

## Flowchart: Control PrismaPro via API (FW ≥ 1.9.0)

See: PrismaPro\_API.xlsm, Makro: Login\_Force  
 See: PrismaPro\_API.xlsm, Makro: Login\_Release

/mmsp/communication/controlInfo/get  
 Check for:  
 ipAddress = ""



1. /mmsp/communication/clientName/set?PfeifferVacuum
2. /mmsp/communication/control/set?force
3. /mmsp/communication/controlLock/set?Session

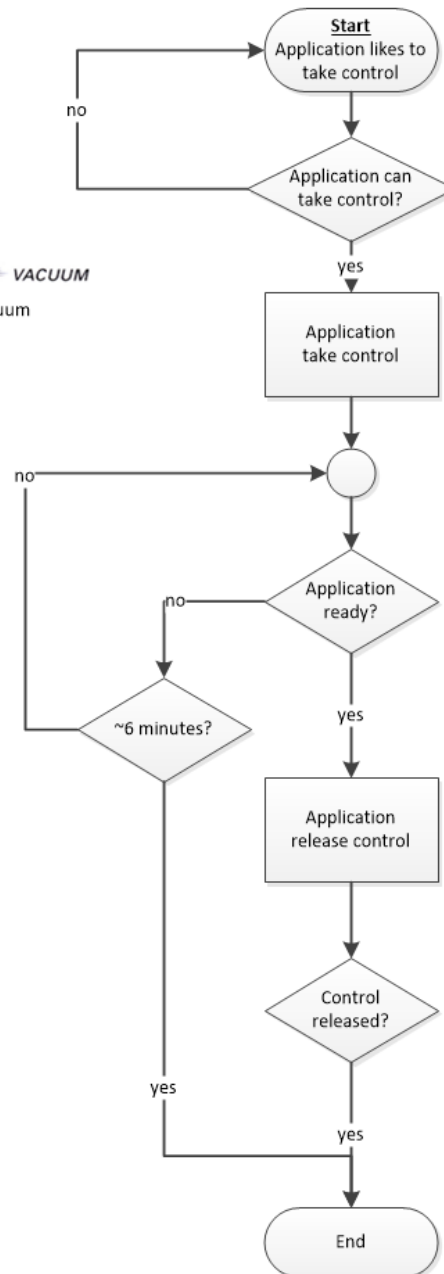
.....

~ 6 minutes without any request!?!  
 (controlled by PrismaPro and not by Application)

1. /mmsp/communication/controlLock/set?Unlocked
2. /mmsp/communication/control/set?release

See: PrismaPro\_API.xlsm, Makro: Login\_Release

/mmsp/communication/controlInfo/get  
 Check for:  
 ipAddress = "" and controlled=false and locked=false and  
 clientName="" and canTakeControl=false = canForceControl



If „no“: Send Error-code to e.g. PLC

## PrismaPro under control by PVMassSpec

172.16.14.42/mmsp/communication/controlInfo/get	
Most Visited Erste Schritte Outlook Web App Englisch ↔ Deutsch W... Google	
JSON	Raw Data Headers
Save	Copy
data:	
sessionId:	"00:A0:41:02:10:41:002c:00000046"
ipAddress:	"172.16.11.151"
controlled:	true
locked:	true
amInControl:	false
canRequestControl:	false
canTakeControl:	false
canForceControl:	false
secondsSinceLastRequest:	0
secondsSinceLastControlRequest:	0
secondsSinceLastDataRequest:	
clientName:	"PVMassSpec"
name:	"got"
origin:	"/mmsp/communication/controlInfo"

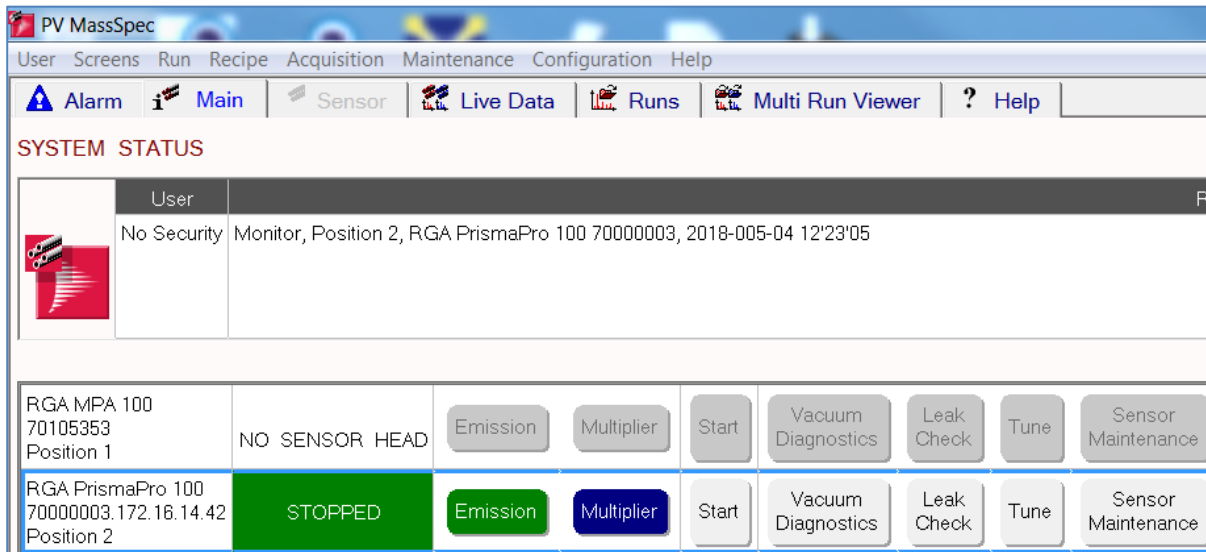
## PrismaPro under no control

172.16.14.42/mmsp/communication/controlInfo/get	
Most Visited Erste Schritte Outlook Web App Englisch ↔ Deutsch W...	
JSON	Raw Data Headers
Save	Copy
data:	
sessionId:	
ipAddress:	"null"
controlled:	false
locked:	false
amInControl:	false
canRequestControl:	true
canTakeControl:	true
canForceControl:	true
secondsSinceLastRequest:	
secondsSinceLastControlRequest:	
secondsSinceLastDataRequest:	
clientName:	
name:	"got"
origin:	"/mmsp/communication/controlInfo"

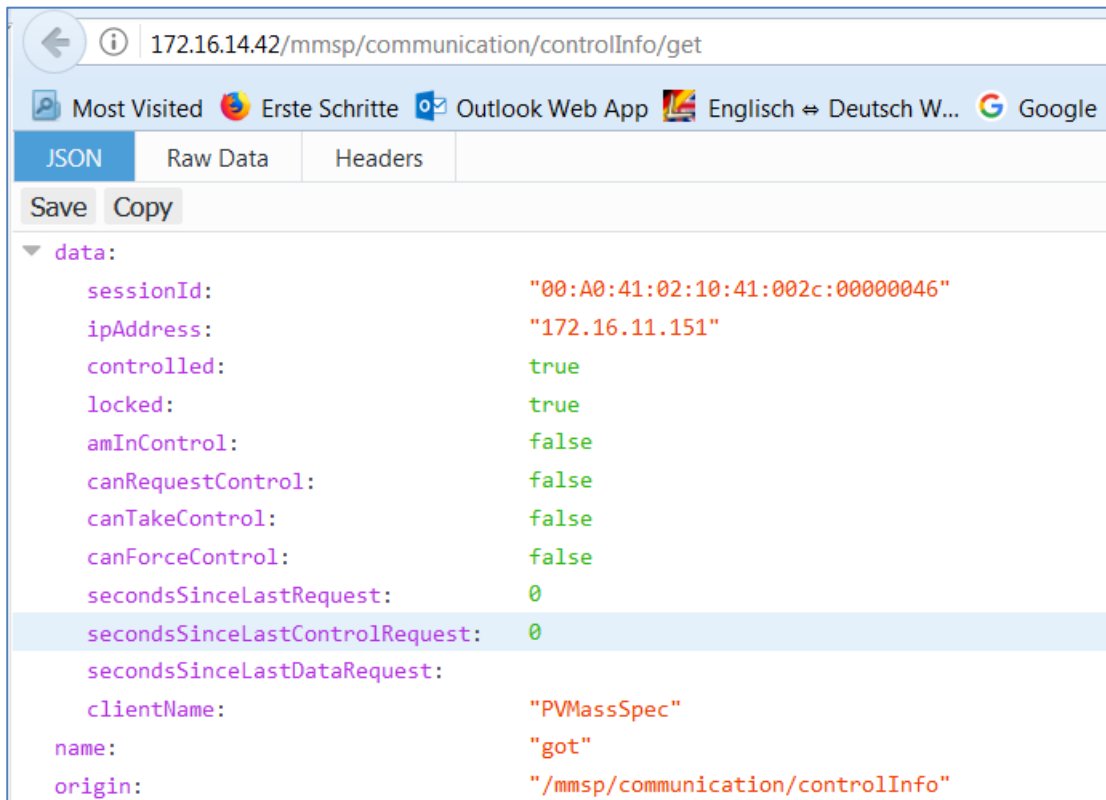
## PrismaPro via API

(see also *Flowchart\_ControlPrismaPro*):

e.g. PVMassSpec is open:

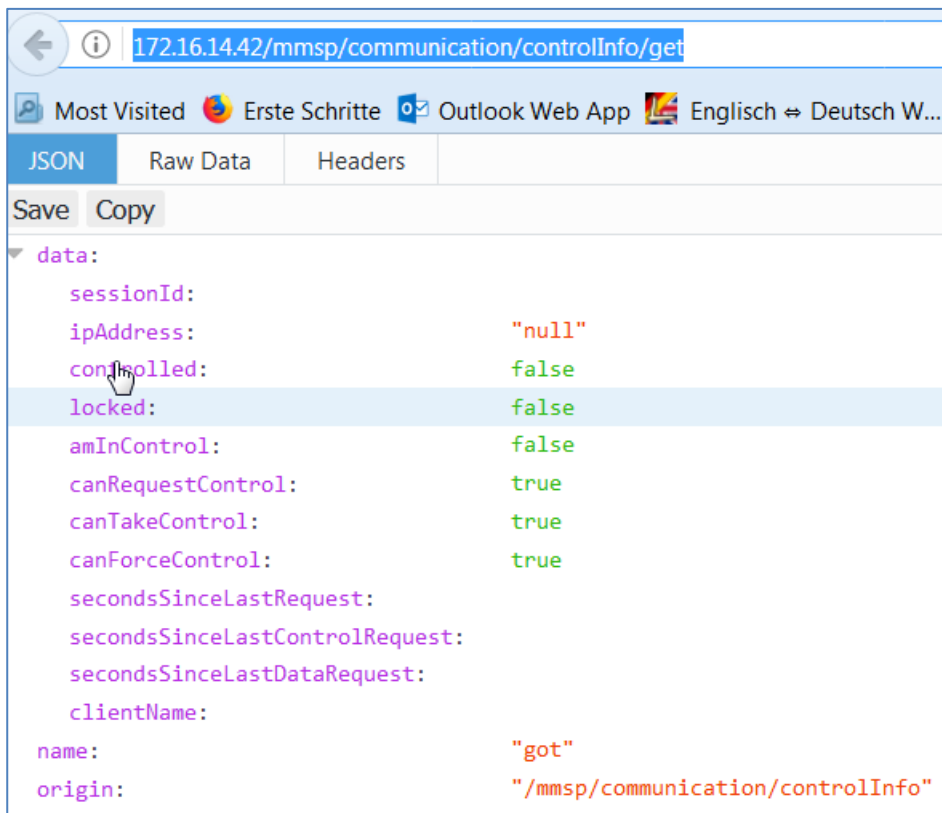


If Scan-Monitor is running, PVMassSpec has full control and locked the PrismaPro:



We can use this API to know if PrismaPro is locked and ask the clientName and can send an error-code to the PLC!

After PVMassSpec has stopped the “Acquisition” or the PCMassSpec is closed, everybody can take the control:



The screenshot shows a web browser window with the address bar displaying `172.16.14.42/mmsp/communication/controlInfo/get`. The browser's developer tools are open, showing the JSON response of the API call. The response is a JSON object with a `data` property. The `data` property contains a list of control status fields. The `locked` field is highlighted with a mouse cursor.

```
{
  "data": {
    "sessionId": null,
    "ipAddress": "null",
    "controlled": false,
    "locked": false,
    "amInControl": false,
    "canRequestControl": true,
    "canTakeControl": true,
    "canForceControl": true,
    "secondsSinceLastRequest": null,
    "secondsSinceLastControlRequest": null,
    "secondsSinceLastDataRequest": null,
    "clientName": null,
    "name": "got",
    "origin": "/mmsp/communication/controlInfo"
  }
}
```

Now we can take the control via API:

1. **Set Clientname**

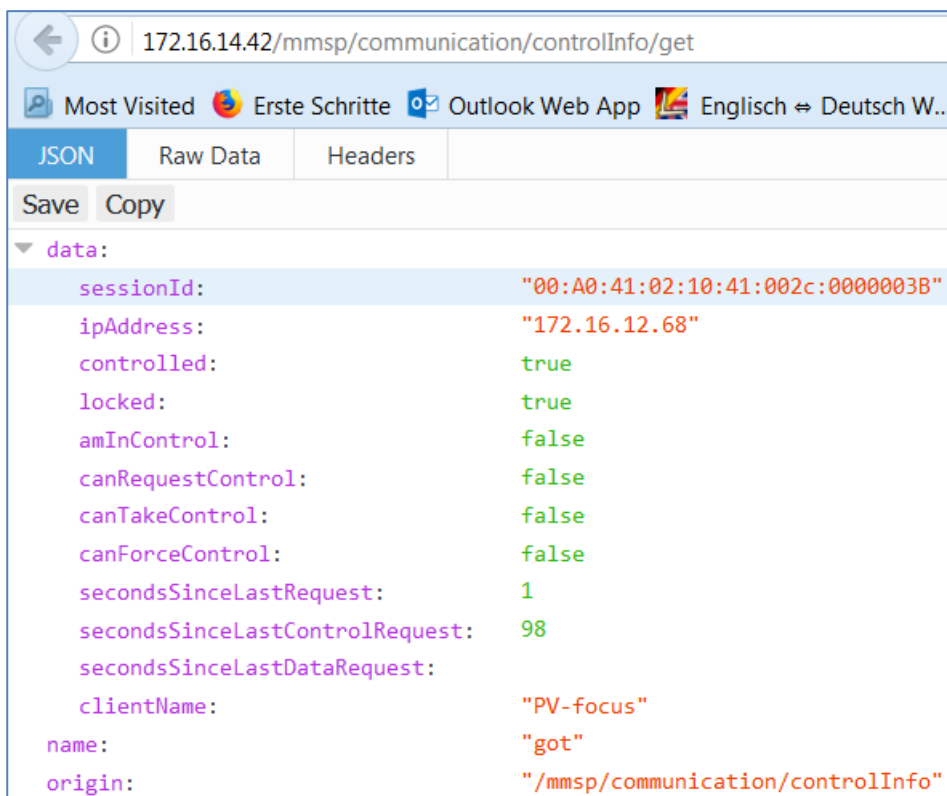
<http://172.16.14.42/mmsp/communication/clientName/set?PfeifferVacuum>

2. **Set Control**

<http://172.16.14.42/mmsp/communication/control/set?force>

3. **Set ControlLock**

<http://172.16.14.42/mmsp/communication/controlLock/set?Session>



The screenshot shows a web browser window with the address bar displaying `172.16.14.42/mmsp/communication/controlInfo/get`. Below the address bar, there are tabs for 'Most Visited', 'Erste Schritte', 'Outlook Web App', and a language switcher 'Englisch ⇌ Deutsch W...'. The main content area shows the JSON response of the API call, with tabs for 'JSON', 'Raw Data', and 'Headers'. The 'JSON' tab is selected, and the response is displayed in a collapsible tree view under the 'data:' root. The response is a JSON object with the following fields and values:

Field	Value
sessionId	"00:A0:41:02:10:41:002c:0000003B"
ipAddress	"172.16.12.68"
controlled	true
locked	true
amInControl	false
canRequestControl	false
canTakeControl	false
canForceControl	false
secondsSinceLastRequest	1
secondsSinceLastControlRequest	98
secondsSinceLastDataRequest	
clientName	"PV-focus"
name	"got"
origin	"/mmsp/communication/controlInfo"

The PrismaPro is locked now for other applications!

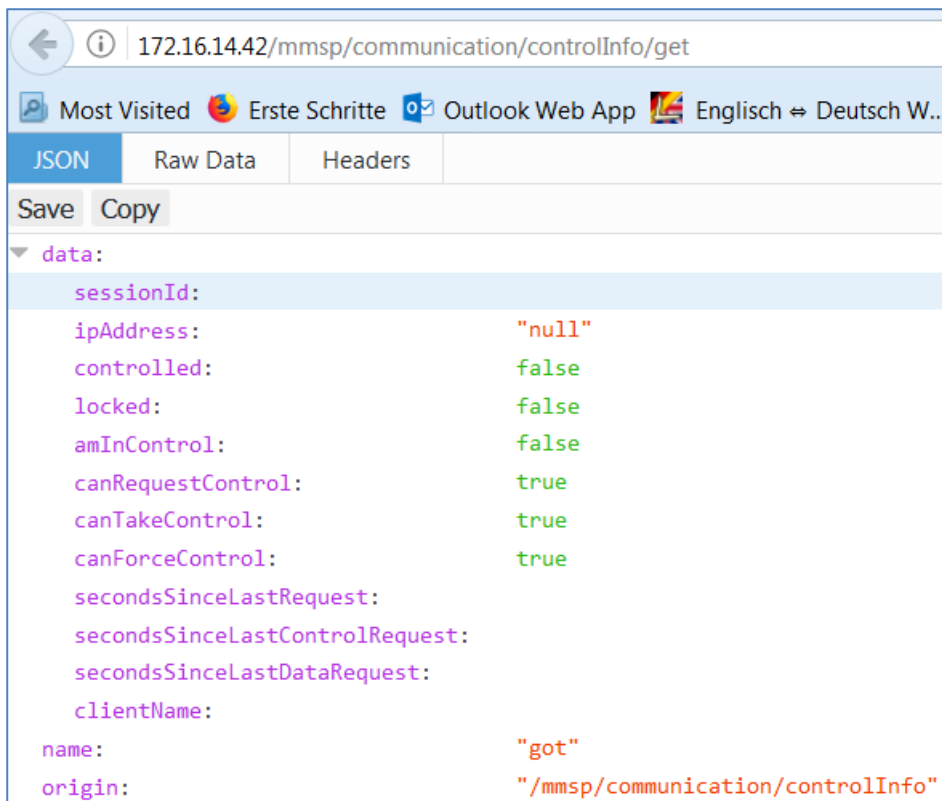
If PVMassSpec try to start the Acquisition, this Error will appear:

User	Run
No Security	Monitor, Position 2, RGA PrismaPro 100 70000003, 2018-005-04 12'23'05 Monitor, Position 2, RGA PrismaPro 100 70000003, 2018-005-04 12'44'49 Monitor, Position 2, RGA PrismaPro 100 70000003, 2018-005-04 12'54'49

RGA MPA 100 70105353 Position 1	NO SENSOR HEAD	Emission	Multiplier	Start	Vacuum Diagnostics	Leak Check	Tune	Sensor Maintenance
RGA PrismaPro 100 70000003.172.16.14.42 Position 2	STOPPED	Emission	Multiplier	Start	Vacuum Diagnostics	Leak Check	Tune	Sensor Maintenance

Class	Count	Time	Type	Detail
ACBYR				*
Red		2018/05/04 12:57:35	Run cannot be set up	
Red	1	2018/05/04 12:57:35	Hardware error	Error = 'System is Locked' (Command = '/mmsp/scanSetup/scanTimeTotal' '')
Red	1	2018/05/04 12:57:35	Hardware error	Error = 'System is Locked' (Command = '/mmsp/analogOutput/ioChannel/0/bypass' '0')
Red	1	2018/05/04 12:57:35	Hardware error	Error = 'Another Session is in Control' (Command = '/mmsp/communication/control' 'take')

After 6 minutes without any request the control will change back to "everybody":



If we don't need the PrismaPro, we can switch back the API's "control" to "release" and the API "controlLocked" to "Unlocked", so PVMassSpec or anybody else can take the control again, if necessary.

Release the control via API:

1. **Set ControlLock**

`http://172.16.14.42/mmsp/communication/controlLock/set?Unlocked`

2. **Set Control**

`http://172.16.14.42/mmsp/communication/control/set?release`