

Microsoft Azure

your Azure IoT hub by using the Web **Apps feature of Azure App Service**

Contact Sales: 1-800-867-1389

Portal

What you do

What you need

Create a web app

Add a consumer

group to your IoT

Configure the web

app to read data

Upload a web

see real-time

your IoT hub

Next steps

temperature and

humidity data from

Is this page helpful? \times

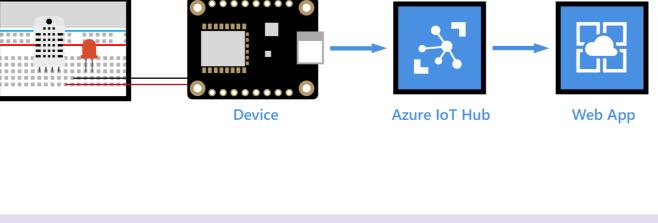
from your IoT hub

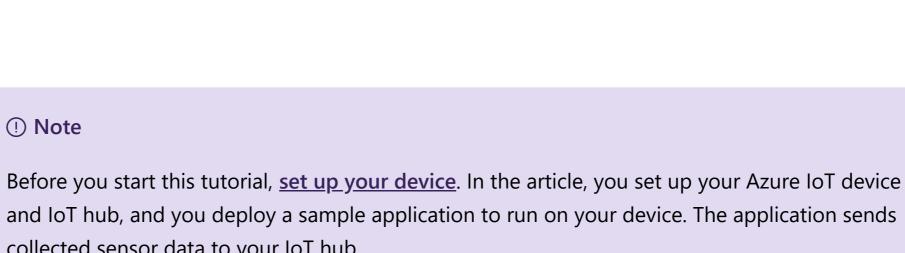
application to be hosted by the web

Open the web app to

hub

app





collected sensor data to your IoT hub. What you learn In this tutorial, you learn how to visualize real-time sensor data that your IoT hub receives by

running a web application that is hosted on a web app. If you want to try to visualize the data in

your IoT hub by using Power BI, see <u>Use Power BI to visualize real-time sensor data from Azure IoT</u>

Hub.

What you do • Create a web app in the Azure portal. • Get your IoT hub ready for data access by adding a consumer group. • Configure the web app to read sensor data from your IoT hub.

• Open the web app to see real-time temperature and humidity data from your IoT hub.

- What you need
- - <u>Set up your device</u>, which covers the following requirements: An active Azure subscription

• Upload a web application to be hosted by the web app.

• An lot hub under your subscription A client application that sends messages to your lot hub

Create a web app

Download Git

- 1. In the <u>Azure portal</u>, click <u>Create a resource</u> > Web + Mobile > Web App.
- 2. Enter a unique job name, verify the subscription, specify a resource group and a location, select

Pin to dashboard, and then click Create.

Microsoft Azure New > Web + Mobile > Web App

Search the marketplace Н MARKETPLACE

Internet of Things

New

 \equiv

•

See all FEATURED APPS See all Enter a name for your App

We recommend that you select the same location as your resource group.

Web App * Subscription * Resource Group 1 Create new Use existing Web + Mobile

A scalable and secure backend that

can be used to power apps on any

Automate the access and use of

data across clouds without writing

Encode, store, and stream video and

audio at scale

Web + Mobile

Web App

iot-sample

* App Service plan/Location

Application Insights •

Create

Properties

🔎 🗘 🕾 😊 ⑦

Slot setting

☐ Save ➤ Discard

evice-to-cloud settings

ServicePlan2375834b-af33(South.

.azurewebsites.net

Enterprise Integration Web App On Linux (preview) Security + Identity Enjoy your web app natively hosted Developer tools Monitoring + Management Enjoy scalable, global distributed edge servers for fast and reliable Pin to dashboard Media Services

Consumer groups are used by applications to pull data from Azure IoT Hub. In this tutorial, you

create a consumer group to be used by a coming Azure service to read data from your IoT hub.

2. In the left pane, click **Endpoints**, select **Events** on the middle pane, enter a name under

A G ® © の Microsoft Azure All resources > mygateway - Endpoints > Properties mygateway - Endpoints + Add 🛅 Delete 💍 Sync prim. key 💍 Sync sec. key

Consumer groups on the right pane, and then click Save.

Add a consumer group to your IoT hub

To add a consumer group to your IoT hub, follow these steps:

1. In the <u>Azure portal</u>, open your IoT hub.

Search (Ctrl+/)

Pricing and scale

erpris... •••

Microsoft Azure xshi - Application settings

xshi - Application settings

Save X Discard

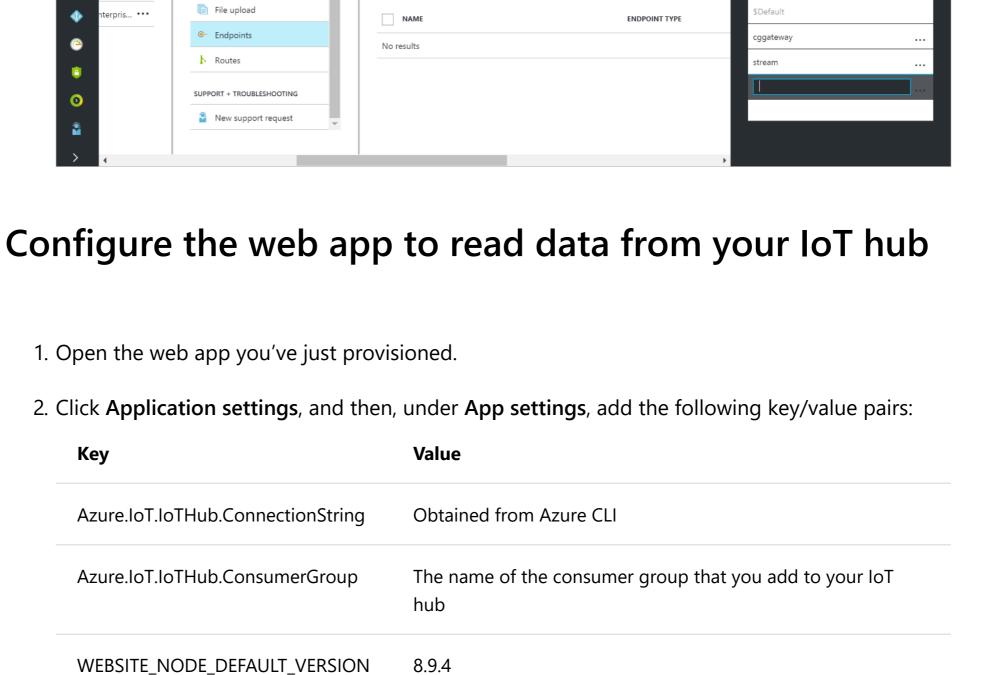
Remote debugging

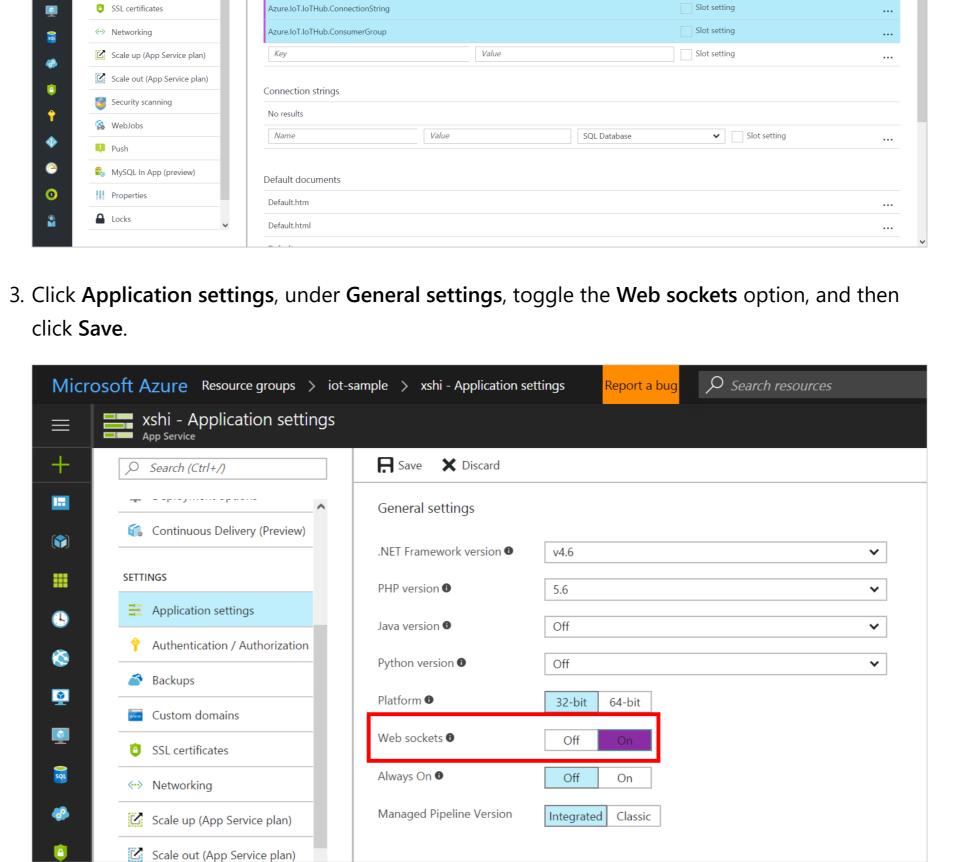
App settings

Remote Visual Studio version

WEBSITE_NODE_DEFAULT_VERSION

Operations monitoring Cloud to device feedback ∃→ IP Filter iii Diagnostics Properties Locks You may have up to 1 endpoint on this IoT hub. Automation script (P | P





Q Microsoft Azure Resource groups > iot-sample > xshi > Deployment source > Choose source xshi Deployment source Choose source **Choose Source** Search (Ctrl+/) Visual Studio Team Services **Local Git Repository** By Microsoft H Overview

Set up basic authentication

OneDrive

By Microsoft

GitHub By GitHub

Dropbox

Bitbucket By Atlassian

Local Git Repository

External Repository

eport a bug 🔎 🐧 🍪 😊 🤈

ServicePlan2375834b-af33 (Standard: 1 Small)

http://xshi.azurewebsites.net

Git/Deployment username

FTP hostname

ServicePlan2375834b-af33 (Standard: 1 Small)

https://shizn@xshi.scm.azurewebsites.net:443/xshi.git

ftp://waws-prod-sn1-019.ftp.azurewebsites.windows.net

https://shizn@xshi.scm.azurewebsites.net:443/xshi.git

ftp://waws-prod-sn1-019.ftp.azurewebsites.windows.net

Сору

App Service plan/pricing tier

Git/Deployment username

(

Setup connection

Not Configured

Upload a web application to be hosted by the web app

On GitHub, we've made available a web application that displays real-time sensor data from your IoT

1. In the web app, click **Deployment Options** > **Choose Source** > **Local Git Repository**, and then

hub. All you need to do is configure the web app to work with a Git repository, download the web

application from GitHub, and then upload it to Azure for the web app to host.

click **OK**.

SQL

Activity log

Tags

APP DEPLOYMENT

Quickstart

Access control (IAM)

X Diagnose and solve problems

Deployment credentials

Deployment options

Continuous Delivery (Preview)

repository in Azure, and then click Save.

Microsoft Azure Resource groups > iot-sample > xshi

xshi

<u>*</u>

Search (Ctrl+/)

Overview

Activity log

APP DEPLOYMENT

Quickstart

Access control (IAM)

X Diagnose and solve problems

Deployment credentials

Deployment options

Application settings

Continuous Delivery (Preview)

Authentication / Authorization

run the following commands:

bash

Overview

APP DEPLOYMENT

Quickstart

Activity log

Access control (IAM)

X Diagnose and solve problems

Deployment credentials

Deployment slots

Deployment options

Application settings

Backups

Continuous Delivery (Preview)

Authentication / Authorization

3. Click **Overview**, and note the value of **Git clone url**.

Resource group (change)

South Central US

Subscription ID

Monitoring

<your subscription id</pre>

Requests and errors

Status

Running

Application settings Authentication / Authorization OK

2. Click **Deployment Credentials**, create a user name and password to use to connect to the Git

■ Stop 🧠 Swap 💍 Restart 🛅 Delete 👱 Get publish profile 🗘 Reset publish profile

0 4. Open a command or terminal window on your local computer.

REQUESTS

5. Download the web app from GitHub, and upload it to Azure for the web app to host. To do so,

HTTP SERVER ERRORS

```
git clone https://github.com/Azure-Samples/web-apps-node-iot-hub-data-visualization.g
      cd web-apps-node-iot-hub-data-visualization
      git remote add webapp <Git clone URL>
      git push webapp master:master
      ① Note
      <Git clone URL> is the URL of the Git repository found on the Overview page of the web
      app.
Open the web app to see real-time temperature and
humidity data from your IoT hub
On the Overview page of your web app, click the URL to open the web app.
                                                                         Microsoft Azure xshi
     xshi
App Service
                          ☑ Browse ■ Stop 🥞 Swap 💍 Restart 🛅 Delete 👱 Get publish profile
       Search (Ctrl+/)
                          Essentials ^
```

Custom domains

11:30 AM

11:15 AM

REQUESTS

Resource group (change)

South Central US Subscription name (change) VSChina IoT Prod

<your subscription id>

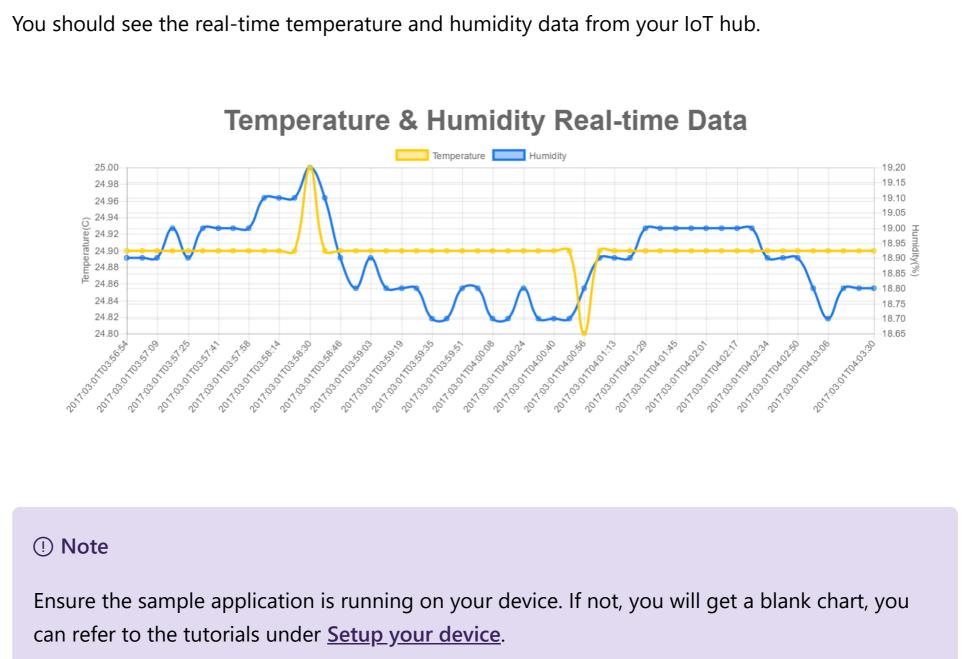
Requests and errors

HTTP SERVER ERRORS

Subscription ID

iot-sample

Status Running



For an alternative way to visualize data from Azure IoT Hub, see <u>Use Power BI to visualize real-time</u> sensor data from your IoT hub.

Feedback

Next steps

To continue to get started with Azure IoT Hub and to explore other IoT scenarios, see the following: • Manage cloud device messaging with Azure IoT Toolkit extension for Visual Studio Code

You've successfully used your web app to visualize real-time sensor data from your IoT hub.

• Use the Web Apps feature of Azure App Service to visualize real-time sensor data from your <u>loT hub</u> • Forecast weather by using the sensor data from your IoT hub in Azure Machine Learning

• Use Power BI to visualize real-time sensor data from your IoT hub

• Save your Azure IoT hub messages to Azure data storage

- Manage devices with Azure IoT Toolkit extension for Visual Studio Code • <u>Use Logic Apps for remote monitoring and notifications</u>
- We'd love to hear your thoughts. Choose the type you'd like to provide:

Product feedback 년 Sign in to give documentation feedback Our new feedback system is built on GitHub Issues. Read about this change in our blog post. **O** Loading feedback...

English (United States)