

IoT Bridge

Wi-Fi Connectivity Settings



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Wi-Fi Connectivity Settings Details

NOTE The security type notations have been made more user-friendly from version 2.6.0.0-001R and higher. The same security types can be expressed in multiple ways. Samples of Wi-Fi Profile settings that go into the **badge_config.json** file for each of the Wi-Fi configurations are provided.

Wi-Fi Security Types

Table 1 Security Types

Security Types	Encryption	Security Type Notation	EAP Type	Security Key	Outer Identity	WPA Enterprise Password	Sample
WPA PSK Security With TKIP	TKIP	wpatkip, wpa_tkip, wpatkip_psk	N/A	Refer to section below	N/A	N/A	WPA TKIP
WPA PSK Security With AES	AES	wpa, wpaaes	N/A	Refer to section below	N/A	N/A	WPA AES
WPA PSK Security With TKIP & AES (Mixed Mode)	TKIP, AES (Mixed Mode)	wpamixed_psk	N/A	Refer to section below	N/A	N/A	WPA Mixed
WPA2 PSK Security With TKIP	TKIP	wpa2tkip, wpa2_tkip, wpa2tkip_psk	N/A	Refer to section below	N/A	N/A	WPA2 TKIP
WPA2 PSK Security With AES	AES	wpa2, wpa2aes	N/A	Refer to section below	N/A	N/A	WPA2 AES
WPA2 PSK Security With TKIP & AES	TKIP, AES (Mixed Mode)	wpa2mixed_psk	N/A	Refer to section below	N/A	N/A	WPA2 Mixed
WPA Enterprise Security With TKIP	TKIP	wpatkip_ent, wpatkip, wpa_tkip, wpatkip_psk	peap	N/A	Refer to section below	Refer to section below	WPA Enterprise TKIP
WPA Enterprise Security With AES	AES	wpa, wpaaes, wpaaes_ent	peap	N/A	Refer to section below	Refer to section below	WPA Enterprise AES
WPA Enterprise Security With TKIP & AES	TKIP, AES (Mixed Mode)	wpamixed_ent	peap	N/A	Refer to section below	Refer to section below	WPA Enterprise Mixed

Table 1 Security Types (Continued)

Security Types	Encryption	Security Type Notation	EAP Type	Security Key	Outer Identity	WPA Enterprise Password	Sample
WPA2 Enterprise Security With TKIP	TKIP	wpa2tkip_ent, wpa2tkip, wpa_tkip, wpa2tkip_psk	peap	N/A	Refer to section below	Refer to section below	WPA2 Enterprise TKIP
WPA2 Enterprise Security With AES	AES	wpa2, wpa2aes, wpa2aes_ent	peap	N/A	Refer to section below	Refer to section below	WPA2 Enterprise AES
WPA2 Enterprise Security With TKIP & AES	TKIP, AES (Mixed Mode)	wpa2mixed_ent	peap	N/A	Refer to section below	Refer to section below	WPA2 Enterprise Mixed

Password Details

Table 2 Password Details

Type	Details
Security Key	Password key length maximum 63 characters
Outer Identity	String with maximum length 31 characters. Accepts empty string.
WPA Enterprise Password	Password key length maximum of 15 characters

Legend

Table 3 Legend

Name	Description
N/A	Not applicable
PSK	Pre shared key
AES	Advanced Encryption Standard
TKIP	Temporal Key Integrity Protocol
WPA	Wi-Fi- Protected Access
WPA2	Wi-Fi- Protected Access 2
Peap	Protected Extensible Authentication Protocol
Wep	Wired Equivalent Privacy

WIFI Profile Configuration Samples

WPA TKIP

<pre>{ "ssid": "MotAP7532", "securityKey": "abcdABCDef12", "securityType": "wpa_tkip", "wpaEnterpriseUser": "", "wpaEnterprisePassword": "", "eapType": "", "enable": true }</pre>	<pre>{ "ssid": "MotAP7532", "securityKey": "abcdABCDef12", "securityType": "wpatkip", "wpaEnterpriseUser": "", "wpaEnterprisePassword": "", "eapType": "", "enable": true }</pre>	<pre>{ "ssid": "MotAP7532", "securityKey": "abcdABCDef12", "securityType": "wpatkip_psk", "wpaEnterpriseUser": "", "wpaEnterprisePassword": "", "eapType": "", "enable": true }</pre>
--	---	---

WPA AES

<pre>{ "ssid": "MotAP7532", "securityKey": "abcdABCDef12", "securityType": "wpa", "wpaEnterpriseUser": "", "wpaEnterprisePassword": "", "eapType": "", "enable": true }</pre>	<pre>{ "ssid": "MotAP7532", "securityKey": "abcdABCDef12", "securityType": "wpaaes", "wpaEnterpriseUser": "", "wpaEnterprisePassword": "", "eapType": "", "enable": true }</pre>	<pre>{ "ssid": "MotAP7532", "securityKey": "abcdABCDef12", "securityType": "wpaaes_psk", "wpaEnterpriseUser": "", "wpaEnterprisePassword": "", "eapType": "", "enable": true }</pre>
---	--	--

WPA Mixed

<pre>{ "ssid": "MotAP7532", "securityKey": "abcdABCDef12", "securityType": "wpamixed_psk", "wpaEnterpriseUser": "", "wpaEnterprisePassword": "", "eapType": "", "enable": true }</pre>
--

WPA2 TKIP

```
{
  "ssid": "MotAP7532",
  "securityKey": "abcdABCDef12",
  "securityType": "wpa2_tkip",
  "wpaEnterpriseUser": "",
  "wpaEnterprisePassword": "",
  "eapType": "",
  "enable": true
}
```

```
{
  "ssid": "MotAP7532",
  "securityKey": "abcdABCDef12",
  "securityType": "wpa2tkip",
  "wpaEnterpriseUser": "",
  "wpaEnterprisePassword": "",
  "eapType": "",
  "enable": true
}
```

```
{
  "ssid": "MotAP7532",
  "securityKey": "abcdABCDef12",
  "securityType":
    "wpa2tkip_psk",
  "wpaEnterpriseUser": "",
  "wpaEnterprisePassword": "",
  "eapType": "",
  "enable": true
}
```

WPA2 AES

```
{
  "ssid": "MotAP7532",
  "securityKey":
    "abcdABCDef12",
  "securityType": "wpa2",
  "wpaEnterpriseUser": "",
  "wpaEnterprisePassword": "",
  "eapType": "",
  "enable": true
}
```

```
{
  "ssid": "MotAP7532",
  "securityKey": "abcdABCDef12",
  "securityType": "wpa2aes",
  "wpaEnterpriseUser": "",
  "wpaEnterprisePassword": "",
  "eapType": "",
  "enable": true
}
```

```
{
  "ssid": "MotAP7532",
  "securityKey": "abcdABCDef12",
  "securityType": "wpa2aes_psk",
  "wpaEnterpriseUser": "",
  "wpaEnterprisePassword": "",
  "eapType": "",
  "enable": true
}
```

WPA2 Mixed

```
{
  "ssid": "MotAP7532",
  "securityKey": "abcdABCDef12",
  "securityType": "wpa2mixed_psk",
  "wpaEnterpriseUser": "",
  "wpaEnterprisePassword": "",
  "eapType": "",
  "enable": true
}
```


WPA Enterprise TKIP

```
{
  "ssid": "PB_PEAP_2",
  "securityKey": "mpact123",
  "securityType": "wpatkip_ent",
  "wpaEnterpriseUser":
"IoTBridge1",
  "wpaEnterprisePassword":
"Scarlet1",
  "eapType": "peap",
  "wpaEnterpriseOuterIdentity" :
"ab",
  "enable": true
}
```

```
{
  "ssid": "PB_PEAP_2",
  "securityKey": "mpact123",
  "securityType": "wpatkip",
  "wpaEnterpriseUser":
"IoTBridge1",
  "wpaEnterprisePassword":
"Scarlet1",
  "eapType": "peap",
  "wpaEnterpriseOuterIdentity" :
"ab",
  "enable": true
}
```

```
{
  "ssid": "PB_PEAP_2",
  "securityKey": "mpact123",
  "securityType": "wpa_tkip",
  "wpaEnterpriseUser":
"IoTBridge1",
  "wpaEnterprisePassword":
"Scarlet1",
  "eapType": "peap",
  "wpaEnterpriseOuterIdentity" :
"ab",
  "enable": true
}
```

WPA Enterprise AES

```
{  
  "ssid": "PB_PEAP_2",  
  "securityKey": "mpact123",  
  "securityType": "wpa",  
  "wpaEnterpriseUser": "IoTBridge1",  
  "wpaEnterprisePassword": "Scarlet1",  
  "eapType": "peap",  
  "wpaEnterpriseOuterIdentity" : "ab",  
  "enable": true  
}
```

```
{  
  "ssid": "PB_PEAP_2",  
  "securityKey": "mpact123",  
  "securityType": "wpaaes_ant",  
  "wpaEnterpriseUser": "IoTBridge1",  
  "wpaEnterprisePassword": "Scarlet1",  
  "eapType": "peap",  
  "wpaEnterpriseOuterIdentity" : "ab",  
  "enable": true  
}
```

```
{  
  "ssid": "PB_PEAP_2",  
  "securityKey": "mpact123",  
  "securityType": "wpaaes",  
  "wpaEnterpriseUser": "IoTBridge1",  
  "wpaEnterprisePassword": "Scarlet1",  
  "eapType": "peap",  
  "wpaEnterpriseOuterIdentity" : "ab",  
  "enable": true  
}
```

WPA Enterprise Mixed

```
{  
  "ssid": "PB_PEAP_2",  
  "securityKey": "mpact123",  
  "securityType": "wpamixed_ent",  
  "wpaEnterpriseUser": "IoTBridge1",  
  "wpaEnterprisePassword": "Scarlet1",  
  "eapType": "peap",  
  "wpaEnterpriseOuterIdentity" : "ab",  
  "enable": true  
}
```

WPA2 Enterprise TKIP

```
{
  "ssid": "PB_PEAP_2",
  "securityKey": "mpact123",
  "securityType": "wpa2tkip_ent",
  "wpaEnterpriseUser": "IoTBridge1",
  "wpaEnterprisePassword": "Scarlet1",
  "eapType": "peap",
  "wpaEnterpriseOuterIdentity" : "ab",
  "enable": true
}
```

```
{
  "ssid": "PB_PEAP_2",
  "securityKey": "mpact123",
  "securityType": "wpa2tkip",
  "wpaEnterpriseUser": "IoTBridge1",
  "wpaEnterprisePassword": "Scarlet1",
  "eapType": "peap",
  "wpaEnterpriseOuterIdentity" : "ab",
  "enable": true
}
```

```
{
  "ssid": "PB_PEAP_2",
  "securityKey": "mpact123",
  "securityType": "wpa2_tkip",
  "wpaEnterpriseUser": "IoTBridge1",
  "wpaEnterprisePassword": "Scarlet1",
  "eapType": "peap",
  "wpaEnterpriseOuterIdentity" : "ab",
  "enable": true
}
```

WPA2 Enterprise AES

```
{  
  "ssid": "PB_PEAP_2",  
  "securityKey": "mpact123",  
  "securityType": "wpa2",  
  "wpaEnterpriseUser": "IoTBridge1",  
  "wpaEnterprisePassword": "Scarlet1",  
  "eapType": "peap",  
  "wpaEnterpriseOuterIdentity" : "ab",  
  "enable": true  
}
```

```
{  
  "ssid": "PB_PEAP_2",  
  "securityKey": "mpact123",  
  "securityType": "wpa2aes_ant",  
  "wpaEnterpriseUser": "IoTBridge1",  
  "wpaEnterprisePassword": "Scarlet1",  
  "eapType": "peap",  
  "wpaEnterpriseOuterIdentity" : "ab",  
  "enable": true  
}
```

```
{  
  "ssid": "PB_PEAP_2",  
  "securityKey": "mpact123",  
  "securityType": "wpa2aes",  
  "wpaEnterpriseUser": "IoTBridge1",  
  "wpaEnterprisePassword": "Scarlet1",  
  "eapType": "peap",  
  "wpaEnterpriseOuterIdentity" : "ab",  
  "enable": true  
}
```

WPA2 Enterprise Mixed

```
{  
  "ssid": "PB_PEAP_2",  
  "securityKey": "mpact123",  
  "securityType": "wpa2mixed_ent",  
  "wpaEnterpriseUser": "IoTBridge1",  
  "wpaEnterprisePassword": "Scarlet1",  
  "eapType": "peap",  
  "wpaEnterpriseOuterIdentity" : "ab",  
  "enable": true  
}
```