user/reg3"> RAPID/T_ROB1/user/reg3 reg3</pre>
400	The request cannot be fulfilled due to bad syntax
406	The server can only generate a response that is not accepted by the client

Code	Description
415	The server will not accept the request, because the media type is not supported

OPTIONS

/rw/rapid/symbols/search Get Forms



"List of actions that can be invoked on a rapid symbols."

Parameters

Try it out

No parameters

Responses

Response content type

application/xhtml+xml;v=2.0 ▾

Code

Description

200

Standard response for successful HTTP requests

Example Value | Model

```
<?xml version="1.0" encoding="UTF-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<base href="https://127.0.0.1/rw/rapid/">
</head>
<body>
<div class="state">
<a href="symbols/search" rel="self"/>
<form action="/rw/rapid/symbols" id="search" method="post">
<input checked="checked" name="view" type="radio" value="block"/>
<input name="view" type="radio" value="scope"/>
<input name="view" type="radio" value="stack"/>
<input name="posl" type="text" value="0"/>
<input name="posc" type="text" value="0"/>
<input name="blockurl" type="text" value="RAPID"/>
<input name="stack" type="text" value="0"/>
<select name="recursive">
<option value="true"/>
<option value="false"/>
</select>
<select name="onlyused">
<option value="true"/>
<option value="false"/>
</select>
<select name="skipshared">
<option value="true"/>
<option value="false"/>
```

Code	Description
400	The request cannot be fulfilled due to bad syntax
415	The server will not accept the request, because the media type is not supported

GET
/rw/rapid/symbols/{symbol URL}/object-list-ext
Get Object Extension List
^

"Returns symbol extension list."

Parameters
Try it out

Name	Description
symbol URL * required	{symbol URL}
string (path)	symbol URL
type string (query)	{Statements BackwardStmts ErrorStmts UndoStmts TypeDecls DataDecls ParDecls RtnDecls Attribs}. Default value is Statements. Statements-List of statement, BackwardStmts-List of backward statement, ErrorStmts-List of error statement, UndoStmts-List of undo statements, TypeDecls-List of type declarations, DataDecls-List of data declarations, ParDecls-List of parameter declarations, RtnDecls-List of routine declarations, Attribs-List of module attributes
type	

Responses
Response content type
application/xhtml+xml;v=2.0 ▾

Code	Description
200	Standard response for successful HTTP requests

Example Value | Model

Code	Description
	<pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost:4444/rw/rapid/"> </head> <body> <div class="state"> <li class="object-list-extension" title="RAPID/T_ROB1/mainmodule"> 2 2 7 137 2 2 2 125 7 5 7 137 </div> </body></pre>

400

The request cannot be fulfilled due to bad syntax

406

The server can only generate a response that is not accepted by the client

GET

/rw/rapid/symbol/{symbolurl}/data Get RAPID Symbol Data



"Returns rapid data state.

Controller supports UTF-8 character for this API from RW7.1.

The API with v=2.1 supports "begin-column" tag instead of "begin-coloumn" and "end-column" tag instead of "end-coloumn" in response."

Parameters

[Try it out](#)

Name	Description
symbolurl * required string (path)	{symbolurl}

symbolurl

Name	Description
value string (query)	raw Returns a non stringify json value. value
Responses	Response content type
	application/xhtml+xml;v=2.0 ▾
Code	Description
200	Standard response for successful HTTP requests
	Example Value Model <pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost:7777/rw/rapid/"> </head> <body> <div class="state"> <li class="rap-data" title="RAPID/T_ROB1/user/reg1"> 0 <li class="rap-data-decl-pos" title="decl-pos"> 8 2 8 19 <li class="rap-data-initval-pos" title="initval_pos"> 8 18 8 18 </div></pre>
404	The requested page could not be found but may be available again in the future
406	The server can only generate a response that is not accepted by the client

POST

/rw/rapid/symbol/{symbolurl}/data Update RAPID Variable Current/Init Value



"Update rapid variable.

When updating a rapid variable, mastership over rapid is required.
Controller supports UTF-8 character for this API from RW7.1"

The resource can be subscribed (RAPID persistent value) using /subscription with resource uri /rw/rapid/symbol/{symbolurl}/data;value

The event contains a link to the variable that has changed and the new value of the changed variable

It is possible to subscribe with any subscription priority (i.e High, Medium, Low priority) for RAPID persistent variables value.

Sample response for RAPID persistent value subscription

```
<?xml version="1.0" encoding="utf-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
  <head>
    <base href="https://127.0.0.1:7777/">
  </head>
  <body>
    <div class="state">
      <a href="/subscription/1" rel="group"></a>
      <a href="ws://127.0.0.1:7777/poll/1" rel="self"></a>
      <ul>
        <li class="rap-value-ev" title="value">
          <a href="/rw/rapid/symbol/RAPID/T_ROB1/MainModule/numt/data;value" rel="self"/>
        </li>
        <li class="rap-data" title="RAPID/T_ROB1/MainModule/numt">
          <span class="value">4</span>
        </li>
      </ul>
    </div>
  </body>
</html>
```

Parameters

Try it out

Name	Description
symbolurl * required string (path)	{symbolurl}
initval string (query)	{true false} by default initval will be false. true- set the initial value. false- set the current value value.

Name	Description
log string (query)	{true false} changes will be updated in elog (not applicable in updating initial value). Default value is false.
mastership string (query)	{implicit explicit} by default mastership is explicit
request-body object (body)	<p>Data parameter(s)</p> <p>Example Value Model</p> <pre>value=string</pre> <p>Parameter content type</p> <p>application/x-www-form-urlencoded;v=2.0 ▾</p>

Responses	Response content type	application/json	▼

Code	Description
204	The request has been successfully processed, but is not returning any content
400	The request cannot be fulfilled due to bad syntax
403	The request was a legal request, but the server is refusing to respond to it
404	The requested page could not be found but may be available again in the future
415	The server will not accept the request, because the media type is not supported

OPTIONS

/rw/rapid/symbol/{symbolurl}/data Get Forms



"Options that can be invoked on a rapid data resource."

Parameters

[Try it out](#)

Name	Description
------	-------------

symbolurl * required

string
(path)
{symbolurl}

symbolurl

Responses

Response content type

application/xhtml+xml;v=2.0 ▾

Code

Description

200

Standard response for successful HTTP requests

Code	Description
Example Value Model	
	<pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost:443/rw/rapid/"> </head> <body> <div class="state"> <form id="set" method='post' action="/rw/rapid/symbol/RAPID/T_ROB1/user/reg1/data"> <input type="text" name="value" value="0" /> </form> </div> </body> </html></pre>
400	The request cannot be fulfilled due to bad syntax
406	The server can only generate a response that is not accepted by the client

POST	/rw/rapid/symbols/validate Validate RAPID Variable	Try it out						
"Validate rapid variable."								
Parameters								
No parameters								
Responses		Response content type application/xhtml+xml;v=2.0						
<table border="1"> <thead> <tr> <th>Code</th><th>Description</th></tr> </thead> <tbody> <tr> <td>204</td><td>The request has been successfully processed, but is not returning any content</td></tr> <tr> <td>400</td><td>The request cannot be fulfilled due to bad syntax</td></tr> </tbody> </table>			Code	Description	204	The request has been successfully processed, but is not returning any content	400	The request cannot be fulfilled due to bad syntax
Code	Description							
204	The request has been successfully processed, but is not returning any content							
400	The request cannot be fulfilled due to bad syntax							

Code	Description
406	The server can only generate a response that is not accepted by the client
415	The server will not accept the request, because the media type is not supported

OPTIONS
/rw/rapid/symbols/validate
Get Forms
^

"Options that can be invoked on a RAPID data validate."

Parameters
Try it out

No parameters

Responses
Response content type
application/xhtml+xml;v=2.0 ▾

Code
Description

200
Standard response for successful HTTP requests

Example Value
| Model

```
<?xml version="1.0" encoding="UTF-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<base href="https://localhost/rw/rapid/">
</head>
<body>
<div class="state">
<form id="validate" method='post' action="symbols/validate">
<input type="text" name="task" value="" />
<input type="text" name="datatype" value="" />
<input type="text" name="value" value="" />
</form>
</div>
</body>
</html>
```

406
The server can only generate a response that is not accepted by the client

GET

/rw/rapid/symbol/{symbolurl}/properties Get RAPID Symbol Properties



"Returns a rapid symbol properties."

Parameters

Try it out

Operations on RAPID Tasks Operations on RAPID Tasks



Name

GET

/rw/rapid/tasks/{task}/modules Get RAPID Modules



symbolurl * required

string

{symbolurl}

"Returns a list of rapid modules loaded in a rapid task."
(path)

symbolurl

Parameters

Try it out

Responses

Description

Response content type

application/xhtml+xml;v=2.0 ▾

task * required

string
Code
(path)

{task}

Description

200

task

Standard response for successful HTTP requests

Example Value | Model

Responses

```
<?xml version="1.0" encoding="UTF-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<base href="https://192.168.8.105/rw/rapid/">
</head><body>
<div class="state">
<a href="symbol/RAPID/T_ROB1/user/reg1/properties" rel="self"></a>
<ul>
<li class="rap-sympropvar" title="RAPID/T_ROB1/user/reg1">
<a href="symbol/RAPID/T_ROB1/user/reg1/data" class="rap-data"></a>
<span class="symburl">RAPID/T_ROB1/user/reg1</span>
<span class="sytyp">var</span>
<span class="named">true</span>
<span class="dattyp">num</span>
<span class="ndim">0</span>
<?xml version="1.0" encoding="UTF-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<base href="https://127.0.0.1/rw/rapid/">
</head>
<body>
<div class="state">
<a href="tasks/T_ROB1/modules" rel="self"></a>
<ul>
<li class="rap-module-info-li" title="T_ROB1/user">
<span class="name">user</span>
<span class="type">SysMod</span>
</li>
<li class="rap-module-info-li" title="T_ROB1/BASE">
<span class="name">BASE</span>
```

Example Model

Code	Description
400	<pre>SysMod <li class="rap-module-info-li" title="T_ROB1/MainModule"> MainModule ProgMod </div> </body> </html></pre>
406	
406	The server can only generate a response that is not accepted by the client

GET /rw/rapid/tasks/{task}/modules/{module} Get RAPID Module Attributes ^

"Get RAPID module attributes."

Parameters Try it out

Name	Description
task * required string (path)	{task} task
module * required string (path)	{module} module
continue-on-err string (query)	{1 0} Default value is 0. In case input is 1, the API continues execution even if any error occurs in between. continue-on-err

Responses Response content type application/xhtml+xml;v=2.0

Code	Description
200	Standard response for successful HTTP requests
	Example Value Model
	<pre><?xml version="1.0" encoding="UTF-8"?> <html> <head> <base href= "https://localhost:7777/rw/rapid/" /> </head> <body> <div class="state"> <li class="rap-module-changecount-li" title="changecount"> <li class="rap-module-mod-possible-li" title="mod-possible"> <li class="rap-module-extension-li" title="extension"> <li class="rap-module-sync-pers-li" title="sync-pers"> <li class="rap-module-text-li" title="text"> <li class="rap-module-rules-instr-li" title="rules-instr"> <li class="rap-module-symbol-li" title="symbol"> <li class="rap-module-possible-attributes-li" title="attributes"> <li class="rap-module-object-li" title="object"> </pre>
400	The request cannot be fulfilled due to bad syntax
406	The server can only generate a response that is not accepted by the client

POST </rw/rapid/tasks/{task}/modules/{module}/save> Save RAPID Module ^

"Save a rapid program module."

Parameters [Try it out](#)

Name	Description
task * required string (path)	{task}
task	

Name	Description
module * required	
string (path)	{module}
module	
request-body	
object (body)	Data parameter(s)
	Example Value Model
	<code>name=string&path=string</code>
Parameter content type	
	<code>application/x-www-form-urlencoded;v=2.0</code> ▾
Responses	
	Response content type <code>application/json</code> ▾
Code	Description
204	The request has been successfully processed, but is not returning any content
400	The request cannot be fulfilled due to bad syntax
404	The requested page could not be found but may be available again in the future
415	The server will not accept the request, because the media type is not supported

OPTIONS	/rw/rapid/tasks/{task}/modules/{module} /save	Get Forms	↗
"Operations that can be invoked on rapid save module."			

Parameters

Try it out

Name	Description
------	-------------

task * required

string {task}

(path)

task

module * required

string {module}

(path)

module

Responses

Response content type

application/xhtml+xml;v=2.0 ▾

Code	Description
------	-------------

200

Standard response for successful HTTP requests

Example Value | Model

```
<?xml version="1.0" encoding="UTF-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<base href="https://localhost:443/rw/rapid/">
</head>
<body>
<div class="state">
<form id="save" method='post' action="tasks/T_ROB1/modules/MainModule/save">
<input type="text" name="path" value="0" />
<input type="text" name="name" value="0" />
</form>
</div>
</body>
</html>
```

400

The request cannot be fulfilled due to bad syntax

406

The server can only generate a response that is not accepted by the client

POST

/rw/rapid/tasks/{task}/modules/{module}
/text/range

Set Text Range



"Set text in a given range of rapid module.
Mastership is Required.
Controller supports UTF-8 character for this API from RW7.1"

Parameters

[Try it out](#)

Name	Description
task * required string (path)	{task}
	<input type="text" value="task"/>
module * required string (path)	{module}
	<input type="text" value="module"/>
mastership string (query)	{implicit explicit} by default mastership is explicit. Supported from RW7.2
	<input type="text" value="mastership"/>
request-body object (body)	Data parameter(s) Example Value Model <pre>replace-mode=string&query-mode=string&startrow=string&startcol=string&endrow=string&endcol=string&text=string</pre>
	Parameter content type application/x-www-form-urlencoded;v=2.0 ▾

Responses

Response content type

[application/xhtml+xml;v=2.0](#) ▾

Code	Description
200	Standard response for successful HTTP requests

Code	Description
	<p>Example Value Model</p> <pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost:7777/rw/rapid/" /> </head> <body> <div class="state"> <li class="rap-set-text-range" title="set-text-range"> false 234850 </div> </body> </html></pre>
400	The request cannot be fulfilled due to bad syntax
415	The server will not accept the request, because the media type is not supported

OPTIONS
/rw/rapid/tasks/{task}/modules/{module}
Get Forms
^

"Operations that can be invoked on rapid module set text."

Parameters
Try it out

Name	Description
task * required	{task}
string (path)	task
module * required	{module}
string (path)	module

Responses

Response content type

application/xhtml+xml;v=2.0 ▾

Code

Description

200

Standard response for successful HTTP requests

Example Value | Model

```
<?xml version="1.0" encoding="UTF-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<base href="https://localhost:443/rw/rapid/">
</head>
<body>
<div class="state">
<form id="set-text-range" method='post' action="tasks/T_ROB1/modules/MainModule/text	range">
<input type="text" name="task" value="T_ROB1" />
<input type="text" name="replace-mode" value="After" />
<input type="text" name="query-mode" value="Force" />
<input type="text" name="startrow" value="0" />
<input type="text" name="startcol" value="0" />
<input type="text" name="endrow" value="0" />
<input type="text" name="endcol" value="0" />
<input type="text" name="text" value="0" />
</form>
</div>
</body>
</html>
```

400

The request cannot be fulfilled due to bad syntax

406

The server can only generate a response that is not accepted by the client

GET

/rw/rapid/tasks/{task}/modules/{module}/text/range

Get a Specified Range of Text



"Get a specified range of text from rapid module.
Controller supports UTF-8 character for this API from RW7.1"

Parameters

Try it out

Name

Description

Name	Description
task * required	
string (path)	{task}
	task
module * required	
string (path)	{module}
	module
startrow * required	
string (query)	{start row}
	startrow
startcol * required	
string (query)	{start column}
	startcol
endrow * required	
string (query)	{end row}
	endrow
endcol * required	
string (query)	{end column}
	endcol

Responses	Response content type	application/xhtml+xml;v=2.0 ▾
-----------	-----------------------	-------------------------------

Code	Description
200	<p>Standard response for successful HTTP requests</p> <p>Example Value Model</p> <pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost:443/rw/rapid/"> </head></pre>

Code	Description
<pre> <body> <div class="state"> <li class="rap-mod-text" title="pgm"> %%% VERSION:1 LANGUAGE:ENGLISH %%% MODULE backup_big ! Used for testing RAP variable ! variable declarations ! xx1 is not changed by the RAPID program. It is instead changed via RAP. xx2 is ! 1234567890123456789 CONST robtarget p1:=[[981.71,-451.78,1468.82],[0.698099,0.107363,0.675469,-0.211834],[-1,0,-1,0],[9E+09,9E+09,9E+09,9E+09,9E+09,9E+09]]; CONST robtarget p2:=[[284.77,1042.49,1468.82],[0.612974,-0.445876,0.518631,0.3 </pre>	

400

The request cannot be fulfilled due to bad syntax

406

The server can only generate a response that is not accepted by the client

POST

/rw/rapid/tasks/{task}/modules/{module}/modify-position Set Modify Position



"Modify the position for the first found target in the given extension.

Login as Local Client in Manual Mode

Rapid program should run in motors on state.

Rapid MasterShip is needed

Load Motion RAPID program"

Parameters

Try it out

Name	Description
task * required	{task}
string (path)	task
module * required	{module}
string (path)	module

string
(path)

task

string
(path)

module

Name	Description
mastership string (query)	{implicit explicit} by default mastership is explicit. Supported from RW7.2
request-body object (body)	<p>Data parameter(s)</p> <p>Example Value Model</p> <pre>startrow=string&startcol=string&endrow=string&endcol=string&checklimit=string&checkdeactaxes=string&allowdeact=string</pre> <p>Parameter content type</p> <p>application/x-www-form-urlencoded;v=2.0 ▾</p>

Responses	Response content type	application/json ▾
-----------	-----------------------	--------------------

Code	Description
204	The request has been successfully processed, but is not returning any content
400	The request cannot be fulfilled due to bad syntax
403	The request was a legal request, but the server is refusing to respond to it
404	The requested page could not be found but may be available again in the future
415	The server will not accept the request, because the media type is not supported

OPTIONS

/rw/rapid/tasks/{task}/modules/{module}
/modify-position

Get Forms



"Operations that can be invoked on rapid module set text."

Parameters

Try it out

Name	Description
------	-------------

task * required

string
(path)

task

module * required

string
(path)

module

Responses

Response content type

application/xhtml+xml;v=2.0 ▾

Code	Description
------	-------------

200

Standard response for successful HTTP requests

Example Value | Model

```
<?xml version="1.0" encoding="UTF-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<base href="https://localhost:443/rw/rapid/">
</head>
<body>
<div class="state">
<form id="modify-position" method='post' action="tasks/T_ROB1/modules/MainModule1/modify-position">
<input type="text" name="startrow" value="0" />
<input type="text" name="startcol" value="0" />
<input type="text" name="endrow" value="0" />
<input type="text" name="endcol" value="0" />
<input type="text" name="checklimit" value="0" />
<input type="text" name="checkdeactaxes" value="0" />
<input type="text" name="text" value="0" />
<input type="text" name="allowdeact" value="0" />
</form>
</div>
</body>
</html>
```

400

The request cannot be fulfilled due to bad syntax

Code	Description
406	The server can only generate a response that is not accepted by the client

GET

/rw/rapid/tasks/{task}/modules/{module}
/text

Get Module Text



"Get a module text.
 Depends on RAPID program size output, it can be module-text or file-path.
 Controller supports UTF-8 character for this API from RW7.1"

Parameters

Try it out

Name	Description
------	-------------

task * required

string
(path)

task

module * required

string
(path)

module

Responses

Response content type

application/xhtml+xml;v=2.0 ▾

Code	Description
------	-------------

200

Standard response for successful HTTP requests

Example Value | Model

```
<?xml version="1.0" encoding="UTF-8"?>
<html>
<head>
<base href= "https://localhost:7777/rw/rapid/" />
</head>
<body>
<div class="state">
<a href= "tasks/T_ROB1/modules/MainModule/text" rel="self"/>
<ul>
<li class="rap-module-text" title="modulertext">
```

Code	Description
	<pre> 217220 MODULE MainModule PERS num num1 := 1; PERS num num2 := 2; PROC main() WaitTime 1; WaitTime 1; WaitTime 1; ENDPROC PROC main1() reg1 := 2; Routine1 reg1, "Hello", TRUE; reg2 := Routine2(reg1, "Test"); ENDPROC LOCAL PROC Routine1(num var1, string var2, bool flag) reg4 := 2; ENDPROC FUNC num Routine2(num var3, string var4) reg4 := 1; RETURN reg4; ENDFUNC TRAP Routine3 reg5 := 1; ENDTRAP ENDMODULE 1368 </div> </body> </html></pre>

400

The request cannot be fulfilled due to bad syntax

406

The server can only generate a response that is not accepted by the client

POST

/rw/rapid/tasks/{task}/modules/{module}

Set Module Text



"Update text in RAPID module

Mastership is required.

Controller supports UTF-8 character for this API from RW7.1.

For uploading RAPID module, any one of "text" or "path" needs to be provided as input
Data parameter "path" is supported from RW7.2"

Parameters

Try it out

Name	Description
task * required	
string	{task}
(path)	<input type="text" value="task"/>
module * required	
string	{module}
(path)	<input type="text" value="module"/>
mastership	
string	{implicit explicit} by default mastership is explicit
(query)	

Name	Description
request-body	mastership
object (body)	<p>Data parameter(s)</p> <p>Example Value Model</p> <pre>text=string&path=string</pre> <p>Parameter content type</p> <p>application/x-www-form-urlencoded;v=2.0 ▾</p>
Responses	Response content type
200	<p>Standard response for successful HTTP requests</p> <p>Example Value Model</p> <pre><?xml version="1.0" encoding="UTF-8"?> <html> <head> <base href= "https://localhost:443/rw/rapid/" /> </head> <body> <div class="state"> <li class="rap-set-module-text" title="set-module-text"> TRUE MainModule1 103879 </div> </body> </html></pre>
400	The request cannot be fulfilled due to bad syntax
403	The request was a legal request, but the server is refusing to respond to it

Code	Description
404	The requested page could not be found but may be available again in the future
406	The server can only generate a response that is not accepted by the client
415	The server will not accept the request, because the media type is not supported

OPTIONS `/rw/rapid/tasks/{task}/modules/{module}` Get Forms ^

"Operations that can be invoked on rapid module set text."

Parameters Try it out

Name	Description
task * required	{task}
string (path)	task
module * required	{module}
string (path)	module

Responses Response content type application/xhtml+xml;v=2.0

Code	Description
200	Standard response for successful HTTP requests

Example Value | Model

```
<?xml version="1.0" encoding="UTF-8"?>
```

Code**Description**

```
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<base href="https://localhost:443/rw/rapid/">
</head>
<body>
<div class="state">
<form id="set-module-text" method='post' action="tasks/T_ROB1/modules/MainModule/text">
<input type="text" name="task" value="T_ROB1" />
<input type="text" name="text" value="" />
<input type="text" name="path" value="" />
</form>
</div>
</body>
</html>
```

400

The request cannot be fulfilled due to bad syntax

406

The server can only generate a response that is not accepted by the client

GET`/rw/rapid/tasks/{task}/modules/{module}`

Get SyncPers Status



"Get a syncpers status."

Parameters**Try it out****Name****Description****task** * required

string

(path)

{task}

task

module * required

string

(path)

{module}

module

Responses

Response content type

`application/xhtml+xml;v=2.0`

Code	Description
200	Standard response for successful HTTP requests
	Example Value Model
	<pre><?xml version="1.0" encoding="UTF-8"?> <html> <head> <base href= "https://localhost:7777/rw/rapid/" /> </head> <body> <div class="state"> <li class="rap-syncper-status" title="syncperstatus"> 1 </div> </body> </html></pre>
400	The request cannot be fulfilled due to bad syntax
406	The server can only generate a response that is not accepted by the client

POST [/rw/rapid/tasks/{task}/modules/{module}/sync-pers](#) Set SyncPers [^](#)

"Update the initial values of persistent data in the module with their current values. Mastership is required."

Parameters [Try it out](#)

Name	Description
task * required	{task}
string (path)	task
module * required	{module}
string (path)	module

Name	Description
mastership string (query)	{implicit explicit} by default mastership is explicit mastership

Responses	Response content type	application/xhtml+xml;v=2.0 ▾
-----------	-----------------------	-------------------------------

Code	Description
200	Standard response for successful HTTP requests
400	The request cannot be fulfilled due to bad syntax
403	The request was a legal request, but the server is refusing to respond to it
404	The requested page could not be found but may be available again in the future
406	The server can only generate a response that is not accepted by the client
415	The server will not accept the request, because the media type is not supported

OPTIONS

/rw/rapid/tasks/{task}/modules/{module}
/sync-pers

Get Forms



"Operations that can be invoked on rapid module set text."

Parameters

Try it out

Name	Description
------	-------------

Name	Description
task * required	
string (path)	{task}
	task
module * required	
string (path)	{module}
	module
Responses	
Response content type application/xhtml+xml;v=2.0	
<hr/>	
Code	Description
200	Standard response for successful HTTP requests
	Example Value Model
	<pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost:443/rw/rapid/"> </head> <body> <div class="state"> <form id="set-syncpers" method='post' action="tasks/T_ROB1/modules/MainModule /sync-pers"> </form> </div> </body> </html></pre>
400	The request cannot be fulfilled due to bad syntax
406	The server can only generate a response that is not accepted by the client

GET	/rw/rapid/tasks/{task}/modules/{module} /module-extension	Get Module Extension	^
"Get a module extension."			

Parameters

Try it out

Name	Description
------	-------------

task * required

string
(path)

task

module * required

string
(path)

module

Responses

Response content type

application/xhtml+xml;v=2.0 ▾

Code	Description
------	-------------

200

Standard response for successful HTTP requests

Example Value | Model

```
<?xml version="1.0" encoding="UTF-8"?>
<html>
<head>
<base href= "https://localhost:7777/rw/rapid/" />
</head>
<body>
<div class="state">
<a href= "tasks/T_ROB1/modules/MainModule/module-extension" rel="self"/>
<ul>
<li class="rap-module-extension" title="extension">
<span class="num-of-lines">24</span>
<span class="max-num-of-col">118</span>
<span class="count">680609</span>
</li>
</ul>
</div>
</body>
</html>
```

400

The request cannot be fulfilled due to bad syntax

406

The server can only generate a response that is not accepted by the client

GET/rw/rapid/tasks/{task}/modules/{module}
/mod-possible

Get Mod Possible



"Get targets that can be modified in a given extension in a module."

Parameters**Try it out**

Name	Description
------	-------------

task * required

string
(path)

task

module * required

string
(path)

module

startrow

string
(query)

startrow

startcol

string
(query)

startcol

endrow * required

string
(query)

endrow

endcol * required

string
(query)

endcol

Responses

Response content type

application/xhtml+xml;v=2.0 ▾

Code	Description
200	Standard response for successful HTTP requests
	Example Value Model
	<pre><?xml version="1.0" encoding="UTF-8"?> <html> <head> <base href= "https://localhost:7777/rw/rapid/" /> </head> <body> <div class="state"> <li class="rap-module-mod-possible" title="mod-possible"> 2 19 9 19 11 </div> </body> </html></pre>
400	The request cannot be fulfilled due to bad syntax
406	The server can only generate a response that is not accepted by the client

GET
/rw/rapid/tasks/{task}/modules/{module}/changecount
Get Module Change Count
^

"Get module change count."

Parameters
Try it out

Name	Description
task * required	
string (path)	{task}
	<input type="text" value="task"/>

Name	Description
------	-------------

module * required

string
(path)
{module}

module

Responses

Response content type

application/xhtml+xml;v=2.0 ▾

Code

Description

200

Standard response for successful HTTP requests

Example Value | Model

```
<?xml version="1.0" encoding="UTF-8"?>
<html>
<head>
<base href= "https://localhost:7777/rw/rapid/" />
</head>
<body>
<div class="state">
<a href= "tasks/T_ROB1/modules/mymodule/changecount" rel="self"/>
<ul>
<li class="rap-module-changecount" title="changecount">
<span class="count"></span>
</li>
</ul>
</div>
</body>
</html>
```

400

The request cannot be fulfilled due to bad syntax

403

The request was a legal request, but the server is refusing to respond to it

404

The requested page could not be found but may be available again in the future

406

The server can only generate a response that is not accepted by the client

GET

/rw/rapid/tasks/{task}/modules/{module}
/routine

Get Routine Information



"Gets the routine information at the given position."

Parameters

Try it out

Name	Description
------	-------------

task * required

string
(path)

task

module * required

string
(path)

module

row * required

string
(query)

row

column * required

string
(query)

column

Responses

Response content type

application/xhtml+xml;v=2.0 ▾

Code	Description
------	-------------

200

Standard response for successful HTTP requests

Example Value | Model

```
<?xml version="1.0" encoding="UTF-8"?>
<html>
<head>
<base href= "https://localhost/rw/rapid/" />
</head>
<body>
<div class="state">
<a href= "tasks/T_ROB1/modules/MainModule/routine?row=10&column=9" rel="self">
<ul>
<li class="rap-routine-prop" title="RAPID/T_ROB1/MainModule/Routine1">
```

Code	Description
	<pre>RAPID/T_ROB1/MainModule/Routine1 Routine1 prc true false 1 </div> </body> </html></pre>
400	The request cannot be fulfilled due to bad syntax
403	The request was a legal request, but the server is refusing to respond to it
404	The requested page could not be found but may be available again in the future
406	The server can only generate a response that is not accepted by the client

GET
/rw/rapid/tasks/{task}/modules/{module}/routine/arguments
Get Routineargs information
^

"Gets the routine argument information at a given position.
 Routineargs will show a list of arguments based on the mark and limit.
 Default value of mark is 0.
 Absence of next link indicates last page.
 You will get routine argument information only on lines having procedure call."

Parameters
Try it out

Name	Description
task * required string (path)	{task}
	task
module * required string (path)	{module}
	module

Name	Description
mark string (query)	{mark} (index of the element)
	mark
limit string (query)	{numberofelements}
	limit
row * required string (query)	{row}
	row
column * required string (query)	{column}
	column

Responses Response content type application/xhtml+xml;v=2.0 ▾

Code	Description
200	<p>Standard response for successful HTTP requests</p> <p>Example Value Model</p> <pre><?xml version="1.0" encoding="UTF-8"?> <html> <head> <base href= "https://localhost:443/rw/rapid/" /> </head> <body> <div class="state"> <li class="rap-routine-args" title="arg0"> 0 0 4 9 4 16 ObjectNameReference </pre>

Code	Description
	<pre>NONE 0 0 <li class="rap-routine-args" title="arg1"> 1 0</pre>
400	The request cannot be fulfilled due to bad syntax
403	The request was a legal request, but the server is refusing to respond to it
404	The requested page could not be found but may be available again in the future
406	The server can only generate a response that is not accepted by the client

GET /rw/rapid/modules/{module}/rules-instr Get RulesInstr ^

"Returns suggested template for data type/instruction when new data type/instruction is added."

Parameters **Try it out**

Name	Description
module * required string (path)	{module}
name * required string (query)	{datatype_name instruction_name}
data-type string (query)	true false

Name	Description
line string (query)	{line_num}
col string (query)	{column_num}
parnum string (query)	{parnum_value}
altnum string (query)	{altnum_value}

Responses	Response content type	application/xhtml+xml;v=2.0 ▾
-----------	-----------------------	-------------------------------

Code	Description
200	<p>Standard response for successful HTTP requests</p> <p>Example Value Model</p> <pre><?xml version="1.0" encoding="UTF-8"?> <html> <head> <base href= "https://localhost:7777/rw/rapid/" /> </head> <body> <div class="state"> <li class="rap-module-rulesinstr" title="header"> 4 0 1 2 0 <li class="rap-module-rulesinstr" title="arg2"> 2 TRUE ToPoint </pre>

Code	Description
	<pre>FALSE [[515.00,0.00,712.00],[0.707107,0,0.707107,0],[0,0,0,0],[9E+09,9E+09,9E+09,9E+09,9E+09]] robtarget CONST FALSE</pre>
400	The request cannot be fulfilled due to bad syntax
404	The requested page could not be found but may be available again in the future
406	The server can only generate a response that is not accepted by the client

GET

/rw/rapid/modules/{module}/object/child Get Object Child



"Get a rapid object child details."

Parameters

[Try it out](#)

Name	Description
module * required	
string (path)	{module}
	<input type="text" value="module"/>
startline	
string (query)	{startline} , default startline=1
	<input type="text" value="startline"/>
startcolumn	
string (query)	{startcolumn} , default startcolumn=1
	<input type="text" value="startcolumn"/>
endline * required	
string (query)	{endline}

Name	Description
	<div style="border: 1px solid #ccc; padding: 5px; border-radius: 5px; text-align: center;">endline</div>
endcolumn * required string (query)	{endcolumn}. startline & startcolumn refers to the start of the object. endline & endcolumn refers to the end of object extent. Choose the entire extent of the object, to obtain the details(children) of the object

Responses Response content type application/xhtml+xml;v=2.0 ▾

Code	Description
200	Standard response for successful HTTP requests
	Example Value Model
	<pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost:4444/rw/rapid/"> </head> <body> <div class="state"> <li class="rap-mod-child" title="object-child"> "module" 1 8 1 11 0 0 0 0 0 0 0 0 0 0 0</pre>
400	The request cannot be fulfilled due to bad syntax
406	The server can only generate a response that is not accepted by the client

GET

/rw/rapid/tasks/{task}/modules/{module}
/symbol

Get Symbol Information



"Get symbol information from a position.
Output varies with different symbol type" under "Resources""

Parameters

[Try it out](#)

Name	Description

Name	Description
task * required	
string (path)	{task}
	task
module * required	
string (path)	{module}
	module
row	
string (query)	{row number} , Default row = 1
	row
col	
string (query)	{col number} , Default col = 1
	col

Responses Response content type application/xhtml+xml;v=2.0 ▾

Code	Description
200	<p>Standard response for successful HTTP requests</p> <p>Example Value Model</p> <pre><?xml version="1.0" encoding="UTF-8"?> <html> <head> <base href= "https://localhost:7777/rw/rapid/" /> </head> <body> <div class="state"> <li class="rap-module-symbol" title="module-symbol"> #2 p10 RAPID/T_ROB1/MainModule/p10 CON 1 1 RAPID/robtarget robtarget 0 0 </pre>

Code	Description
	<pre>0 1 </div> </body> </html></pre>

400

The request cannot be fulfilled due to bad syntax

GET

/rw/rapid/tasks/{task}/modules/{module}
/attributes

Get Module Possible Attributes



"Get a module possible attributes.
URL param "attribute" can be provided multiple times"

Parameters

[Try it out](#)

Name	Description
task * required	
string (path)	{task}
<input type="text" value="task"/>	
module * required	
string (path)	{module}
<input type="text" value="module"/>	
attribute * required	
string (query)	{[[noview,nostepin,viewonly,readonly,systemmod]]}. For multiple values, group inside '[]' and seperate each value using ',' Ex: [1,2,3]. attribute parameter value can be given in any combination as attribute=[nostepin,readonly,viewonly]
<input type="text" value="attribute"/>	

{[[noview,nostepin,viewonly,readonly,systemmod]]}. For multiple values, group inside '[]' and seperate each value using ',' Ex: [1,2,3]. attribute parameter value can be given in any combination as attribute=[nostepin,readonly,viewonly]

Responses

Response content type

application/xhtml+xml;v=2.0 ▾

Code

Description

Code	Description
200	Standard response for successful HTTP requests
	Example Value Model
	<pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost:443/rw/rapid/"> </head> <body> <div class="state"> <li class="rap-posattribs" title="posattribs"> systemmod noview </div> </body> </html></pre>
400	The request cannot be fulfilled due to bad syntax
406	The server can only generate a response that is not accepted by the client

GET
/rw/rapid/tasks/{task}/modules/{module}/object
Get RAPID Object
^

"Get details of the rapid object."

Parameters
Try it out

Name	Description
task * required string (path)	{task}
	task
module * required string (path)	{module}
	module

Name	Description
startrow string (query)	{start row} , Default startrow = 1
startcol string (query)	{start column} , Default startcol = 1
destination string (query)	{[Inner Outer Outer2 Before After Statement [InnerStatement]} , Default destination = inner

Responses	Response content type
	application/xhtml+xml;v=2.0 ▾

Code	Description
200	Standard response for successful HTTP requests

[Example Value](#) | [Model](#)

Code	Description
	<pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost:4444/rw/rapid/"> </head> <body> <div class="state"> <li class="rap-object" title="object"> 3 2 3 50 41 1 7 NONE 0 0 </div> </body> </html></pre>

400

The request cannot be fulfilled due to bad syntax

403

The request was a legal request, but the server is refusing to respond to it

404

The requested page could not be found but may be available again in the future

406

The server can only generate a response that is not accepted by the client

GET

/rw/rapid/tasks/{task}/modules/{module}
/text/search

Get Search Text



"Search text in RAPID module.

Controller supports UTF-8 character for this API from RW7.1 onwards."

If the text is not found, the row and column values will be zero.

Parameters

[Try it out](#)

Name

Description

Name	Description
task * required	
string (path)	{task}
	task
module * required	
string (path)	{module}
	module
startrow	
string (query)	{Start Row Number} , Default startrow = 1
	startrow
startcol	
string (query)	{Start Column Number} , Default startcol = 1
	startcol
text * required	
string (query)	{search text}
	text

Responses	Response content type	application/xhtml+xml;v=2.0
-----------	-----------------------	-----------------------------

Code	Description
200	Standard response for successful HTTP requests
Example Value Model	
<pre><?xml version="1.0" encoding="UTF-8"?> <html> <head> <base href= "https://localhost:7777/rw/rapid/" /> </head> <body> <div class="state"> <li class="rap-text-position" title="text-position"> 5</pre>	

Code	Description
	<pre>8 </div> </body> </html></pre>
400	The request cannot be fulfilled due to bad syntax
403	The request was a legal request, but the server is refusing to respond to it
404	The requested page could not be found but may be available again in the future
406	The server can only generate a response that is not accepted by the client

GET
/rw/rapid/tasks/{task}/motion Get RAPID Motion
^

""

Parameters
Try it out

Name	Description
task * required	
string	{task}
(path)	
	task

Responses
Response content type
application/xhtml+xml;v=2.0 ▾

Code	Description
200	Standard response for successful HTTP requests

Example Value | Model

Code	Description
	<pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost:80/rw/rapid/"> </head> <body> <div class="state"> <li class="rapid-robtarget-li" title="robtarget"> <li class="rapid-jointtarget-li" title="jointtarget"> <li class="rapid-extjointstate-li" title="extjointstate"> <li class="rapid-mechunit-li" title="mechunit"> </div> </body> </html></pre>

400

The request cannot be fulfilled due to bad syntax

406

The server can only generate a response that is not accepted by the client

GET

/rw/rapid/tasks/{task}/motion/robtarget Get RobTarget



"Get a robtarget for the task."

Parameters

[Try it out](#)

Name	Description
task * required	
string (path)	{task}
tool	task
string (query)	{tool_name}

Name	Description
wobj string (query)	tool {wobj_name} wobj
Responses	Response content type
200	application/xhtml+xml;v=2.0 ▾
Code	Description
200	Standard response for successful HTTP requests
	Example Value Model
	<pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost:80/rw/rapid/"> </head> <body> <div class="state"> <li class="rapid-robtarget" title="robtarget"> </pre>
400	The request cannot be fulfilled due to bad syntax
406	The server can only generate a response that is not accepted by the client

GET

/rw/rapid/tasks/{task}/motion/jointtarget Get Joint Target



"Get a jointtarget for the task."

Parameters

Try it out

Name	Description
------	-------------

task * required

string
(path)
{task}

task

Responses

Response content type

application/xhtml+xml;v=2.0 ▾

Code	Description
------	-------------

200

Standard response for successful HTTP requests

Example Value | Model

```
<?xml version="1.0" encoding="UTF-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<base href="https://localhost:80/rw/rapid/">
</head>
<body>
<div class="state">
<a href="tasks/T_ROB1/motion/jointtarget" rel="self"/>
<ul>
<li class="rapid-jointtarget" title="jointtarget">
<span class="rax_1"></span>
<span class="rax_2"></span>
<span class="rax_3"></span>
<span class="rax_4"></span>
<span class="rax_5"></span>
<span class="rax_6"></span>
<span class="eax_a"></span>
<span class="eax_b"></span>
<span class="eax_c"></span>
<span class="eax_d"></span>
<span class="eax_e"></span>
<span class="eax_f"></span>
</li>
</ul>
</div>
</body>
</html>
```

Code	Description
400	The request cannot be fulfilled due to bad syntax
406	The server can only generate a response that is not accepted by the client

GET

/rw/rapid/tasks/{task}/motion/mechunits Get Mechanical Units



"Get information about all mechunits belonging to the task."

Parameters

[Try it out](#)

Name	Description
------	-------------

task * required

string
(path)
task

Responses

Response content type

application/xhtml+xml;v=2.0 ▾

Code	Description
------	-------------

200

Standard response for successful HTTP requests

[Example Value](#) | [Model](#)

```
<?xml version="1.0" encoding="UTF-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<base href="https://localhost:80/rw/rapid/">
</head>
<body>
<div class="state">
<a href="tasks/T_ROB1/motion/mechunits" rel="self"/>
<ul>
<li class="rapid-mechunit" title="ROB_1">
<span class="name">ROB_1</span>
<span class="mode">active</span>
<span class="type">tcp_robot</span>
</li>
<li class="rapid-mechunit" title="CNV1">
```

Code	Description
	<pre>CNV1 inactive single </div> </body> </html></pre>
400	The request cannot be fulfilled due to bad syntax
406	The server can only generate a response that is not accepted by the client

GET /rw/rapid/tasks/{task}/motion/extjointstate Get External Joint States ^

"Get state of external joints."

Parameters Try it out

Name	Description
task * required	{task}
string (path)	task

Responses Response content type application/xhtml+xml;v=2.0 ▾

Code	Description
200	Standard response for successful HTTP requests
	Example Value Model
	<pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost:80/rw/rapid/"> </head> <body></pre>

Code	Description
	<pre><div class="state"> <li class="rapid-extjointstate" title="extjointstate"> linear liner linear not_active linear rotating </div> </body> </html></pre>

400

The request cannot be fulfilled due to bad syntax

406

The server can only generate a response that is not accepted by the client

GET

/rw/rapid/tasks/{task}/program Get RAPID Program Resource



"Returns the rapid program resource for a rapid task.

Http response code is NO_CONTENT(204) when RAPID program is not loaded."

Parameters

[Try it out](#)

Name	Description
task * required string (path)	{task} <input type="text" value="task"/>
continue-on-err string (query)	{1 0} Default value is 0. In case input is 1, the API continues execution even if any error occurs in between. <input type="text" value="continue-on-err"/>

Responses

Response content type

application/xhtml+xml;v=2.0 ▾

Code	Description
200	Standard response for successful HTTP requests
	Example Value Model
	<pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost/rw/rapid/"> </head> <body> <div class="state"> <li class="rap-program"> NewProgramName routine <li class="rap-program-breakpoint-li" title="breakpoint"> <li class="rap-builderrs-li" title="builderrs"> </div> </body> </html></pre>
400	The request cannot be fulfilled due to bad syntax
406	The server can only generate a response that is not accepted by the client

POST

/rw/rapid/tasks/{task}/program/load Load Program into a RAPID Task



"Load rapid program into a rapid task. Location header /progress/{id} will be returned after successful completion of the API.
Mastership is required."

The resource can be subscribed to get events with current status of loading RAPID program. The resource URI for this subscription will be /progress/{id}, where /progress/{id} is the "location header" returned after successful completion of "Load RAPID program" API.

Sample response for Load RAPID Program subscription

```
<?xml version="1.0" encoding="utf-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<base href="https://localhost:443/">
</head>
<body>
<div class="state">
```

```

<a href="subscription/1" rel="group"></a>
<a href="wss://localhost:443/poll/1" rel="self"></a>
<ul>
<a href="/progress/1" rel="self"/>
<li class="progress-ev" title="Load-Program">
<span class="state">pending</span>
<span class="code">294912</span>
</li>
</ul>
</div>
</body>
</html>

```

An event will look like

```

<?xml version="1.0" encoding="utf-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<base href="https://localhost:443/">
</head>
<body>
<div class="state">
<a href="subscription/1" rel="group"></a>
<ul>
<a href="/progress/1" rel="self"/>
<li class="progress-ev" title="Load-Program">
<a href="/user/HOME/testprg.pgf" rel="resource"/>
<span class="state">ready</span>
<span class="code">294912</span>
</li>
</ul>
</div>
</body>
</html>

```

Parameters

[Try it out](#)

Name	Description
------	-------------

task * required

string
(path)

task

mastership

string
(query)

mastership

request-body

Data parameter(s)

object
(body)

Example Value | Model

progpather=string&loadmode=string&unload=string

Name	Description
Parameter content type	
	<code>application/x-www-form-urlencoded;v=2.0</code> ▾
Responses	Response content type
	<code>application/json</code> ▾
Code	Description
202	The request has been accepted for processing, but the processing has not been completed
400	The request cannot be fulfilled due to bad syntax
403	The request was a legal request, but the server is refusing to respond to it
404	The requested page could not be found but may be available again in the future
415	The server will not accept the request, because the media type is not supported

OPTIONS	/rw/rapid/tasks/{task}/program/load Get Forms	▲
"Options that can be invoked on rapid load program."		
Parameters	Try it out	
Name	Description	
task * required		
string	{task}	
(path)		

Name	Description
	task
Responses	Response content type
	application/xhtml+xml;v=2.0
Code	Description
200	<p>Standard response for successful HTTP requests</p> <p>Example Value Model</p> <pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost:443/rw/rapid/"> </head><body> <div class="state"> <form id="loadprog" method='post' action="/rw/rapid/tasks/T_ROB1/program/load"> <input type="text" name="progpath" value="0" /> <input type="text" name="loadmode" value="0" /> </form> </div> </body> </html></pre>
400	The request cannot be fulfilled due to bad syntax
406	The server can only generate a response that is not accepted by the client

POST	/rw/rapid/tasks/{task}/program/unload	Unload Program from a RAPID Task	^
"Unload rapid program from a rapid task. Mastership is required."			
Parameters	Try it out		
Name	Description		

Name	Description
task * required	
string (path)	{task}
task	
mastership	
string (query)	{implicit explicit} by default mastership is explicit
mastership	
Responses	
Code	Description
204	The request has been successfully processed, but is not returning any content
400	The request cannot be fulfilled due to bad syntax
403	The request was a legal request, but the server is refusing to respond to it
404	The requested page could not be found but may be available again in the future
415	The server will not accept the request, because the media type is not supported

OPTIONS	/rw/rapid/tasks/{task}/program/unload Get Forms	^
"Options that can be invoked on rapid unload program."		
Parameters	Try it out	

Name	Description	
task * required		
string (path)	{task}	
	task	
Responses		
	Response content type application/xhtml+xml;v=2.0 ▾	
Code	Description	
200	Standard response for successful HTTP requests	
	Example Value Model	
	<pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost:443/rw/rapid/"> </head><body> <div class="state"> <form id="unloadprog" method='post' action="/rw/rapid/tasks/T_ROB1/program/unload"> </form> </div> </body></html></pre>	
400	The request cannot be fulfilled due to bad syntax	
406	The server can only generate a response that is not accepted by the client	

POST	/rw/rapid/tasks/{task}/program/save	Save RAPID Program	↗
"Save program."			
Parameters		Try it out	
Name	Description		

Name	Description
task * required	
string	{task}
(path)	
	task
request-body	Data parameter(s)
object (body)	<p>Example Value Model</p> <pre>path=string</pre>
	Parameter content type
	application/x-www-form-urlencoded;v=2.0 ▾
Responses	
	Response content type application/json ▾
Code	Description
204	The request has been successfully processed, but is not returning any content
400	The request cannot be fulfilled due to bad syntax
404	The requested page could not be found but may be available again in the future
415	The server will not accept the request, because the media type is not supported

OPTIONS	/rw/rapid/tasks/{task}/program/save Get Forms	^
"Options that can be invoked on rapid save program."		

Parameters

Try it out

Name	Description
------	-------------

task * required

string

(path)

{task}

task

Responses

Response content type

application/xhtml+xml;v=2.0 ▾

Code	Description
------	-------------

200

Standard response for successful HTTP requests

Example Value | Model

```
<?xml version="1.0" encoding="UTF-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<base href="https://localhost:443/rw/rapid/">
</head><body>
<div class="state">
<form id="save" method='post' action="/rw/rapid/tasks/T_ROB1/program/save">
<input type="text" name="path" value="0" />
</form>
</div>
</body></html>
```

400

The request cannot be fulfilled due to bad syntax

406

The server can only generate a response that is not accepted by the client

POST

/rw/rapid/tasks/{task}/program/name Set Program Name

^

"Set program name.
Mastership is required."

Parameters

Try it out

Name	Description
task * required string (path)	{task}
mastership string (query)	{implicit explicit} by default mastership is explicit
request-body object (body)	<p>Data parameter(s)</p> <p>Example Value Model</p> <pre>name=string</pre> <p>Parameter content type</p> <p>application/x-www-form-urlencoded;v=2.0 ▾</p>

Responses	Response content type
	application/json ▾

Code	Description
204	The request has been successfully processed, but is not returning any content
400	The request cannot be fulfilled due to bad syntax
403	The request was a legal request, but the server is refusing to respond to it
404	The requested page could not be found but may be available again in the future
415	The server will not accept the request, because the media type is not supported

OPTIONS

/rw/rapid/tasks/{task}/program/name Get Forms



"Options that can be invoked on set rapid program name."

Parameters

[Try it out](#)

Name	Description
------	-------------

task * required

string
(path)
{task}

task

Responses

Response content type

application/xhtml+xml;v=2.0 ▾

Code

Description

200

Standard response for successful HTTP requests

Code	Description
	<p>Example Value Model</p> <pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost:443/rw/rapid/"> </head><body> <div class="state"> <form id="setname" method='post' action="/rw/rapid/tasks/T_ROB1/program/name"> </form> </div> </body></html></pre>
400	The request cannot be fulfilled due to bad syntax
406	The server can only generate a response that is not accepted by the client

POST /rw/rapid/tasks/{task}/program/entrypoint Set Entry Point ^

"Set entry point of a rapid program.
Mastership is required."

Parameters Try it out

Name	Description
task * required string (path)	{task}
	<input type="text" value="task"/>
mastership string (query)	{implicit explicit} by default mastership is explicit
	<input type="text" value="mastership"/>
request-body object (body)	Data parameter(s)
	Example Value Model
	<input type="text" value="routine=string"/>

Name	Description
Parameter content type	
	<code>application/x-www-form-urlencoded;v=2.0</code> ▾
Responses	Response content type
	<code>application/json</code> ▾
Code	Description
204	The request has been successfully processed, but is not returning any content
400	The request cannot be fulfilled due to bad syntax
403	The request was a legal request, but the server is refusing to respond to it
404	The requested page could not be found but may be available again in the future
415	The server will not accept the request, because the media type is not supported

OPTIONS `/rw/rapid/tasks/{task}/program/entrypoint` Get Forms ▾

"Options that can be invoked on set rapid program entrypoint."

Parameters	Try it out
Name	Description
task * required string (path)	{task}

Name	Description
task	
Responses	Response content type
200	Standard response for successful HTTP requests
400	The request cannot be fulfilled due to bad syntax
406	The server can only generate a response that is not accepted by the client

GET	/rw/rapid/tasks/{task}/program/builderror Get Build Errors	^
"Returns the build errors list for a rapid task. Default value of start is 1 and maximum value of limit is 30(maximum supported by RAPID). Absence of prev and next link indicates first and last page respectively."		
Parameters	Try it out	
Name	Description	
task * required		
string	{task}	

Name	Description
(path)	task
limit string	{limit_value}
(query)	limit
start string	{start_value}
(query)	start

Responses	Response content type	application/xhtml+xml;v=2.0
-----------	-----------------------	-----------------------------

Code	Description
200	<p>Standard response for successful HTTP requests</p> <p>Example Value Model</p> <pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost:443/rw/rapid/"> </head> <body> <div class="state"> <li class="rap-builderrs" title="builderrs1"> MainModule 15 8 S:''' ; ''' <li class="rap-builderrs" title="builderrs2"> MainModule 19 8 135 S:''' ; ''' </div> </body></pre>
400	The request cannot be fulfilled due to bad syntax

Code	Description
404	The requested page could not be found but may be available again in the future
406	The server can only generate a response that is not accepted by the client

GET
/rw/rapid/tasks/{task}/program.breakpoints Get Break Points
^

"Returns the break points list for a rapid task."

Parameters
Try it out

Name	Description
task * required	{task}
string (path)	task
start	{start_value}
string (query)	start
limit	{limit_value}
string (query)	limit

Responses
Response content type
application/xhtml+xml;v=2.0 ▾

Code	Description
200	Standard response for successful HTTP requests

Example Value | Model

Code	Description
	<pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://127.0.0.1/rw/rapid/"> </head> <body> <div class="state"> <li class="rap-program-breakpoint" title="breakpoint1"> MainModule 11 3 11 31 <li class="rap-program-breakpoint" title="breakpoint2"> MainModule 13 3 13 31 </div></pre>

400

The request cannot be fulfilled due to bad syntax

404

The requested page could not be found but may be available again in the future

406

The server can only generate a response that is not accepted by the client

POST

/rw/rapid/tasks/{task}/program.breakpoints Set Break Point



"Set break point.
Mastership is required."

Parameters

Try it out

Name	Description
task * required string (path)	{task}

task

Name	Description
mastership string (query)	{implicit explicit} by default mastership is explicit
	mastership
request-body object (body)	Data parameter(s)
	Example Value Model
	module=string&row=string&column=string
	Parameter content type
	application/x-www-form-urlencoded;v=2.0 ▾
Responses	Response content type
	application/xhtml+xml;v=2.0 ▾
Code	Description
200	Standard response for successful HTTP requests
	Example Value Model
	<pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost:7777/rw/rapid/"> </head> <body> <div class="state"> <li class="rap-program-breakpoint" title="breakpoint"> 15 3 15 31 </div> </body> </html></pre>
400	The request cannot be fulfilled due to bad syntax

Code	Description
403	The request was a legal request, but the server is refusing to respond to it
404	The requested page could not be found but may be available again in the future
406	The server can only generate a response that is not accepted by the client
415	The server will not accept the request, because the media type is not supported

OPTIONS
/rw/rapid/tasks/{task}/program.breakpoints
Get Forms
^

"Get a list of actions that can be invoked on rapid program breakpoint."

Parameters
Try it out

Name	Description
task * required string (path)	{task}

task

Responses
Response content type
application/xhtml+xml;v=2.0 ▾

Code	Description
200	Standard response for successful HTTP requests

Example Value
Model

```
<?xml version="1.0" encoding="UTF-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<base href="https://localhost/rw/rapid/">
```

Code	Description
<pre></head> <body> <div class="state"> <form id="set-breakpoint" method='post' action="tasks/T_ROB1/program/breakpoi nt"> <input type="text" name="module" value="" /> <input type="text" name="column" value="" /> <input type="text" name="row" value="" /> </form> </div> </body> </html></pre>	

400

The request cannot be fulfilled due to bad syntax

406

The server can only generate a response that is not accepted by the client

POST

/rw/rapid/tasks/{task}/program.breakpoints /remove Clear Break Points



"Clear one or all break points.

Mastership is required.

Supported from RW 7.2."

Parameters

[Try it out](#)

Name Description

task * required

string

(path)

task

mastership

string

(query)

mastership

{implicit | explicit} by default mastership is explicit

all

string

(query)

all

={true | false} Optional. By default "all" value will be false

request-body

Data parameter(s)

Name**Description**object
(body)

Example Value | Model

`module=MainModule&row=4&column=0`**Parameter content type**`application/x-www-form-urlencoded;v=2.0` ▾**Responses****Response content type**`application/json`**Code****Description**

204

The request has been successfully processed, but is not returning any content

400

The request cannot be fulfilled due to bad syntax

403

The request was a legal request, but the server is refusing to respond to it

404

The requested page could not be found but may be available again in the future

415

The server will not accept the request, because the media type is not supported

OPTIONS`/rw/rapid/tasks/{task}/program.breakpoints /remove` Get Forms

"Get possible options to clear RAPID break points. Supported from RW7.2."

Parameters**Try it out****Name****Description**

Name	Description
task * required	
string (path)	{task}
	task
Responses	
	Response content type application/xhtml+xml;v=2.0 ▾
Code	Description
200	Standard response for successful HTTP requests
	Example Value Model
	<pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost/rw/rapid/"> </head> <body> <div class="state"> <form id="clear-breakpoints" method='post' action="tasks/T_ROB1/program/break points/remove"> <input type="text" name="task" value="" /> <input type="text" name="datatype" value="" /> <input type="text" name="value" value="" /> </form> </div> </body> </html></pre>
406	The server can only generate a response that is not accepted by the client

GET	/rw/rapid/tasks/{task}/execution	Get RAPID Program Counter Position	▲
"Get program counter position."			
Parameters		Try it out	
Name	Description		

Name	Description
task * required	
string (path)	{task}
	task
Responses	Response content type application/xhtml+xml;v=2.0 ▾
Code	Description
200	Standard response for successful HTTP requests
	Example Value Model
	<pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://127.0.0.1:9898/rw/rapid/"> </head> <body> <div class="state"> <li class="rap-pcp"> mymodule routine1 10 10 1 1 </div> </body> </html></pre>
400	The request cannot be fulfilled due to bad syntax
404	The requested page could not be found but may be available again in the future
406	The server can only generate a response that is not accepted by the client

GET

/rw/rapid/tasks Get RAPID Tasks



"Returns a list of all rapid tasks."

The resource can be subscribed (Build Log Change) using /subscription with resource uri /rw/rapid/tasks;buildlogchange

Sample response for Build Log Change subscription

```
<?xml version="1.0" encoding="utf-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
    <base href="https://localhost/">
</head>
<body>
    <div class="state">
        <a href="subscription/4" rel="group"/>
        <a href="ws://localhost/poll/4" rel="self"/>
    </div>
</body>
</html>
```

A build log change event look like

```
<?xml version="1.0" encoding="utf-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
    <base href="https://localhost/">
</head>
<body>
    <div class="state">
        <a href="subscription/4" rel="group"/>
        <a href="ws://localhost/poll/4" rel="self"/>
        <ul>
            <li class="rap-buildlog-ev" title="buildlog">
                <a href="/rw/rapid/tasks;buildlogchange" rel="self"/>
                <span class="task-name">T_ROB1</span>
                <span class="build-count">16</span>
                <span class="build-log-change">SYS_CTRL_S_RAPID_SEMANTIC_ERROR</span>
            </li>
        </ul>
    </div>
</body>
</html>
```

Parameters

[Try it out](#)

Name	Description
continue-on-err string (query)	{1 0} Default value is 0. In case input is 1, the API continues execution even if any error occurs in between.

continue-on-err

Responses

Response content type

application/xhtml+xml;v=2.0 ▾

Code

Description

200

Standard response for successful HTTP requests

Example Value | Model

```
<?xml version="1.0" encoding="UTF-8"?>
<html
  xmlns="http://www.w3.org/1999/xhtml">
<head>
<base href="https://127.0.0.1:80/rw/rapid/">
</head>
<body>
<div class="state">
<a href="tasks" rel="self"></a>
<ul>
<li class="rap-tasks-spy-li" title="spy">
<a href="tasks/spy" rel="self"></a>
</li>
<li class="rap-tasks-syncstate-pp-li" title="program-pointer">
<a href="tasks-syncstate/program-pointer" rel="self"></a>
</li>
<li class="rap-tasks-syncstate-mp-li" title="motion-pointer">
<a href="tasks-syncstate/motion-pointer" rel="self"></a>
</li>
<li class="rap-task-li" title="T_ROB1">
<a href="tasks/T_ROB1" rel="self"></a>
<span class="name">T_ROB1</span>
<span class="type">normal</span>
<span class="taskstate">linked</span>
<span class="excstate">ready</span>
<span class="active">On</span>
<span class="motiontask">TRUE</span>

```

400

The request cannot be fulfilled due to bad syntax

OPTIONS

/rw/rapid/tasks Get Forms



"Options that can be invoked on a rapid tasks resource.
Not supported in bootserver mode"

Parameters

Try it out

No parameters

Responses

Response content type

application/xhtml+xml;v=2.0 ▾

Code**Description**

200

Standard response for successful HTTP requests

[Example Value](#) | [Model](#)

```
<?xml version="1.0" encoding="UTF-8"?>
<html>
<head>
<base href= "https://localhost:7777/rw/rapid/" />
</head>
<body>
<div class="state">
<form id="sub-subscribe" method='post' action="/subscription">
<fieldset class="rap-buildlog-ev">
<input type="checkbox" name="resources" value="1"/>
<input class="res" type="text" name="1" value="/rw/rapid/tasks;buildlogchange" maxlength="500"/>
<select class="priority" name="1-p">
<option value="0" selected="selected"></option>
<option value="1"></option>
</select>
</fieldset>
</form>
</div>
</body>
</html>
```

400

The request cannot be fulfilled due to bad syntax

406

The server can only generate a response that is not accepted by the client

GET

/rw/rapid/tasks/spy Get RAPID Spy Logging Status



"Get rapid spy logging status."

Parameters**Try it out**

No parameters

Responses

Response content type

application/xhtml+xml;v=2.0 ▾

Code	Description
200	<p>Standard response for successful HTTP requests</p> <p>Example Value Model</p> <pre><?xml version="1.0" encoding="UTF-8"?> <html> <head> <base href= "https://localhost:7777/rw/rapid/" /> </head> <body> <div class="state"> <li class="rap-spy-status" title="spy-status"> Not Logging </div> </body> </html></pre>

406

The server can only generate a response that is not accepted by the client

POST

/rw/rapid/tasks/spy/start Start RAPID Spy Logging



"Starts rapid spy logging.
By default, log file will be created in HOME folder.
Mastership is required."

Parameters

[Try it out](#)

Name	Description
mastership <i>string</i> (query)	{implicit explicit} by default mastership is explicit <input type="text" value="mastership"/>
request-body <i>object</i> (body)	<p>Data parameter(s)</p> <p>Example Value Model</p> <pre>log-file=string</pre>

Name	Description
Parameter content type	<code>application/x-www-form-urlencoded;v=2.0</code> ▾
Responses	Response content type <code>application/json</code> ▾
Code	Description
204	The request has been successfully processed, but is not returning any content
400	The request cannot be fulfilled due to bad syntax
403	The request was a legal request, but the server is refusing to respond to it
415	The server will not accept the request, because the media type is not supported

OPTIONS	/rw/rapid/tasks/spy/start Get Forms	^
"Options that can be invoked on a stop rapid spy logging."		
Parameters	Try it out	
No parameters		
Responses	Response content type <code>application/xhtml+xml;v=2.0</code> ▾	
Code	Description	
200	Standard response for successful HTTP requests	

Code	Description
	<p>Example Value Model</p> <pre><?xml version="1.0" encoding="UTF-8"?> <html> <head> <base href= "https://localhost:7777/rw/rapid/" /> </head> <body> <div class="state"> <form id="start-spy" method="post" action="tasks/spy/start"> <input name="log-file" type="file"/> </form> </div> </body> </html></pre>
400	The request cannot be fulfilled due to bad syntax
406	The server can only generate a response that is not accepted by the client

POST	/rw/rapid/tasks/spy/stop Stop RAPID Spy Logging	^			
"Stops rapid spy logging. Mastership is required."					
Parameters		Try it out			
<table border="1"> <thead> <tr> <th>Name</th><th>Description</th></tr> </thead> <tbody> <tr> <td>mastership string (query)</td><td>{implicit explicit} by default mastership is explicit</td></tr> </tbody> </table>		Name	Description	mastership string (query)	{implicit explicit} by default mastership is explicit
Name	Description				
mastership string (query)	{implicit explicit} by default mastership is explicit				
<table border="1"> <thead> <tr> <th>Responses</th><th>Response content type</th></tr> </thead> <tbody> <tr> <td></td><td>application/json ▾</td></tr> </tbody> </table>		Responses	Response content type		application/json ▾
Responses	Response content type				
	application/json ▾				
<table border="1"> <thead> <tr> <th>Code</th><th>Description</th></tr> </thead> <tbody> <tr> <td>204</td><td>The request has been successfully processed, but is not returning any</td></tr> </tbody> </table>		Code	Description	204	The request has been successfully processed, but is not returning any
Code	Description				
204	The request has been successfully processed, but is not returning any				

Code	Description
content	
400	The request cannot be fulfilled due to bad syntax
403	The request was a legal request, but the server is refusing to respond to it
415	The server will not accept the request, because the media type is not supported

OPTIONS /rw/rapid/tasks/spy/stop Get Forms ^

"Options that can be invoked on a RAPID tasks stop spy logging."

Parameters **Try it out**

No parameters

Responses Response content type application/xhtml+xml;v=2.0 ▼

Code **Description**

200 Standard response for successful HTTP requests

Example Value | Model

```
<?xml version="1.0" encoding="UTF-8"?>
<html>
<head>
<base href= "https://localhost:7777/rw/rapid/" />
</head>
<body>
<div class="state">
<form id="stop-spy" method="post" action="tasks/spy/stop"/>
</div>
</body>
</html>
```

400 The request cannot be fulfilled due to bad syntax

Code	Description
406	The server can only generate a response that is not accepted by the client

POST

/rw/rapid/tasks/activate Activate RAPID Tasks



"Activate/Deactivate rapid tasks in the task panel.
Mastership is required."

Parameters

[Try it out](#)

Name	Description
------	-------------

mastership
string
(query) {implicit | explicit} by default mastership is explicit

mastership

Responses

Response content type

application/json



Code	Description
------	-------------

204 The request has been successfully processed, but is not returning any content

400 The request cannot be fulfilled due to bad syntax

403 The request was a legal request, but the server is refusing to respond to it

415 The server will not accept the request, because the media type is not supported

OPTIONS

/rw/rapid/tasks/activate Get Forms



"Options that can be invoked on a RAPID tasks stop spy logging."

Parameters

[Try it out](#)

No parameters

Responses

Response content type

application/xhtml+xml;v=2.0 ▾

Code

Description

200

Standard response for successful HTTP requests

[Example Value](#) | [Model](#)

```
<?xml version="1.0" encoding="UTF-8"?>
<html>
<head>
<base href= "https://localhost:7777/rw/rapid/" />
</head>
<body>
<div class="state">
<form id="activate" method="post" action="tasks/activate"/>
</div>
</body>
</html>
```

400

The request cannot be fulfilled due to bad syntax

406

The server can only generate a response that is not accepted by the client

POST

/rw/rapid/tasks/deactivate Deactivate RAPID Tasks

⌞

"Activate/Deactivate rapid tasks in the task panel.
Mastership is required."

Parameters

[Try it out](#)

Name

Description

Name	Description
mastership string (query)	{implicit explicit} by default mastership is explicit

mastership

Responses Response content type application/json ▾

Code	Description
204	The request has been successfully processed, but is not returning any content
400	The request cannot be fulfilled due to bad syntax
403	The request was a legal request, but the server is refusing to respond to it
415	The server will not accept the request, because the media type is not supported

OPTIONS /rw/rapid/tasks/deactivate Get Forms ▾

"Options that can be invoked on a RAPID tasks stop spy logging."

Parameters Try it out

No parameters

Responses Response content type application/xhtml+xml;v=2.0 ▾

Code	Description
------	-------------

Code	Description
200	Standard response for successful HTTP requests
	Example Value Model
	<pre><?xml version="1.0" encoding="UTF-8"?> <html> <head> <base href= "https://localhost:7777/rw/rapid/" /> </head> <body> <div class="state"> <form id="deactivate" method="post" action="tasks/deactivate"/> </div> </body> </html></pre>
400	The request cannot be fulfilled due to bad syntax
406	The server can only generate a response that is not accepted by the client

GET /rw/rapid/tasks/syncstate/program-pointer Get Program Pointer Sync State for all Tasks ^

""

Parameters Try it out

No parameters

Responses Response content type application/xhtml+xml;v=2.0 ▾

Code	Description
200	Standard response for successful HTTP requests
	Example Value Model
	<pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://127.0.0.1:9898/rw/rapid/" /> </head></pre>

Code	Description
<code><body></code> <code><div class="state"></code> <code></code> <code></code> <code><li class="rap-sync-state" title="sync-state"></code> <code>On</code> <code></code> <code></code> <code></div></code> <code></body></code> <code></html></code>	

400

The request cannot be fulfilled due to bad syntax

406

The server can only generate a response that is not accepted by the client

POST

/rw/rapid/tasks/calibration Set Calibration for Single/Dual Armed Robot



"Calibration for a single/dual armed robot.

"task2" and "selected_joints2" data parameters will be required for dual armed Robot.

Motors should be in OFF state."

Parameters

Try it out

Name	Description
request-body object (body)	Data parameter(s) Example Value Model <code>task1=string&selected_joints1=string&task2=string&selected_joints2=string&fineCalibration=string</code>

Parameter content type

application/x-www-form-urlencoded;v=2.0 ▾

Responses

Response content type

application/json ▾

Code	Description
204	The request has been successfully processed, but is not returning any content
400	The request cannot be fulfilled due to bad syntax
403	The request was a legal request, but the server is refusing to respond to it
415	The server will not accept the request, because the media type is not supported

OPTIONS
/rw/rapid/tasks/calibration
Get Forms
^

"Options that can be invoked to run calibration for a single/dual armed robot."

Try it out

Parameters

Try it out

No parameters

Responses

Response content type

application/xhtml+xml;v=2.0 ▾

Code
Description

200

Standard response for successful HTTP requests

Example Value

| Model

```
<?xml version="1.0" encoding="UTF-8"?>
<html>
<head>
<base href= "https://localhost:7777/rw/rapid/" />
</head>
<body>
<div class="state">
<form id="calibration" method="post" action="tasks/calibration"/>
<input name="task1" type="taskname"/>
<input name="selected-joints1" type="value"/>
<input name="task2" type="taskname"/>
<input name="selected-joints2" type="value"/>
</div>
```

Code	Description
	</body> </html>
400	The request cannot be fulfilled due to bad syntax
406	The server can only generate a response that is not accepted by the client

GET /rw/rapid/tasks/syncstate/motion-pointer Get Motion Pointer Sync State for all Tasks [^](#)

"Get the motion pointer sync state for all tasks."

Parameters [Try it out](#)

No parameters

Responses Response content type [application/xhtml+xml;v=2.0](#) ▾

Code	Description
200	Standard response for successful HTTP requests
400	The request cannot be fulfilled due to bad syntax

Example Value | Model

```
<?xml version="1.0" encoding="UTF-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<base href="https://127.0.0.1:9898/rw/rapid/">
</head>
<body>
<div class="state">
<a href="tasks/syncstate/motion-pointer" rel="self"/>
<ul>
<li class="rap-sync-state" title="sync-state">
<span class="motion-pointer-state">Off</span>
</li>
</ul>
</div>
</body>
</html>
```

400 The request cannot be fulfilled due to bad syntax

Code	Description
406	The server can only generate a response that is not accepted by the client

OPTIONS
/rw/rapid/tasks/{task} Get Forms
^

"Options that can be invoked on a RAPID task resource."

Parameters
Try it out

Name	Description
task * required string (path)	{task}

task

Responses
Response content type
application/xhtml+xml;v=2.0 ▾

Code	Description
200	Standard response for successful HTTP requests

Example Value | Model

```
<?xml version="1.0" encoding="UTF-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<base href="https://localhost/rw/rapid/">
</head><body>
<div class="state">
<form action="subscription" id="subscribe" method="post">
<fieldset class="rap-task-ev">
<input name="resources" type="checkbox" value="1"/>
<input class="res" maxlength="500" name="1" type="text" value="/rw/rapid/tasks/T_ROB1;taskchange"/>
<select class="priority" name="1-p">
<option selected="selected" value="0"/>
<option value="1"/>
</select>
</fieldset>
</form>
<form action="subscription" id="subscribe" method="post">
<fieldset class="rap-syncstate-ev">
```

Code	Description
	<pre><input name="resources" type="checkbox" value="1"/> <input class="res" maxlength="500" name="1" type="text" value="/rw/rapid/tasks/T_ROB1;syncstatechange"/> <select class="priority" name="1-p"> <option selected="selected" value="0"/> <option value="1"/> </select></pre>
400	The request cannot be fulfilled due to bad syntax
406	The server can only generate a response that is not accepted by the client

GET /rw/rapid/tasks/{task_name}/pref-data-types Get Preferable Data Types ^

""

Parameters Try it out

Name	Description
task_name * required	{task_name}
string (path)	task_name
instruction * required	{AliasIO}
string (query)	instruction
parameter * required	{FromSignal}
string (query)	parameter

Responses Response content type application/xhtml+xml;v=2.0 ▾

Code	Description
------	-------------

Code	Description
200	Standard response for successful HTTP requests
	Example Value Model
	<pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost:443/rw/rapid/"> </head> <body> <div class="state"> <li class="rap-task-pref-data-types" title="pref-data-types1"> signaldi dattyp <li class="rap-task-pref-data-types" title="pref-data-types2"> signaldo dattyp <li class="rap-task-pref-data-types" title="pref-data-types3"> signalgi dattyp <li class="rap-task-pref-data-types" title="pref-data-types4"> signalgo dattyp <li class="rap-task-pref-data-types" title="pref-data-types5"> signalgo</pre>
400	The request cannot be fulfilled due to bad syntax
406	The server can only generate a response that is not accepted by the client

POST /rw/rapid/tasks/{task}/abortexeclevel Abort Current Execution Level ^

"Abort current execution level.
Mastership is required."

Parameters **Try it out**

Name	Description
task * required string (path)	{task}

Name	Description
	task
mastership string (query)	{implicit explicit} by default mastership is explicit
	mastership

Responses	Response content type	application/json
		application/json

Code	Description
204	The request has been successfully processed, but is not returning any content
400	The request cannot be fulfilled due to bad syntax
403	The request was a legal request, but the server is refusing to respond to it
404	The requested page could not be found but may be available again in the future
415	The server will not accept the request, because the media type is not supported

OPTIONS	/rw/rapid/tasks/{task}/abortexeclevel Get Forms	^
"Options that can be invoked on a RAPID task abort current execution level."		
Parameters	Try it out	
Name	Description	

Name	Description
task * required	
string (path)	{task}
	task
Responses	
	Response content type application/xhtml+xml;v=2.0 ▾
Code	Description
200	Standard response for successful HTTP requests
	Example Value Model
	<pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost/rw/rapid/"> </head><body> <div class="state"> <form class="rap-task" id="abortexeclevel" method='post' action="/rw/rapid/tasks/T_ROB1/abortexeclevel"> </form> </div> </body> </html></pre>
400	The request cannot be fulfilled due to bad syntax
406	The server can only generate a response that is not accepted by the client

POST

/rw/rapid/tasks/{task}/loadmod Load RAPID Module into a RAPID Task



"Load module into a rapid task.
Mastership is required"

Parameters

Try it out

Name	Description

Name	Description
task * required string (path)	{task}
mastership string (query)	{implicit explicit} by default mastership is explicit
request-body object (body)	<p>Data parameter(s)</p> <p>Example Value Model</p> <pre>modulepath=string&replace=string</pre> <p>Parameter content type</p> <p>application/x-www-form-urlencoded;v=2.0 ▾</p>

Responses	Response content type
	application/xhtml+xml;v=2.0 ▾
Code	Description
200	<p>Standard response for successful HTTP requests</p> <p>Example Value Model</p> <pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost/rw/rapid/"> </head> <body> <div class="state"> <li class="rap-task-module-li" title="loaded-module"> module_test </div> </body> </html></pre>

Code	Description
400	The request cannot be fulfilled due to bad syntax
403	The request was a legal request, but the server is refusing to respond to it
404	The requested page could not be found but may be available again in the future
406	The server can only generate a response that is not accepted by the client
415	The server will not accept the request, because the media type is not supported

OPTIONS
/rw/rapid/tasks/{task}/loadmod Get Forms
^

"Options that can be invoked on load module into a rapid task."

Parameters
Try it out

Name	Description
task * required string (path)	{task}

task

Responses
Response content type
application/xhtml+xml;v=2.0 ▾

Code	Description
200	Standard response for successful HTTP requests

Example Value | Model

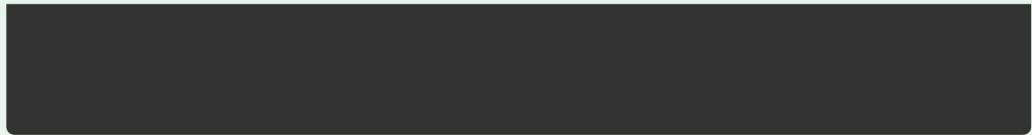
Code	Description
	<pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost/rw/rapid/"> </head><body> <div class="state"> <form class="rap-task" id="loadmod" method='post' action="/rw/rapid/tasks/T_R OB1/loadmod"> <input type="text" name="modulepath" value="0" /> <select class="replace" name="replace"> <option value="true" selected="selected">true</option> <option value="false">false</option> </select> </form> </div> </body> </html></pre>
400	The request cannot be fulfilled due to bad syntax
406	The server can only generate a response that is not accepted by the client

POST /rw/rapid/tasks/{task}/unloadmod Unload Module from a RAPID Task ^

"Unload module from a rapid task.
Mastership is required."

Parameters Try it out

Name	Description
task * required string (path)	{task} <input type="text" value="task"/>
mastership string (query)	{implicit explicit} by default mastership is explicit <input type="text" value="mastership"/>
request-body object (body)	Data parameter(s) Example Value Model

Name	Description
	
Parameter content type application/x-www-form-urlencoded;v=2.0 ▾	
Responses	
Code	Description
204	The request has been successfully processed, but is not returning any content
400	The request cannot be fulfilled due to bad syntax
403	The request was a legal request, but the server is refusing to respond to it
404	The requested page could not be found but may be available again in the future
415	The server will not accept the request, because the media type is not supported

OPTIONS	/rw/rapid/tasks/{task}/unloadmod Get Forms	^
"Options that can be invoked on unload module from a rapid task."		
Parameters	Try it out	
Name	Description	
task * required		
string	{task}	

Name	Description
(path)	task
Responses	Response content type
200	Standard response for successful HTTP requests
400	The request cannot be fulfilled due to bad syntax
406	The server can only generate a response that is not accepted by the client

POST	/rw/rapid/tasks/{task}/build Link RAPID Task	^
Parameters		Try it out
Name	Description	
task * required string	{task}	

Name	Description
(path) mastership string (query)	task {implicit explicit} by default mastership is explicit mastership
Responses	Response content type application/json ▾
Code	Description
204	The request has been successfully processed, but is not returning any content
400	The request cannot be fulfilled due to bad syntax
403	The request was a legal request, but the server is refusing to respond to it
404	The requested page could not be found but may be available again in the future
415	The server will not accept the request, because the media type is not supported

OPTIONS	/rw/rapid/tasks/{task}/build Get Forms	^
"Options that can be invoked on link of a rapid task."		
Parameters		Try it out
Name		Description

Name	Description
task * required	
string	{task}
(path)	
	task
Responses	
Response content type application/xhtml+xml;v=2.0 ▾	
Code	Description
200	Standard response for successful HTTP requests
	Example Value Model
	<pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost/rw/rapid/"> </head><body> <div class="state"> <form id="build" method='post' action="/rw/rapid/tasks/T_ROB1/build"/> </div> </body> </html></pre>
400	The request cannot be fulfilled due to bad syntax
406	The server can only generate a response that is not accepted by the client

POST	/rw/rapid/tasks/{task}/activate Activate RAPID Task	↗
"Activate rapid task in the task panel. Mastership is required."		
Parameters		Try it out
Name	Description	

Name	Description
task * required	
string (path)	{task}
task	
mastership	
string (query)	{implicit explicit} by default mastership is explicit
mastership	
Responses	
Response content type application/json ▼	
Code	Description
204	The request has been successfully processed, but is not returning any content
400	The request cannot be fulfilled due to bad syntax
403	The request was a legal request, but the server is refusing to respond to it
404	The requested page could not be found but may be available again in the future
415	The server will not accept the request, because the media type is not supported

OPTIONS	/rw/rapid/tasks/{task}/activate Get Forms	^
"Options that can be invoked to activate rapid task in the task panel."		
Parameters		Try it out

Name	Description
task * required	
string (path)	{task}
	task
Responses	
	Response content type application/xhtml+xml;v=2.0 ▾
Code	Description
200	Standard response for successful HTTP requests
	Example Value Model
	<pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost/rw/rapid/"> </head><body> <div class="state"> <form class="rap-task" id="activate" method='post' action="/rw/rapid/tasks/T_ROB1/activate"> </div> </body> </html></pre>
400	The request cannot be fulfilled due to bad syntax
406	The server can only generate a response that is not accepted by the client

POST	/rw/rapid/tasks/{task}/deactivate Deactivate RAPID Task	↗
Parameters		Try it out
Name	Description	

Name	Description
task * required	
string (path)	{task}
	task
mastership	
string (query)	{implicit explicit} by default mastership is explicit
	mastership
Responses	
Response content type application/json ▼	
Code	Description
204	The request has been successfully processed, but is not returning any content
400	The request cannot be fulfilled due to bad syntax
403	The request was a legal request, but the server is refusing to respond to it
404	The requested page could not be found but may be available again in the future
415	The server will not accept the request, because the media type is not supported

OPTIONS	/rw/rapid/tasks/{task}/deactivate Get Forms	^
"Options that can be invoked to Deactivate rapid task in the task pane."		
Parameters		Try it out

Name	Description
task * required	
string (path)	{task}
	task
Responses	
	Response content type application/xhtml+xml;v=2.0 ▾
Code	Description
200	Standard response for successful HTTP requests
	Example Value Model
	<pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost/rw/rapid/"> </head><body> <div class="state"> <form class="rap-task" id="deactivate" method='post' action="/rw/rapid/tasks/T_ROB1/deactivate"/> </div> </body> </html></pre>
400	The request cannot be fulfilled due to bad syntax
406	The server can only generate a response that is not accepted by the client

GET	/rw/rapid/tasks/{task_name}/activation-record	Get Activation Record	↗
"An activation record consists of information needed for program execution, such as instances of routines parameters and locally defined data. Preconditions are Motors on, Load Rapid program, Run program"			
Parameters		Try it out	
Name	Description		

Name	Description
task_name * required string (path)	{task_name}
stackframe string (query)	{stack frame} The stack frame is a number starting with 1 for the current activation record, i.e., the activation record containing the user program pointer. The stack frame increases with one for each previous activation record until the entry point is reached. Default value for stackframe is 1.
Responses	Response content type
	application/xhtml+xml;v=2.0 ▾
Code	Description
200	Standard response for successful HTTP requests
	Example Value Model <div style="background-color: black; color: white; padding: 10px;"> <pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://127.0.0.1:9898/rw/rapid/"> </head> <body> <div class="state"> <li class="rap-stackframe" title="stackframe"> Normal 4 8 4 18 RAPID/T_ROB1/%1 RAPID/T_ROB1/MainModule/main </div> </body> </html></pre> </div>
400	The request cannot be fulfilled due to bad syntax

Code	Description
403	The request was a legal request, but the server is refusing to respond to it
404	The requested page could not be found but may be available again in the future
406	The server can only generate a response that is not accepted by the client

GET /rw/rapid/tasks/{task_name}/syncstate/program-pointer Get Program Pointer Sync State ^

""

Parameters Try it out

Name	Description
task_name * required	{task_name}
string (path)	<input type="text" value="task_name"/>

Responses Response content type application/xhtml+xml;v=2.0 ▾

Code	Description
200	Standard response for successful HTTP requests

Example Value | Model

```
<?xml version="1.0" encoding="UTF-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<base href="https://127.0.0.1:9898/rw/rapid/">
</head>
<body>
<div class="state">
<a href="tasks/T_ROB1/syncstate/program-pointer" rel="self"/>
<ul>
<li class="rap-sync-state" title="sync-state">
```

Code	Description
	<pre>On </div> </body> </html></pre>
400	The request cannot be fulfilled due to bad syntax
403	The request was a legal request, but the server is refusing to respond to it
404	The requested page could not be found but may be available again in the future
406	The server can only generate a response that is not accepted by the client

GET /rw/rapid/tasks/{task_name}/syncstate/motion-pointer Get Motion Pointer Sync State ^

""

Parameters Try it out

Name	Description
task_name * required	{task_name}
string (path)	task_name

Responses Response content type application/xhtml+xml;v=2.0 ▾

Code	Description
200	Standard response for successful HTTP requests

Example Value | Model

Code	Description
	<pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://127.0.0.1:9898/rw/rapid/"> </head> <body> <div class="state"> <li class="rap-sync-state" title="sync-state"> Off </div> </body> </html></pre>

- 400 The request cannot be fulfilled due to bad syntax
- 404 The requested page could not be found but may be available again in the future
- 406 The server can only generate a response that is not accepted by the client

GET

/rw/rapid/tasks/{task_name}/structural-changecount

Get Structural Change Count



""

Parameters

[Try it out](#)

Name	Description
------	-------------

task_name * required

string

(path)

task_name

Responses

Response content type

application/xhtml+xml;v=2.0 ▾

Code	Description
200	Standard response for successful HTTP requests
	Example Value Model
	<pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://127.0.0.1/rw/rapid/"> </head> <body> <div class="state"> <li class="rap-task-struc-change-count" title="task-struc-change-count"> 197 887287 </div> </body> </html></pre>
400	The request cannot be fulfilled due to bad syntax
404	The requested page could not be found but may be available again in the future
406	The server can only generate a response that is not accepted by the client

GET /rw/rapid/tasks/{task_name}/pallet Get Pallet ^

""

Parameters Try it out

Name	Description
task_name * required	
string (path)	{task_name}
	task_name

Name	Description
pallet_no * required	{pallet_no}. pallet_no. 1 - Common, pallet_no. 2 - Prog.Flow, pallet_no. 3 - Various, pallet_no. 4 - Settings, pallet_no. 5 - Motion&Proc., pallet_no. 6 - I/O, pallet_no. 7 - Communicate, pallet_no. 8 - Interrupts, pallet_no. 9 - Error Rec., pallet_no. 10 - System&Time, pallet_no. 11 - Mathematics, pallet_no. 12 - M.C 1, pallet_no. 13 - M.C 2, pallet_no. 14 - M.C 3, pallet_no. 15 - MotionSetAdv, pallet_no. 16 - Motion Adv., pallet_no. 17 - Ext.Computer, pallet_no. 18 - MultiTasking&MultiMove, pallet_no. 19 - RAPIDsupport, pallet_no. 20 - Calib&Service,
start	<p>pallet_no</p> <div style="border: 1px solid #ccc; padding: 5px; width: fit-content;">pallet_no</div>
limit	<p>{page_no}</p> <div style="border: 1px solid #ccc; padding: 5px; width: fit-content;">start</div> <p>{elements_no}</p> <div style="border: 1px solid #ccc; padding: 5px; width: fit-content;">limit</div>

Responses

Response content type

application/xhtml+xml;v=2.0 ▾

Code Description

200

Standard response for successful HTTP requests

[Example](#) [Value](#) | [Model](#)

```
<?xml version="1.0" encoding="UTF-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<base href="https://localhost:443/rw/rapid/">
</head>
<body>
<div class="state">
<a href="tasks/T_ROB1/pallet/9?limit=3" rel="self"/>
<a href="T_ROB1/pallet/9?start=2&limit=3" rel="next"/>
<ul>
<li class="rap-pallet" title="pallet1">
<span class="Name">EXIT</span>
<span class="Instruction">307623174</span>
<span class="Parameter">0</span>
<span class="Alternative">0</span>
<span class="Keyword">1</span>
</li>

```

Code	Description
	<pre><li class="rap-pallet" title="pallet2"> RAISE 307623054 0 0 1 <li class="rap-pallet" title="pallet3"> RETRY 307622934</pre>
400	The request cannot be fulfilled due to bad syntax
406	The server can only generate a response that is not accepted by the client

GET
/rw/rapid/tasks/{task_name}/pallet-head Get Pallet Head
^

""

Parameters
Try it out

Name	Description
task_name * required	{task_name}
string (path)	<input type="text" value="task_name"/>
start	{page_no}
string (query)	<input type="text" value="start"/>
limit	{elements_no}
string (query)	<input type="text" value="limit"/>

Responses
Response content type
application/xhtml+xml;v=2.0 ▾

Code	Description
200	Standard response for successful HTTP requests
	Example Value Model
	<pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost:433/rw/rapid/"> </head> <body> <div class="state"> <li class="rap-pallet-head" title="pallet-head1"> Common 1 <li class="rap-pallet-head" title="pallet-head2"> Prog.Flow 2 <li class="rap-pallet-head" title="pallet-head3"> Various 3 <li class="rap-pallet-head" title="pallet-head4"> Settings 4 <li class="rap-pallet-head" title="pallet-head5"></pre>
400	The request cannot be fulfilled due to bad syntax
406	The server can only generate a response that is not accepted by the client

GET /rw/rapid/tasks/{task}/serviceroutine Get RAPID Service Routine ^

"Returns the rapid task service routines."

Parameters **Try it out**

Name	Description
task * required	{task}
string (path)	
	task

Name	Description
start string (query)	{PageNumber}
limit string (query)	{no. of elements}
allread string (query)	{TRUE FALSE}

Responses	Response content type	application/xhtml+xml;v=2.0
-----------	-----------------------	-----------------------------

Code	Description
200	<p>Standard response for successful HTTP requests</p> <p>Example Value Model</p> <pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost:443/rw/rapid/"> </head> <body> <div class="state"> <li class="rap-task-routine" title="routine1"> SkipTaskExec RAPID/T_ROB1/BASEFUN/SkipTaskExec TRUE <li class="rap-task-routine" title="routine2"> LoadIdentify RAPID/T_ROB1/BASEFUN/LoadIdentify TRUE <li class="rap-task-routine" title="routine3"> ManLoadIdentify RAPID/T_ROB1/BASEFUN/ManLoadIdentify TRUE <li class="rap-task-routine" title="routine4"> WristOptimization RAPID/T_ROB1/CAL_WRIST/WristOptimization </pre>

Code	Description
400	The request cannot be fulfilled due to bad syntax
404	The requested page could not be found but may be available again in the future
406	The server can only generate a response that is not accepted by the client

GET

/rw/rapid/tasks/{task}/pcp Get RAPID Task Motion & Program Pointer Positions



"Returns the rapid task PCP resources.

The v=2.1 is supported from RW7.1.

The API with v=2.1 supports "modulename" tag instead of "modulename" in response."

The resource can be subscribed (program pointer) using /subscription with resource uri /rw/rapid /tasks/{taskname}/pcp;programpointerchange

On subscription an empty initial event will be generated followed by the current value.

Sample response for program pointer subscription

```
<?xml version="1.0" encoding="utf-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
  <base href="https://localhost/">
</head>
<body>
  <div class="state">
    <a href="subscription/4" rel="group"/>
    <a href="ws://localhost/poll/4" rel="self"/>
  </div>
</body>
</html>
```

An event will look like

```
<?xml version="1.0" encoding="utf-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
  <base href="https://localhost/">
</head>
<body>
  <div class="state">
    <a href="subscription/4" rel="group"/>
    <a href="ws://localhost/poll/4" rel="self"/>
    <ul>
      <li class="rap-pp-ev" title="pp">
        <a href="/rw/rapid/tasks/T_ROB1/pcp;programpointerchange" rel="self"/>
        <span class="module-name">MainModule</span>
        <span class="routine-name">routine1</span>
        <span class="BegPosLine">3</span>
        <span class="BegPosCol">3</span>
        <span class="EndPosLine">3</span>
      </li>
    </ul>
  </div>
</body>
</html>
```

```

        <span class="EndPosCol">122</span>
    </li>
</ul>
</div>
</body>
</html>

```

The resource can also be subscribed (motion pointer) using /subscription with resource uri /rw/rapid/tasks/{taskname}/pcp;motionpointerchange

Sample response for motion pointer. subscription

```

<?xml version="1.0" encoding="utf-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
    <base href="https://localhost/">
</head>
<body>
    <div class="state">
        <a href="subscription/4" rel="group"/>
        <a href="ws://localhost/poll/4" rel="self"/>
    </div>
</body>
</html>

```

An event will look like

```

<?xml version="1.0" encoding="utf-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<base href="https://localhost/">
</head>
<body>
    <div class="state">
        <a href="subscription/4" rel="group"/>
        <a href="ws://localhost/poll/4" rel="self"/>
        <ul>
            <li class="rap-mp-ev" title="mp">
                <a href="/rw/rapid/tasks/T_ROB1/pcp;motionpointerchange" rel="self"/>
                <span class="module-name">MainModule</span>
                <span class="routine-name">routine1</span>
                <span class="BegPosLine">3</span>
                <span class="BegPosCol">3</span>
                <span class="EndPosLine">3</span>
                <span class="EndPosCol">122</span>
            </li>
        </ul>
    </div>
</body>
</html>

```

Parameters

[Try it out](#)

Name	Description
------	-------------

Name	Description
task * required	
string (path)	{task}
	task
Responses	Response content type application/xhtml+xml;v=2.0 ▾
Code	Description
200	Standard response for successful HTTP requests
	Example Value Model
	<pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost:7777/rw/rapid/"> </head> <body> <div class="state"> <li class="pcp-info" title="progpointer"> 9,8 9,20 module_test main -1 normal <li class="pcp-info" title="motionpointer"> 9,8 9,20 module_test main -1 </div></pre>
400	The request cannot be fulfilled due to bad syntax
406	The server can only generate a response that is not accepted by the client

OPTIONS

/rw/rapid/tasks/{task}/pcp Get Forms



"Options that can be invoked on a rapid task PCP resources."

Parameters

Try it out

Name	Description
------	-------------

task * required

string
(path)

{task}

task

Responses

Response content type

application/xhtml+xml;v=2.0 ▾

Code	Description
------	-------------

200

Standard response for successful HTTP requests

Example Value | Model

```
<?xml version="1.0" encoding="UTF-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<base href="https://localhost:7777/rw/rapid/">
</head>
<body>
<div class="state">
<form id="subscribe" method='post' action="/subscription">
<fieldset class="sub-pp-ev">
<input type="checkbox" name="resources" value="1"/>
<input class="res" type="text" name="1" value="/rw/rapid/tasks/T_ROB1/pcp;programpointerchange" maxlength="500"/>
<select class="priority" name="1-p">
<option value="0" selected="selected"></option>
<option value="1"></option>
</select>
</fieldset>
<fieldset class="sub-mp-ev">
<input type="checkbox" name="resources" value="1"/>
<input class="res" type="text" name="1" value="/rw/rapid/tasks/T_ROB1/pcp;motionpointerchange" maxlength="500"/>
<select class="priority" name="1-p">
<option value="0" selected="selected"></option>
<option value="1"></option>
</select>
</fieldset>
</form>
```

400

The request cannot be fulfilled due to bad syntax

Code	Description
406	The server can only generate a response that is not accepted by the client

POST

/rw/rapid/tasks/{task}/pcp/cursor Set the Program Pointer(PP) Position to Cursor



"Set the Program Pointer(PP) Position to cursor.
Line number and Column number should be in given routine range.
Mastership is required."

Parameters

[Try it out](#)

Name	Description
task * required	
string (path)	{task}
	<input type="text" value="task"/>
mastership	{implicit explicit} by default mastership is explicit
string (query)	
	<input type="text" value="mastership"/>
request-body	Data parameter(s)
object (body)	Example Value Model
	<pre>module=string&line=string&column=string</pre>
	Parameter content type
	application/x-www-form-urlencoded;v=2.0 ▾

Responses

Response content type

[application/json](#)



Code

Description

Code	Description
204	The request has been successfully processed, but is not returning any content
400	The request cannot be fulfilled due to bad syntax
403	The request was a legal request, but the server is refusing to respond to it
404	The requested page could not be found but may be available again in the future
415	The server will not accept the request, because the media type is not supported

OPTIONS
/rw/rapid/tasks/{task}/pcp/cursor Get Forms
^

"Options that can be invoked to set the program pointer(PP) position to cursor."

Parameters
Try it out

Name	Description
task * required string (path)	{task}
	task

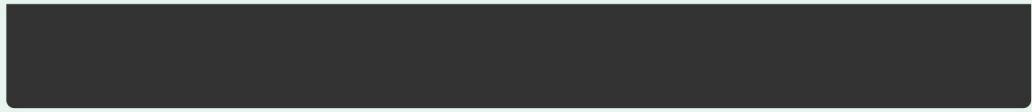
Responses
Response content type
application/xhtml+xml;v=2.0 ▾

Code	Description
200	Standard response for successful HTTP requests

Example Value | Model

Code	Description
	<pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost:7777/rw/rapid/"> </head> <body> <div class="state"> <form id="setpptocursor" method='post' action="tasks/T_ROB1/pcp/cursor"> <input type="text" name="module" value="0" /> <input type="text" name="line" value="0" /> <input type="text" name="column" value="0" /> </form> </div> </body> </html></pre>
400	The request cannot be fulfilled due to bad syntax
406	The server can only generate a response that is not accepted by the client

POST	/rw/rapid/tasks/{task}/pcp/routine Set the Program Pointer(PP) Position to Routine	▲							
"Set the program pointer(PP) position to routine. Controller needs to be in auto mode. Mastership is required."									
Parameters		Try it out							
<table border="1"> <thead> <tr> <th>Name</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>task * required string (path)</td> <td>{task}</td> </tr> <tr> <td>mastership string (query)</td> <td>{implicit explicit} by default mastership is explicit</td> </tr> <tr> <td>request-body object (body)</td> <td>Data parameter(s)</td> </tr> </tbody> </table>		Name	Description	task * required string (path)	{task}	mastership string (query)	{implicit explicit} by default mastership is explicit	request-body object (body)	Data parameter(s)
Name	Description								
task * required string (path)	{task}								
mastership string (query)	{implicit explicit} by default mastership is explicit								
request-body object (body)	Data parameter(s)								
<table border="1"> <tbody> <tr> <td>routine=string&module=string&userlevel=string</td> </tr> </tbody> </table>		routine=string&module=string&userlevel=string							
routine=string&module=string&userlevel=string									

Name	Description
	
Parameter content type <code>application/x-www-form-urlencoded;v=2.0</code> ▾	
Responses	
Response content type <code>application/json</code> ▾	
Code	Description
204	The request has been successfully processed, but is not returning any content
400	The request cannot be fulfilled due to bad syntax
403	The request was a legal request, but the server is refusing to respond to it
404	The requested page could not be found but may be available again in the future
415	The server will not accept the request, because the media type is not supported

OPTIONS	/rw/rapid/tasks/{task}/pcp/routine Get Forms	▲
"Options that can be invoked to set the program pointer(PP) position to routine."		
Parameters	Try it out	
Name	Description	
task * required		
string (path)	{task}	

Name	Description
task	
Responses	Response content type
200	<p>Standard response for successful HTTP requests</p> <p>Example Value Model</p> <pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost:7777/rw/rapid/"> </head> <body> <div class="state"> <form id="setptoroutine" method='post' action="tasks/T_ROB1/pcp/routine"> <input type="text" name="routine" value="" /> <input type="text" name="module" value="" /> <input type="text" name="userlevel" value="" /> </form> </div> </body> </html></pre>
400	The request cannot be fulfilled due to bad syntax
406	The server can only generate a response that is not accepted by the client

POST	/rw/rapid/tasks/{task}/pcp/routine-from-url	Set the Program Pointer(PP) Position to Routine by URL	^
"Set the program pointer(PP) position to routine by URL. Controller needs to be in auto mode. The routine which is declared as LOCAL or has parameters is not allowed. Mastership is required"			
Parameters		Try it out	
Name	Description		

Name	Description
task * required string (path)	{task}
mastership string (query)	{implicit explicit} by default mastership is explicit
request-body object (body)	Data parameter(s) Example Value Model <code>routineurl=string&userlevel=string</code> Parameter content type <code>application/x-www-form-urlencoded;v=2.0</code> ▾

Responses	Response content type
	<code>application/json</code> ▾

Code	Description
------	-------------

204

The request has been successfully processed, but is not returning any content

Operations on RAPID UI Instructions

Operations on RAPID UI Instructions



400

The request cannot be fulfilled due to bad syntax

GET

/rw/rapid/uiinstr Get UI Instruction Resource



403

The request was a legal request, but the server is refusing to respond to it
"Returns a list of UI instruction resources"

404 resource can be subscribed (UI Events) using /subscription with resource uri /rw/rapid
/uiinstr;uievent. The requested page could not be found but may be available again in the
From RW7.1, this subscription information will support UTF8 characters.

Sample response for UI Events subscription

415

Any empty event is sent as an initial UI event
The server will not accept the request, because the media type is not supported

```
<?xml version="1.0" encoding="utf-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
</head>
<body> /rw/rapid/tasks/{task}/pcp/routine-from- Get Forms
<a href="ws://127.0.0.1:9696/poll/1" rel="events"/>
<div class="state">
<ul/>
<div> Options that can be invoked to set the program pointer(PP) position to routine by URL.</div>
</body>
</html>
```

Parameters may look like. Ulinstruction parameter in response is supported from RW7.1 Try it out

Name	Description
task	task
string	{task}
(path)	<ul style="list-style-type: none"> li class="rap-ui-ev" title="uiinstruction"> IMessageBox SEND RAPID/T_ROB1/\$67775 NORMAL ""
Responses	Response content type application/xhtml+xml;v=2.0

Code	Description
------	-------------

Parameters

Standard response for successful HTTP requests

Try it out

Node	parameters	Description
		Example Value Model
Responses		<pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost:7777/rw/rapid/"> </head> <body> <div class="state"> <form id="setptoroutinefromurl" method='post' action="tasks/T_ROB1/pcp/routine-from-url"> <input type="text" name="routineurl" value="" /> <input type="text" name="userlevel" value="" /> </form> </div> </body> <?xml version="1.0" encoding="UTF-8"?></pre>
Code		
200		<pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost:7777/rw/rapid/"> </head> <body> <div class="state"> <li class="rap-active-li" title="active"> </div> </body> </html></pre>
400		
406		
POST	/rw/rapid/uiinstr	<p>"Set the program pointer(-1) position to previous instruction. Controller needs to be in auto mode. Mastership is required."</p> <p>The requested page could not be found but may be available again in the future</p>
Parameters		<div style="float: right;">Try it out</div> <p>The server can only generate a response that is not accepted by the client</p>
Name	Description	
OPTIONS <small>required</small>	/rw/rapid/uiinstr	<p>Get Forms</p> <p>task</p> <p>(path) "Returns a list of UI Instructions actions."</p>
Parameters		<div style="float: right;">Try it out</div> <p>{implicit explicit} by default mastership is explicit</p>
string		
(query)		
No parameters		<p>mastership</p>

Responses

Response content type: application/xhtml+xml;v=2.0 ▾

Code	Description
------	-------------

200

Standard response for successfully processed request that is not returning any content
Example Value | Model

400

```
<?xml version="1.0" encoding="UTF-8"?>

<html xmlns="http://www.w3.org/1999/xhtml">
  <head>
    <base href="https://127.0.0.1:9696/">
  </head>
  <body>
    <div class="state">
      <a href="rw/rapid/uiinstr" rel="self"/>
      <form action="subscription" id="subscribe" method="post">
        <fieldset class="sub-uievent">
          <input name="resources" type="checkbox" value="1"/>
          <input class="res" maxlength="500" name="1" type="text" value="/rw/rapid/uiinstr;uievent"/>
          <select class="priority" name="1-p">
            <option selected="selected" value="0"/>
            <option value="1"/>
          </select>
        </fieldset>
      </form>
    </div>
  </body>
</html>
```

OPTIONS /

406 Options that can be invoked to set the program pointer(PP) position to previous instruction."

The request cannot be fulfilled due to bad syntax

406 Parameters

The server can only generate a response that is not accepted by the client

Try it out

Name	Description
------	-------------

GET /rw/rapid/uiinstr/active Get Active UI Instruction

^

task string {task}

Returns any active UI instruction resource."

task

Parameters

Try it out

No parameters
Responses

Response content type

application/xhtml+xml;v=2.0 ▾

Code	Description
------	-------------

Code**Responses**

Description

Response content type

application/xhtml+xml;v=2.0 ▾

200

Code

Standard response for successful HTTP requests

Description

Example Value | Model

200

```
<?xml version="1.0" encoding="UTF-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<base href="https://localhost:7777/rw/rapid/">
</head>
<?xml version="1.0" encoding="UTF-8"?>

<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<base href="https://localhost/rw/rapid/uiinstr/">
</head>
<body>
<div class="state">
<a href="active" rel="self"/>
<ul>
<li class="rap-uaactive-li">
<span class="instr">TPReadNum</span>
<span class="event">SEND</span>
<span class="stack">RAPID/T_ROB1/%$104</span>
<span class="execLvl">NORMAL</span>
<span class="msg"/>
<a href="active/params/RAPID/T_ROB1/%25%24104" rel="params"/>
<a href="active/param/RAPID/T_ROB1/%25%2499/Result" rel="param"/>
</li>
</ul>
</div>
</body>
</html>
```

POST

/rw/rapid/uiinstr/active/params/{stackurl}

"Set the program pointer(PP) position to next instruction.

400 Controller needs to be in auto mode.

Mastership is required. The request cannot be fulfilled due to bad syntax

404

ParametersThe requested page could not be found but may be available again in the future Try it out**Name****Description**

GET

/rw/rapid/uiinstr/active/params/{stackurl} Get Active UI Instruction Parameters

^

task

{task}

{path}

Get active UI instruction parameters.

task

Parameters

string

{implicit | explicit} by default mastership is explicit

Try it out

(query)

Name**Description**

Name	Description	Response content type
Responses		application/json ▾
stackurl * required		
string Code (path)	{stackurl} Description	
204	stackurl	The request has been successfully processed, but is not returning any content
400		
Responses	The request cannot be fulfilled due to bad syntax	application/xhtml+xml;v=2.0 ▾
403		
Code	The request was a legal request, but the server is refusing to respond to it	Description
404		
Responses	The requested page could not be found but may be available again in the future	Standard response for successful HTTP requests
415		
OPTIONS	/	
"Options that		
Parameters		
Name		
task * required	<?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost/rw/rapid/uiinstr/active/"> </head> <body> <div class="state"> <li class="rap-uiparams-li" title="Result"> 0 <li class="rap-uiparams-li" title="TPCompleted"> FALSE <li class="rap-uiparams-li" title="Header"> UIMsgBox Header <li class="rap-uiparams-li" title="MsgArray"> ["Message Line 1","Message Line 2","Message Line 3","Message Line 4","Message Line 5"] <li class="rap-uiparams-li" title="Wrap"> FALSE </div> </body> </html>	Example Value Model
400	task	The request cannot be fulfilled due to bad syntax
404		
Responses	The requested page could not be found but may be available again in the future	application/xhtml+xml;v=2.0 ▾
406		
Code	The server can only generate a response that is not accepted by the client	Description

GET/rw/rapid/uiinstr/active/param/{stackurl}
/{uiparam}Get Parameter Value for an Active UI
Instruction

200

"Get an parameter value for an active UI Instruction"

Controller supports UTF-8 character for this API from RW7.1"

[Example Value](#) | [Model](#)**Parameters****Name****stackurl** * required
string
(path)

```
<?xml version="1.0" encoding="UTF-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<base href="https://localhost:7777/rw/rapid/">
</head>
<body>
<div class="state">
<form id="set-pp-next-inst" method='post' action="tasks/T_ROB1/pcp/next-ins">
</div>
</body>
</html>
```

400

uiparam * required
The request cannot be fulfilled due to bad syntax
string
{uiparam}

406(h)

The server did not find a representation for the requested resource accepted by the client

POST

/rw/rapid/tasks/{task}/pcp/reset

Reset RAPID Program Pointer to Main for specified task

**Responses****Response content type**

application/xhtml+xml;v=2.0



"Reset RAPID Program Pointer to Main for specified task. Supported from RW7.2"

Code**Description****Parameters**

200

Try it out

Standard response for successful HTTP requests

Name[Example Value](#) | [Model](#)**mastership**
string
(query)

task * required
string
(path)

```
<?xml version="1.0" encoding="UTF-8"?>
<html
  xmlns="http://www.w3.org/1999/xhtml">
<head>
<base href="https://localhost/rw/rapid/uiinstr/active/">
</head>
<body>
<div class="state">
<a href="params" rel="self"></a>
<ul>
<li class="rap-uiparams-li" title="TPAnswer">
<span class="value">0</span>
</li>
<li class="rap-uiparams-li" title="TPText">
<span class="value">"Show the layout"</span>
</li>
<li class="rap-uiparams-li" title="TPFK1">
<span class="value">"&"</span>
</li>

```

Code	Responses	Description	Response content type	application/json
204		<li class="rap-uiparams-li" title="TPFK2"> "" <li class="rap-uiparams-li" title="TPFK3"> "" <li class="rap-uiparams-li" title="TPFK4"> The request has been received, but is not yet processed, but is not returning any content		
400		The request cannot be fulfilled due to bad syntax		
400				
404		The request cannot be fulfilled due to bad syntax		
403		The requested page could not be found but may be available again in the future		
406		The request was a legal request, but the server is refusing to respond to it		
415		The server can only generate a response that is not accepted by the client		
		The server will not accept the request, because the media type is not supported		

POST

/rw/rapid/uiinstr/active/param/{stackurl}/{uiparam} Update an Active UI Instruction Parameter [^](#)

OPTIONS

/rw/rapid/tasks/{task}/pcp/reset Get Forms [^](#)

"Update an active UI instruction parameter.

{stackurl} ends with a variable number, which can be obtained from "Get Active UI Instruction" API.

RAPID program should be running.

Reset RAPID Program Pointer to Main for specified task. Supported from 7.2."

Example of {uiparam} are TPFK1, TPFK2, TPFK3, TPCompleted etc.

Mastership is required."

Try it out**Try it out****Parameters****Parameters**

Name	Description
task	Description
stackurl	{task}
string	{stackurl}
(path)	task
	stackurl

uiparam	* required
string	{uiparam}

Responses	Response content type
	application/xhtml+xml;v=2.0

uiparam

Mastership	Description
string	{implicit explicit} by default mastership is explicit
200 (query)	

Standar

mastership

Example Value | Model

Code	Description
request-body object (body)	<pre><?xml version="1.0" encoding="UTF-8"?> <html xmlns="http://www.w3.org/1999/xhtml"> <head> <base href="https://localhost/"> </head> <body> <div c value=string <form </form </div> </body> </html></pre> <p>application/xml, www-form-urlencoded, text/html</p>
406	The server can only generate a response that is not accepted by the client

Responses	Response content type	application/json	▼
Code	Description		
204	The request has been successfully processed, but is not returning any content		
400	The request cannot be fulfilled due to bad syntax		
403	The request was a legal request, but the server is refusing to respond to it		
404	The requested page could not be found but may be available again in the future		
415	The server will not accept the request, because the media type is not supported		

OPTIONS	/rw/rapid/uiinstr/active/param Get Forms	▲
"Returns a list of active UI instructions actions."		
Parameters	Try it out	

No parameters

Responses

Response content type

application/xhtml+xml;v=2.0 ▾

Code

Description

200

Standard response for successful HTTP requests

[Example Value](#) | [Model](#)

```
<?xml version="1.0" encoding="UTF-8"?>

<html xmlns="http://www.w3.org/1999/xhtml">
  <head>
    <base href="https://localhost/">
  </head>
  <body>
    <div class="state">
      <form id="set" method="post" action="/rw/rapid/uiinstr/active/param/{blockuri}/{uiparam}">
        <input name="value" value="0" type="text"/>
      </form>
    </div>
  </body>
</html>
```

Operations

GET

"Get rapid user interface parameter"

The resource can be subscribed (Tasks Panel Change) using /subscription with resource uri /rw/rapid/tasksselection:taskpanelchange

The request cannot be fulfilled due to bad syntax

Sample response for Tasks Panel Change subscription

406

```
<?xml version="1.0" encoding="utf-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
  <head>
    <base href="https://localhost/">
  </head>
  <body>
    <div class="state">
      <a href="subscription/4" rel="group"/>
      <a href="ws://localhost/poll/4" rel="self"/>
    </div>
  </body>
</html>
```

A task panel change event look like

```
<?xml version="1.0" encoding="utf-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
  <head>
    <base href="https://localhost/">
  </head>
  <body>
    <div class="state">
      <a href="subscription/4" rel="group"/>
      <a href="ws://localhost/poll/4" rel="self"/>
    </div>
  </body>
```

```
<ul>
  <li class="rap-taskpanel-ev" title="taskpanel">
    <a href="/rw/rapid/taskselection;taskpanelchange" rel="self"/>
    <span class="change-count">2</span>
  </li>
</ul>
</div>
</body>
</html>
```

Parameters

Try it out

No parameters

Responses

Response content type

application/xhtml+xml;v=2.0 ▾

Code

Description

200

Standard response for successful HTTP requests

Example Value | Model

```
<?xml version="1.0" encoding="UTF-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<base href="https://localhost/rw/rapid/">
</head>
<body>
<div class="state">
<a href="taskselection" rel="self">
</a>
<ul>
<li class="rap-taskselection" title="T_ROB1">
<span class="name">T_ROB1</span>
<span class="state">ON</span>
<span class="motiontask">TRUE</span>
<span class="usermodify">TRUE</span>
</li>
<li class="rap-taskselection" title="T_ROB2">
<span class="name">T_ROB2</span>
<span class="state">ON</span>
<span class="motiontask">TRUE</span>
<span class="usermodify">TRUE</span>
</li>
<li class="rap-taskselection" title="T_ROB3">
<span class="name">T_ROB3</span>
<span class="state">ON</span>
<span class="motiontask">TRUE</span>
<span class="usermodify">TRUE</span>
</li>

```

400

The request cannot be fulfilled due to bad syntax

Code	Description
406	The server can only generate a response that is not accepted by the client

OPTIONS

/rw/rapid/taskselection Get Forms



"Get a list of actions that can be invoked on a 'task panel' type resources."

Parameters

Try it out

No parameters

Responses

Response content type

application/xhtml+xml;v=2.0 ▾

Code

Description

200

Standard response for successful HTTP requests

Example Value | Model

```
<?xml version="1.0" encoding="UTF-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<base href="https://localhost:7777/" />
</head>
<body>
<div class="state"><a href="rw/rapid/taskselection" rel="self"></a>
<form method="post" action="subscription" id="subscribe"> <input type="checkbox" name="resources" value="1" />
<fieldset class="sub-value"> <input class="res" type="text" name="1" maxlength="500" value="/rw/rapid/taskselection;taskpanelchange" /> <select class="priority" name="1-p"> <option value="0" selected="selected"></option> <option value="1"></option> </select> </fieldset>
</form>
</div>
</body>
</html>
```

400

The request cannot be fulfilled due to bad syntax

406

The server can only generate a response that is not accepted by the client

Operations on Rapid AliasIO

Operations on Rapid AliasIO



GET

/rw/rapid/aliasio Get AliasIO List



"Create a rapid program and define aliases for the IO signals.

When the program is running, the API returns all the aliases which are defined in the program."

Parameters

Try it out

Name	Description
------	-------------

start string (query)	{start position}
----------------------------	------------------

start

limit string (query)	{number of aliasios}
----------------------------	----------------------

limit

Responses

Response content type

application/xhtml+xml;v=2.0



Code	Description
------	-------------

200	Standard response for successful HTTP requests
-----	--

Example Value | Model

```
<?xml version="1.0" encoding="UTF-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<base href="https://localhost:4444/rw/rapid/">
</head>
<body>
<div class="state">
<a href="aliasio?start=0" rel="self"/>
<ul>
<li class="rap-alias-io" title="aliasio0">
<span class="alias-name">signaldi1</span>
<span class="signal-name">TestD1</span>
<span class="type">DI</span>
</li>
<li class="rap-alias-io" title="aliasio1">
```

Code	Description
	<pre>signaldi2 TestD2 DI </div> </body> </html></pre>

400

The request cannot be fulfilled due to bad syntax

406

The server can only generate a response that is not accepted by the client

RAPID Service



GET

/rw/rapid Get RAPID System Resources



"Returns a list of rapid resource."

Parameters

[Try it out](#)

No parameters

Responses

Response content type

application/xhtml+xml;v=2.0 ▾

Code

Description

200

Standard response for successful HTTP requests

[Example Value](#) | [Model](#)

```
<?xml version="1.0" encoding="UTF-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<base href="https://localhost:7777/rw/rapid/">
</head>
<body>
<div class="state"> <a href="" rel="self">
</a> <ul> <li class="rap-tasks-li" title="tasks"> <a href="tasks" rel="self">
</a> </li> <li class="rap-symbols-li" title="symbols"> <a href="symbols" rel
="self">
</a> </li> <li class="rap-execution-li" title="execution"> <a href="executio
n" rel="self">
</a> </li> <li class="rap-uiinstr-li" title="uiinstr"> <a href="uiinstr" rel
="self">
</a> </li> <li class="rap-taskselection-li" title="taskselection"> <a href="t
```

Code	Description
<pre>askselection" rel="self"> <li class="rap-modules-li" title="modules"> <li class="rap-aliasio-li" title="aliasio"> </div> </body> </html></pre>	

406

The server can only generate a response that is not accepted by the client

RobotWebServices

1

GET /rw/rapid/tasks/{task} Get RAPID Task State

1

"Returns the rapid task resource. Retcode is provided if API fails."

The resource can be subscribed (RAPID task change) using /subscription with resource uri /rw/rapid/tasks/{task}; taskchange

On subscription an empty initial event will be generated.

Sample response for RAPID task change subscription

A task change event look like

- 15262 T_ROB1 MainModule module

The resource can also be subscribed (RAPID PP Sync State Change) using /subscription with resource uri /rw/rapid/tasks/{task}; syncstatechange

On subscription an empty initial event will be generated followed by the current value.

Sample response for RAPID PP Sync State Change subscription

A task sync state change event look like

- off

The resource can also be subscribed (RAPID task sync state change) using /subscription with resource uri /rw/rapid/tasks/{taskname}; excstate

On subscription an empty initial event will be generated followed by the current value.

Sample response for RAPID task PGM Execution State Change subscription

A task PGM Execution State Change event look like

- T ROB1 started

Sample response In case of any error from API's, Retcode is provided under tag.

- • • • •

- T_ROB1 normal linked ready On True None 1 unknown forever None main True

Parameters

[Try it out](#)

Name	Description
------	-------------

task * required

string
(path)
{task}

task

continue-on-err

string
(query)

continue-on-err

{1|0} Default value is 0. In case input is 1, the API continues execution even if any error occurs in between.

Responses

Response content type

application/xhtml+xml;v=2.0 ▾

Code	Description
------	-------------

200

Standard response for successful HTTP requests

[Example Value](#) | [Model](#)

```
<?xml version="1.0" encoding="UTF-8"?>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<base href="https://127.0.0.1:9898/rw/rapid/">
</head>
<body>
<div class="state">
<a href="tasks/T_ROB1" rel="self"/>
<ul>
<li class="rap-tasks-program-li" title="program">
<a href="tasks/T_ROB1/program" rel="self"></a> </li>
<li class="rap-tasks-module-li" title="module">
<a href="tasks/T_ROB1/modules" rel="self"></a> </li>
<li class="rap-tasks-pref-data-types-li" title="pref-data-types">
<a href="tasks/T_ROB1/pref-data-types" rel="self"></a> </li>
<li class="rap-tasks-activation-record-li" title="activation-record">
<a href="tasks/T_ROB1/activation-record" rel="self"></a> </li>
<li class="rap-tasks-structural-changecount-li" title="structural-changecount">
<a href="tasks/T_ROB1/structural-changecount" rel="self"></a> </li>
<li class="rap-tasks-syncstate-pp-li" title="program-pointer">
<a href="tasks/T_ROB1-syncstate/program-pointer" rel="self"></a> </li>
<li class="rap-tasks-syncstate-mp-li" title="motion-pointer">
<a href="tasks/T_ROB1-syncstate/motion-pointer" rel="self"></a> </li>
<li class="rap-tasks-pallet-li" title="pallet">
```

Code	Description
403	<pre> <li class="non_tasks_pallet_li" title="pallet_head"></pre>
404	The requested page could not be found but may be available again in the future