



Digi Application Guide

Upload a file from Device Cloud to a Digi device via RCI

1. Upload a file to a Digi Gateway or Connect Wan router via RCI using a Task on Device Cloud.

Objective: Convert a file to Base64 and create an RCI command to upload this file to a Digi Gateway or Connect Wan router using a task on Device Cloud.

1.1 Software Requirements

- Digi Device Discovery
- Latest 2.15.X firmware or newer
- Web browser and Device Cloud account.

1.2 Hardware Requirements

- Digi ConnectPort X Gateway or Digi Connect Wan 3G.

2. Scenario

In this example we will upload the file python.zip via Device Cloud through an RCI command to a Digi Gateway or Connect Wan router. Using the previous Application guide that demonstrated how to create a scheduled task, we will use a task to send this RCI command to the Gateway.



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3. Convert the python.zip file to Base64 and upload it via RCI

- Make sure that the device has internet connectivity and is connected Device Cloud. The following Knowledge Base article will help troubleshooting any connection issues :
<http://www.digi.com/support/kbase/kbaseresultdetl?id=3211>
- Open a web browser to <http://login.etherios.com> (for the US Cloud) or <http://login.etherios.co.uk> (for the European Cloud)
- Log-in using your credentials
- If the device is not yet added to your account, add it by click on the “**Add Devices**” button under **Device Manager**.
- There are several ways to convert a file to Base64, the easiest is to use a website that will do it for you, for example : <http://www.motobit.com/util/base64-decoder-encoder.asp>
- On the web page, chose “**Select a file to convert to a Base64 string**”, click “**Browse**” and select the python.zip file (or any other python file you want to upload) and click on “**Convert the source data**”
- Once the conversion is done, the result is shown in the window on top. This is the “Data” part that will be used in the RCI string.

ONLINE SAMPLE OF A BASE64 PROPERTY DECODING AND ENCODING TEXTS AND FILES.

You can use this base64 sample decoder and encoder to:

- Decode base64 strings (base64 string looks like YTMONZomzl2OTsmlzMONTueYQ==)
- Decode a base64 encoded file (for example ICO files or files from MIME message)
- Convert source text data from several code pages and encode them to a base64 string or a file

The Form.SizeLimit is 10000000bytes. Please, do not post more data using this form.

v Base64 representation of the source data:

```
UESDBBQAAAAIAA1DgzsFjzjmfgYAAEYMAAANABUAbG1uZWNhY2h1LnB5Y1VUCQADkDoYS5E6GETV
eRQA6APoA4VWzY4bRRcunvHY6117f5LNJuZCB0WKIxIjDtySCMgiiIQW5E200cLKmnjG9mXmZ5zp
NomRjZA2B24IhISQEG/ADU48BWeOPAE8AFBfjWfXiYQysnv6p6a+quvqvr3v5v+j9//ebdP
i8fj
/9v8N2NuQqIDbhWFDj1SdKDKvkMHD0UuhRUKPRq6d0BiPqzSMxbzaEQUVcMs0TFWUJ01FV1a
kX5d
+nXp+9L30d9rr2LnX7m5E/RHkU7iNDJ6kGfHehAnken4/r1RbDR+qY3SMAq1zXQeBeGy7HEW
Tlha
x8fjLLcsc+OGHkVpP9LxQAEiKg2OIS/VpJnVg2yShtd1bPWTOE10kmWpdJg9SbV1Ewpd2kRB
3h/p
```

Type (or copy-paste) some text to a textbox below. The text can be Base64 string to decode or any string to encode to a Base64.

or select a file to convert to a Base64 string.
C:\Temp\python.zip



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Go back to the Device Cloud web site, Create a new Schedule and chose “**RCI Command**”

h) Select **Embed** and past the following :

```
<rci_request version="1.1">
  <do_command target="file_system">
    <put_file name="/WEB/python/python.zip">
      <data> ...
    </data>
    </put_file>
  </do_command>
</rci_request>
```

The part between <data> </data> is where the Base64 output goes.

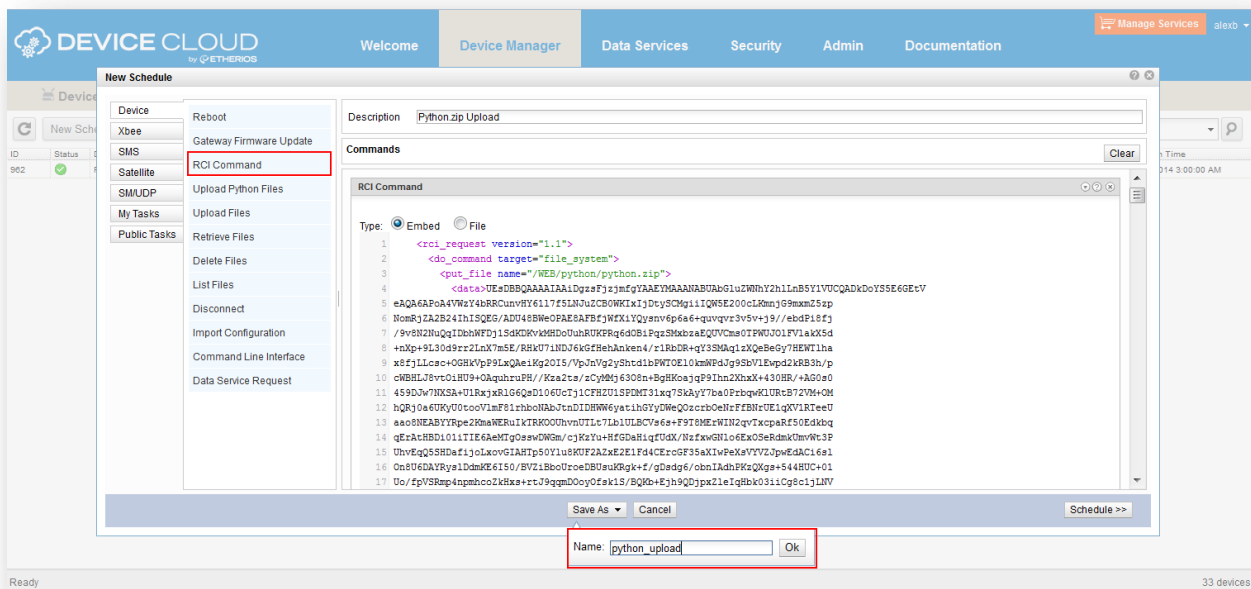
`<rci_request version="1.1">` : specify that this is an RCI request format

`<do_command target="file_system">` : type of command and target

`<put_file name="/WEB/python/python.zip">` : where to push the file and it's filename

`<data></data>` : raw data

i) The window should look like this :



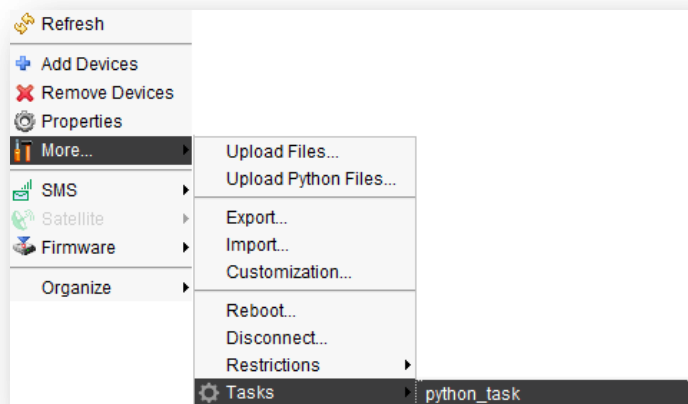
You can also create a .RCI file by pasting all the text into a blank file and saving it as .rci. then chose “File” instead of Embed



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- j) Click **Save As** and chose a name for the task
- k) Click on Schedule, select the target device and click “**Run Now**”
- l) As this task was saved, it can be run later by right clicking on a device in **Device Manager > Devices**, select **More > Tasks > “Task name”**



You can find further information about Schedule Tasks and Device Cloud in the Device Cloud user guide available under “**Documentation > User Guide**”