

Mioty activation steps

Changelog

10/11/2021 v.1.1

- Added support for over-the-air attachment devices (also via multiple basestations at once)
- Additional read-only fields have been added to the basestation page
- Added support for BSSCI Status Operation
- A status request is sent to the basestations right after connecting. This allows ResIOT to align its clock with the basestation's. In case of retained data while the basestation was offline, ResIOT is now able to store it locally at the exact moment in time it happened, instead of relying on the basestation's clock.

28/10/2021 v.1.0

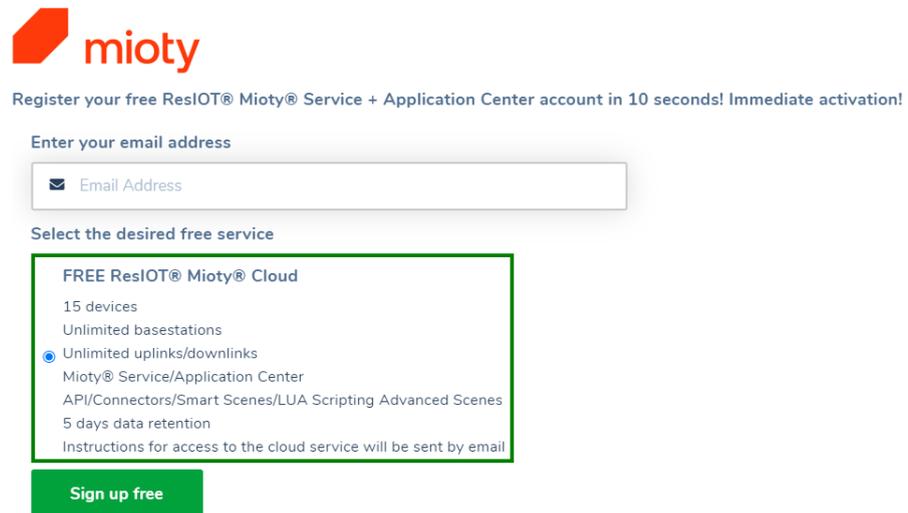
- Mioty Basestation registration
- Support for Mioty BSSCI version 0.9 and 1.0.0, supported operation: "con", "conRsp", "conCmp", "ping", "pingRsp", "pingCmp", "attPrp", "attPrpRsp", "attPrpCmp", "ulData", "ulDataRsp", "ulDataCmp"
- Support for Mioty Device Pre-Attached and Attachment propagation on all connected basestations
- Uplink deduplication/aggregation for uplinks arriving through multiple basestations simultaneously
- Uplink management, log, data retention and ResIOT Lua scripting integration for decode

Next steps:

- Basestation remote management and access with ResIOT Merlin IoT Box
- Operation: "detPrp", "detPrpRsp", "detPrpCmp", "status", "statusRsp", "statusCmp"
- Downlinks
- Detach operation

1 - Account Registration

Head to <https://www.resiot.io/en/mioty-sign-up-free/> and register an account with a valid email address:

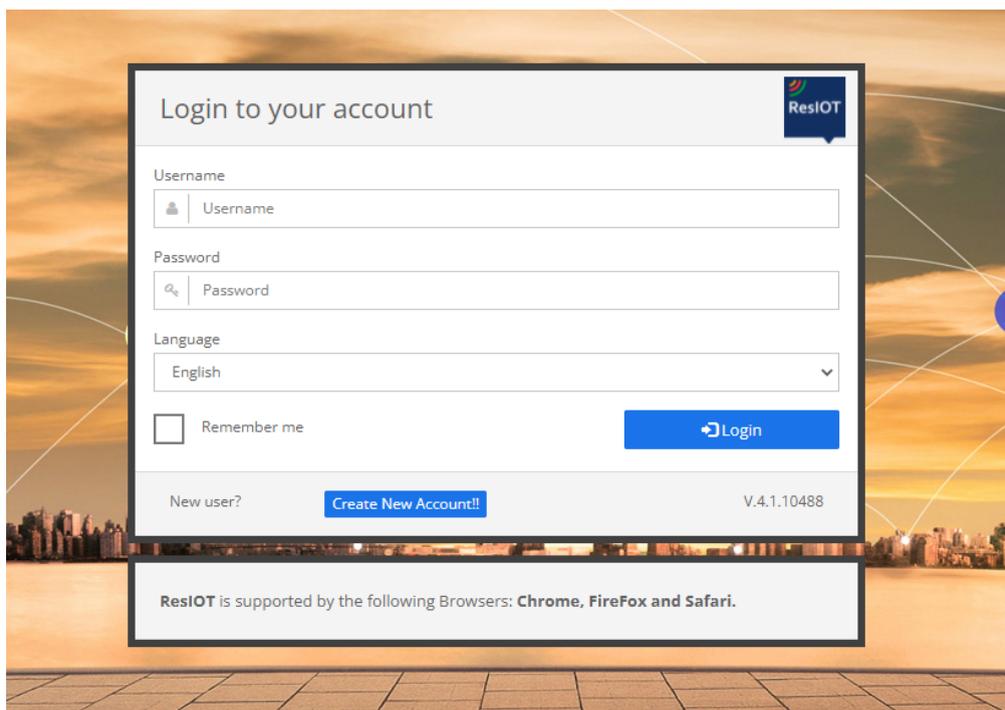


The screenshot shows the Mioty registration interface. At the top left is the Mioty logo. Below it is a promotional banner: "Register your free ResIoT® Mioty® Service + Application Center account in 10 seconds! Immediate activation!". The form consists of three main sections: 1. "Enter your email address" with a text input field containing a placeholder "Email Address" and an envelope icon. 2. "Select the desired free service" with a list of features: "FREE ResIoT® Mioty® Cloud", "15 devices", "Unlimited basestations", "Unlimited uplinks/downloads" (selected with a radio button), "Mioty® Service/Application Center", "API/Connectors/Smart Scenes/LUA Scripting Advanced Scenes", "5 days data retention", and "Instructions for access to the cloud service will be sent by email". 3. A green "Sign up free" button.

2 - Acces the IOT Platform

Your account activation email contains the required login credentials and link access. Head to <https://mioty.resiot.io/> or click the link in the email body.

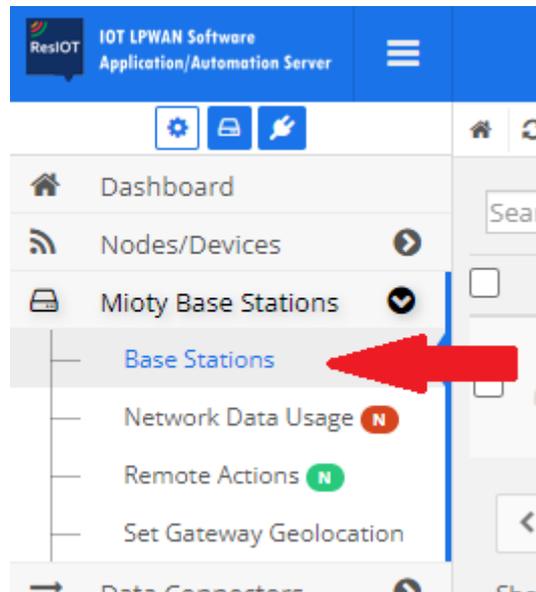
Finally login with your credentials:



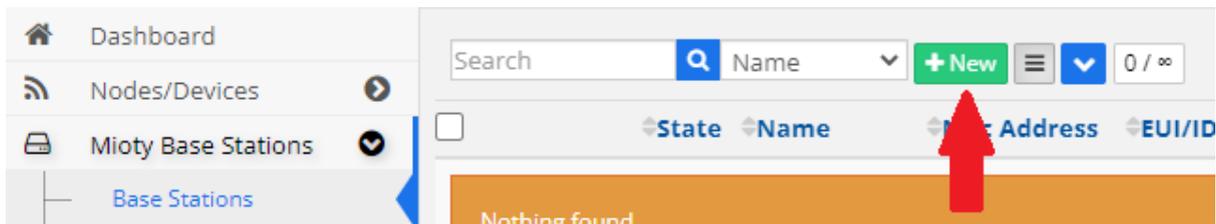
The screenshot shows the ResIoT login page. The title is "Login to your account" with the ResIoT logo in the top right corner. The form includes: 1. "Username" field with a person icon and placeholder "Username". 2. "Password" field with a magnifying glass icon and placeholder "Password". 3. "Language" dropdown menu set to "English". 4. "Remember me" checkbox. 5. A blue "Login" button with a right-pointing arrow. 6. A footer area with "New user?" and a "Create New Account!!" button, and the version number "V.4.1.10488". 7. A banner at the bottom stating "ResIoT is supported by the following Browsers: Chrome, FireFox and Safari." The background of the page is a sunset over a city skyline.

3 - Base Station Registration

After logging into the platform, It's now time to register your base station(s). Head to the Mioty Base Stations menu:



Now press the New button, and register a Mioty Base Station:



Now enter the following required data:

Mioty Center *	[EU] ResIoT MIOTY Service Center
Name *	Name
Mac Address *	Mac Address
Gateway EUI/ID *	Gateway EUI/ID

Mioty center: Select the pre-registered ResIoT Mioty Service Center.

Name: this is just a label field.

Mac Address: this is a required field where you can enter the mac address of your base station. It doesn't have to be the real mac address of your base station as this is only a label field.

Gateway Eui/ID: Enter the EUI of your base station. This is what is going to grant access to your base station so this has to be a valid value.

The Eui of your base station can be retrieved in your Mioty base station dashboard:

Dashboard

Mode	Other Service Center
Profile	eu1
Base Station EUI	70-B3-D5-67-70-07-00-39 
Service Center Connection	

Finally, all you have to do is connect your base station to the ResIoT Service Center.

The service center is running with TLS on:

Service Center Address: mioty.resiot.io

Service Center Port: 53000

TLS CA Certificate:

-----BEGIN CERTIFICATE-----

```

MIIDzTCCArWgAwIBAgIUybUeJBxDcDNYZHxfXI/Ojpyr7glwDQYJKoZIhvcNAQEL
BQAwdjELMAkGA1UEBhMCNVBAgMBU1JTEFOMQ4wDAYDVQQQHDAVNS
UxB
TjEUMBIGA1UECgwLVUJMU09GVFdBUCUxZDZANBgNVBAsMBIjIc0IPVDEgMB4GCSqG
S1b3DQEJARYRc3VwcG9ydEByZXNpb3QuaW8wHhcNMjExMDIyMDcxNDE0WhcNMzEx
MDIwMDcxNDE0WjB2MQswCQYDVQQGEwJJVDEOMAwGA1UECAwFTUIMQU4xDjAMBg
NV
BAcMBU1JTEFOMRQwEgYDVQQKDAVQKxTT0ZUV0FSRTEPMA0GA1UECwwGUmVzS
U9U
MSAwHgYJKoZIhvcNAQkBFhFzdXBwb3J0QHJlc2lvdC5pbzCCASlwdQYJKoZIhvcN
AQEBBQADggEPADCCAQoCggEBAOcjC7Qy+TPNjawzGRmK/IOk6w54Svsuyrj6bXhn
+Hvq0hjyPATaUo173ISDIYpJHirJnIkkKpju+1HkHclABKu1ihetruLMAC/LpqX
MVY8N07vkwoVomaAIQKhlvH9cCFxHt4138+iFXJUALayM2R9ibzT1Ri0eUZwTO9T
zBq61g4b5npikTICwlqquJK0wfQ3ly60hN2es1x8DfmJX/G6419rs+CUJPhs+rrA
HqMDAmpn55paOFI6V9ue2UIghdy/50DQecZsX+UINMDHjhmQdxlp6LbsmQncLXt
z9mJGZawmUXBG5lrcyppcdCxJue0GtA+rT5rzj2kw3QhxfECAwEAAaNTMFEwHQYD
VR0OBBYEFN4x5nvax9AJ3ca9Po61ylnNM672MB8GA1UdIwQYMBaAFN4x5nvax9AJ
3ca9Po61ylnNM672MA8GA1UdEwEB/wQFMAMBAf8wDQYJKoZIhvcNAQELBQADggEB
AE1V9fpMORGdoy4ILqjIEUyDtEO/U9Bo6C8rnC+CF/F4f90Da/26kNZ9OkUc5bEX
1QtWzV0vVafK/neYGbo9uyTYinHSopVw+Bo2BjaVMbtA6KMLQFlwGalgtJqwaCnC
Cy9qG6OGt72l3M4csuxl7pqJ/WOjgQ5drBnGLtK9W+HeiA5aqTogBe39ix9MISNV
37q+ljqrISM5UCaKEEuJ0JTaUTEbzG8zuZjJynkKBTIN32VtcCkVJLyeO9OkhHu
baMT6cuyI9cp45x+Js7OYOklcDeHexL3lrQ3vaoT2YjBux/GxZ8hVFPT1MIM6oqB
bKFWHxw6dFA/3BPfWYAcNAQ=

```

-----END CERTIFICATE-----

Head to your **mode** menu in your gateway configuration panel and fill as follows:

Manual Service Center Configuration

This mode enables operation as a Mioty Base Station.

In this case the device must be connected to a compatible backend solution via BSSCI. Internal Service Center and Application Center are disabled and device management is done via the external backend.

BS ← BSSCI → SC | AC

Service Center Address: 34.77.110.212

Service Center Port: 56383

TLS CA Certificate: ****

TLS Certificate: ****

TLS Key: ****

TLS Authentication Required:

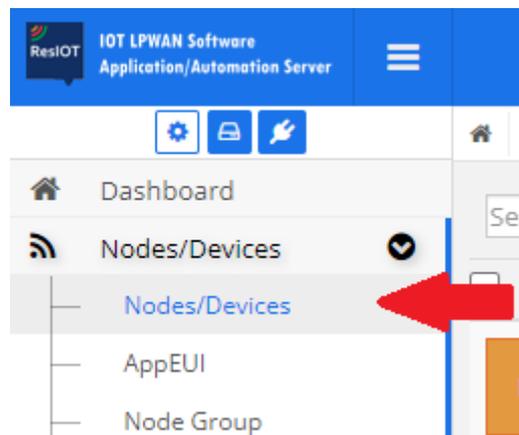
TLS Hostname Verification:

Now the gateway should be connecting to the ResIOT Mioty Service Center! You should be getting positive connection logs in your mioty base station dashboard panel.

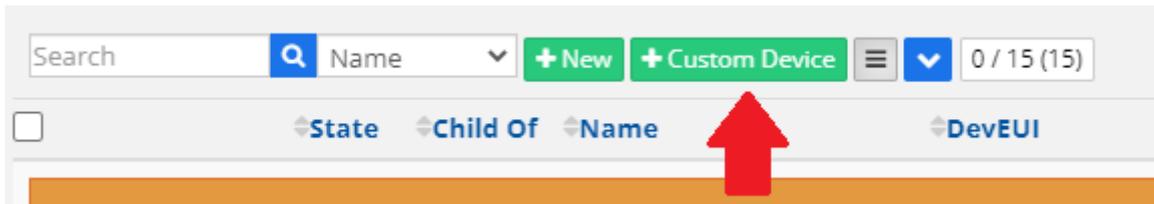
All is now set, time to configure the devices!

4 - Register your device(s)

Currently, ResIOT only supports preattached devices. Head to the Devices menu:



Create a new Custom device:



ResIOT devices have many options. The minimum required fields to register a device to your service center are the following:

Node AUTH type: select MIOTY Preattached

device: enter the device eui. This should be provided by your device manufacturer

Application EUI: create a valid application EUI. This is only needed by ResIOT. Any random value will do.

Short Address: enter the device short address. This should be provided by your device manufacturer

Network Session Key: enter the device session key. This should be provided by your device manufacturer

Bidirectional: this information should be provided by your device manufacturer

Mioty Center: select the ResIOT Mioty Service Center

5 - Using ResIOT

You should be now receiving data from your base stations. Enjoy ResIOT!