

# You need to provide remote maintenance to your customers ?

See how you can leverage our IR1100 and our API's

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# Agenda

- Introduction
- Platform Overview
- Serial Ports
- Logic
- Python Script
- Cisco API's
- Conclusion
- Resources



# Introduction

# Problem we are trying to solve

- Providing remote maintenance capability
- Ability to open the maintenance only when required
- Must be super simple – Could be done by the operators
- Reliable
- Secured
- Automated deployment

# Platform Overview

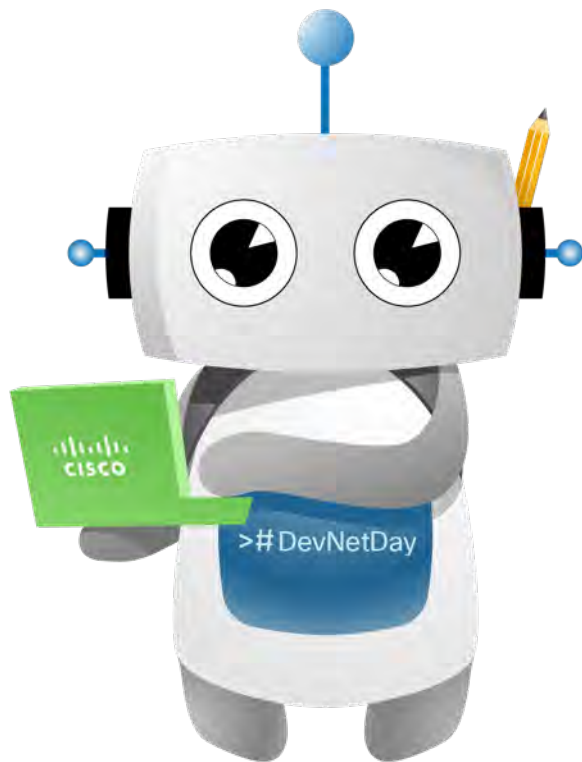


# Platform – IR1101

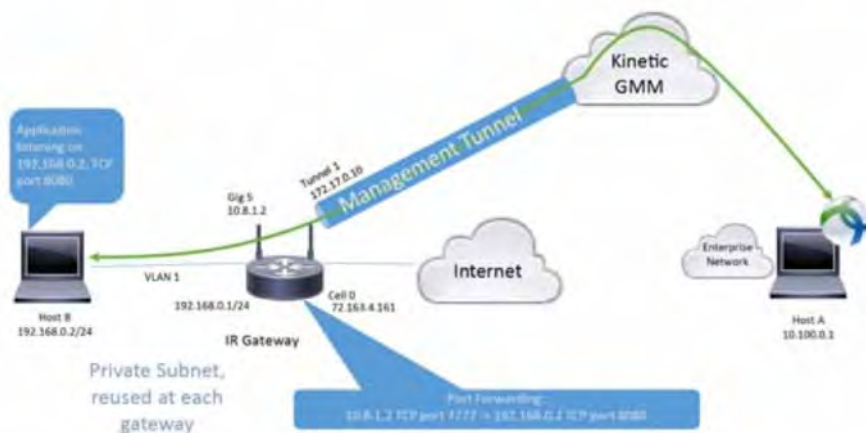
Kinetic Managed



# Platform – Kinetic GMM



# Platform – Kinetic GMM VPN Access



+ Claim Gateways						
Search Gateways						
Networking Grouping VPN Delete						
Name	Status	Serial Number	Model	Template	Devices	
<input checked="" type="checkbox"/> My_GW_In_GMM	<span style="color: green;">●</span> Up	FTXABC1234	IR1101-K9	IR1101_template	5	



# Platform – IR1101

Kinetic Managed



# Platform – IR1101

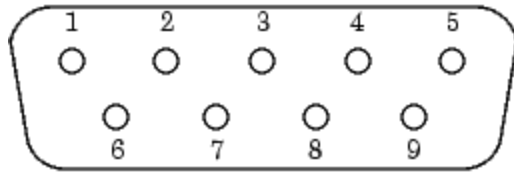
Kinetic Managed

Serial Port !



# Serial Ports

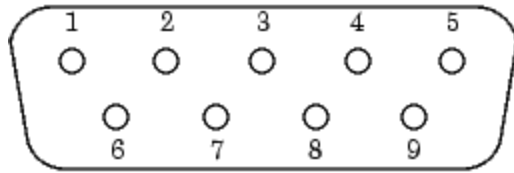
# Serial Port



Pin	Label	Signal Name	Signal Type
1	CD	Carrier Detect	Control
2	RD	Received Data	Data
3	TD	Transmitted Data	Data
4	DTR	Data Terminal Ready	Control
5	GND	Signal Ground	Ground
6	DSR	Data Set Ready	Control
7	RTS	Request to Send	Control
8	CTS	Clear to Send	Control
9	RI	Ring Indicator	Control

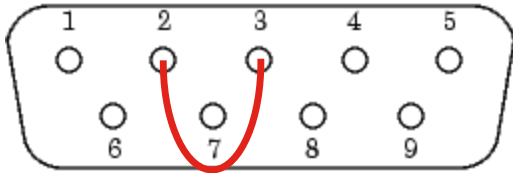


# Serial Port



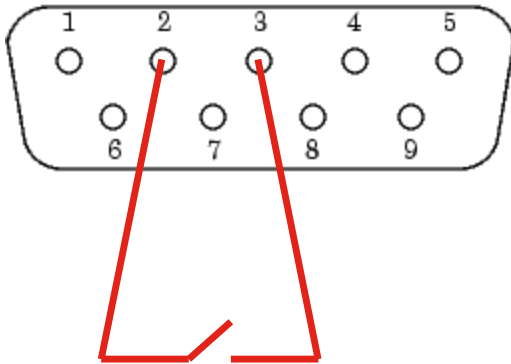
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# Serial Port - Loopback



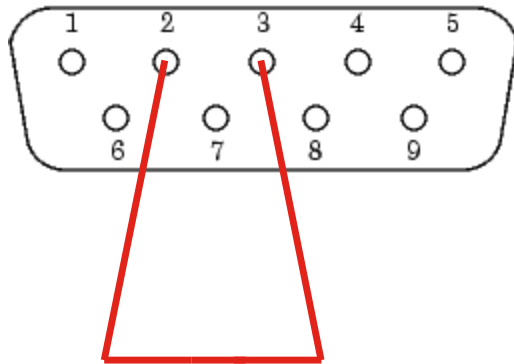
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5	GND	Signal Ground	Ground
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8	CTS	Clear to Send	Control
9	RI	Ring Indicator	Control

# Serial Port - Button



Pin	Label	Signal Name	Signal Type
1	CD	Carrier Detect	Control
2	RD	Received Data	Data
3	TD	Transmitted Data	Data
4	DTR	Data Terminal Ready	Control
5	GND	Signal Ground	Ground
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# Serial Port - Button



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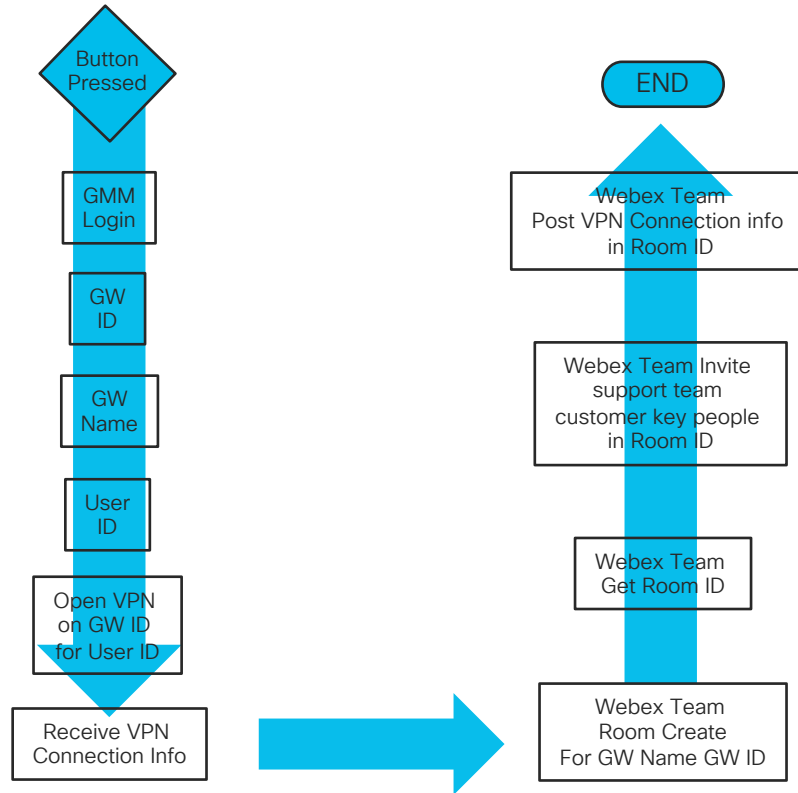
# Serial Port – Detecting with a script

```
...  
BYTE = "A"  
port = serial.Serial(device, 9600, timeout=1)  
  
# write a byte and try to read back, timeout indicates  
# open circuit  
while True:  
    port.write(BYTE)  
    i = port.read(1)  
    if len(i) == 1 and i == BYTE:  
        print "*** Button Pressed ***"  
    else:  
        print "Button Not Pressed", i  
    time.sleep(0.1)
```

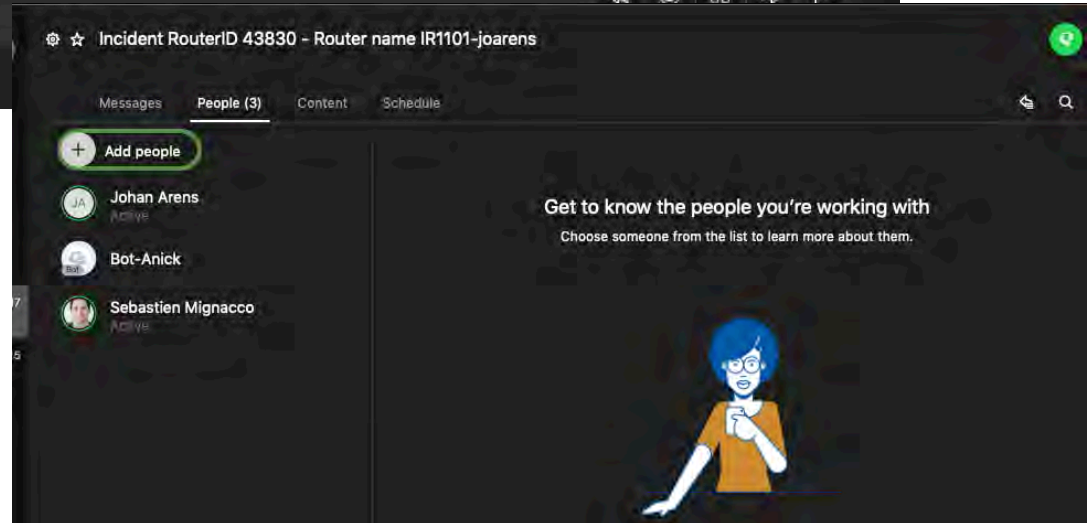
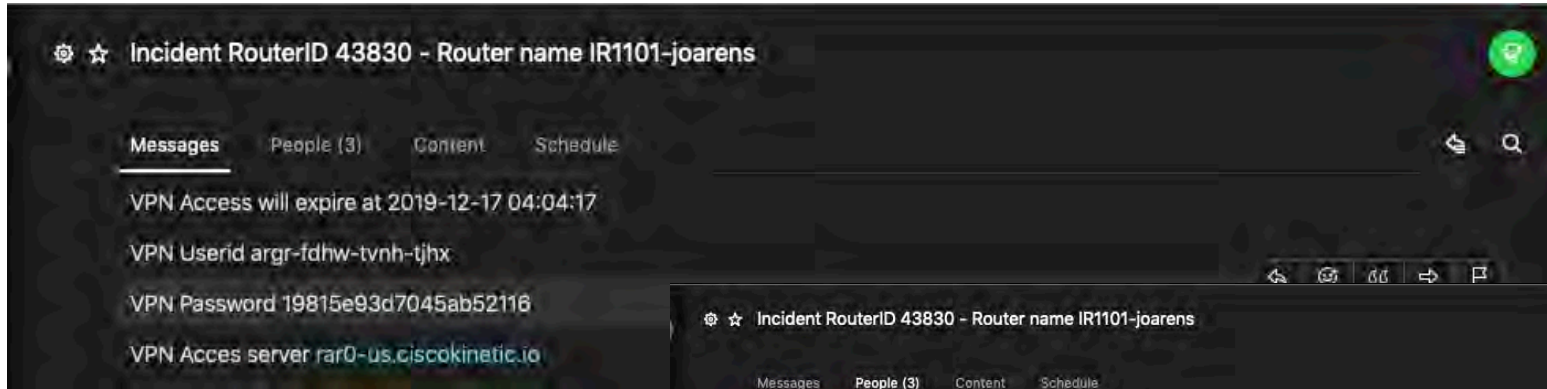


# Logic

# Logic



# Webex Team





# Python Script

# Cisco API's



# Cisco API's on DevNet – Kinetic GMM

## Gateways

GET	/v2/organizations/{organization_id}/gate_ways
GET	/v2/organizations/{organization_id}/gate_ways/search
GET	/v2/gate_ways/{id}
PUT	/v2/gate_ways/{id}
DELETE	/v2/gate_ways/{id}
GET	/v2/gate_ways/{id}/discover_things
GET	/v2/gate_ways/{id}/metrics
GET	/v2/gate_ways/{id}/connector_details
GET	/v2/gate_ways/{id}/audit_logs
GET	/v2/gate_ways/{id}/cellular_usage_from_jcc

**POST** /v2/gate\_ways/{id}/remote\_access

Create Remote Access

Parameters

Try it out

Name	Description
<b>id</b> <small>* required</small> integer (path)	Id of the gate_way
<b>remote_access</b> <small>* required</small> (body)	Create Remote Access Params

Example Value Model

```
{  "duration": 0}
```

Parameter content type

application/json

Responses

Response content type application/json

# Cisco API's on DevNet – Webex Team

## Rooms

Rooms are virtual meeting places where people post messages and collaborate to get work done. This API is used to manage the rooms themselves. Rooms are created and deleted with this API. You can also update a room to change its title, for example.

To create a team room, specify the `teamId` in the POST payload. Note that once a room is added to a team, it cannot be moved. To learn more about managing teams, see the [Teams API](#).

To manage people in a room see the [Memberships API](#).

To post content see the [Messages API](#).

Method	Description
<a href="#">GET</a> <a href="https://api.ciscospark.com/v1/rooms">https://api.ciscospark.com/v1/rooms</a>	List Rooms
<a href="#">POST</a> <a href="https://api.ciscospark.com/v1/rooms">https://api.ciscospark.com/v1/rooms</a>	Create a Room
<a href="#">GET</a> <a href="https://api.ciscospark.com/v1/rooms/{roomId}">https://api.ciscospark.com/v1/rooms/{roomId}</a>	Get Room Details
<a href="#">GET</a> <a href="https://api.ciscospark.com/v1/rooms/{roomId}/meetingInfo">https://api.ciscospark.com/v1/rooms/{roomId}/meetingInfo</a>	Get Room Meeting Details
<a href="#">PUT</a> <a href="https://api.ciscospark.com/v1/rooms/{roomId}">https://api.ciscospark.com/v1/rooms/{roomId}</a>	Update a Room
<a href="#">DELETE</a> <a href="https://api.ciscospark.com/v1/rooms/{roomId}">https://api.ciscospark.com/v1/rooms/{roomId}</a>	Delete a Room

### List Rooms

List rooms.

The `title` of the room for 1:1 rooms will be the display name of the other person.

By default, lists rooms to which the authenticated user belongs. Long result sets will be split into [pages](#).

```
GET /v1/rooms
```

#### Query Parameters

**teamId**  
string

List rooms associated with a team, by ID.

**type**  
string

List rooms by type.

Possible values: `direct`, `group`

**sortBy**  
string

Sort results.

Possible values: `at`, `lastactivity`, `created`


**max**  
integer

Limit the maximum number of rooms in the response.

Default: 100


[Try it](#) [Example](#)

```
GET /v1/rooms/{roomId},type,sortBy,max
```

 [Log in to try the API](#)

### Header

Authorization

 [Link your account to this token](#)

Group:

This limited-duration personal access token is hidden for your security.

### Query Parameters

teamId

type

sortBy

max



# Conclusion

Thank you



# Possibilities

#CiscoLive | #DevNetDay



# Resources

# Resources

- [Devnet Kinetic API explorer](#)
- [Webex Team API's](#)
- [Cisco IR1100 Datasheet](#)
- [Johan's GitHub](#)
- [Johan's Youtube Channel](#)

