# How to embed a Power BI report into a web page by Javascript

# Introduction

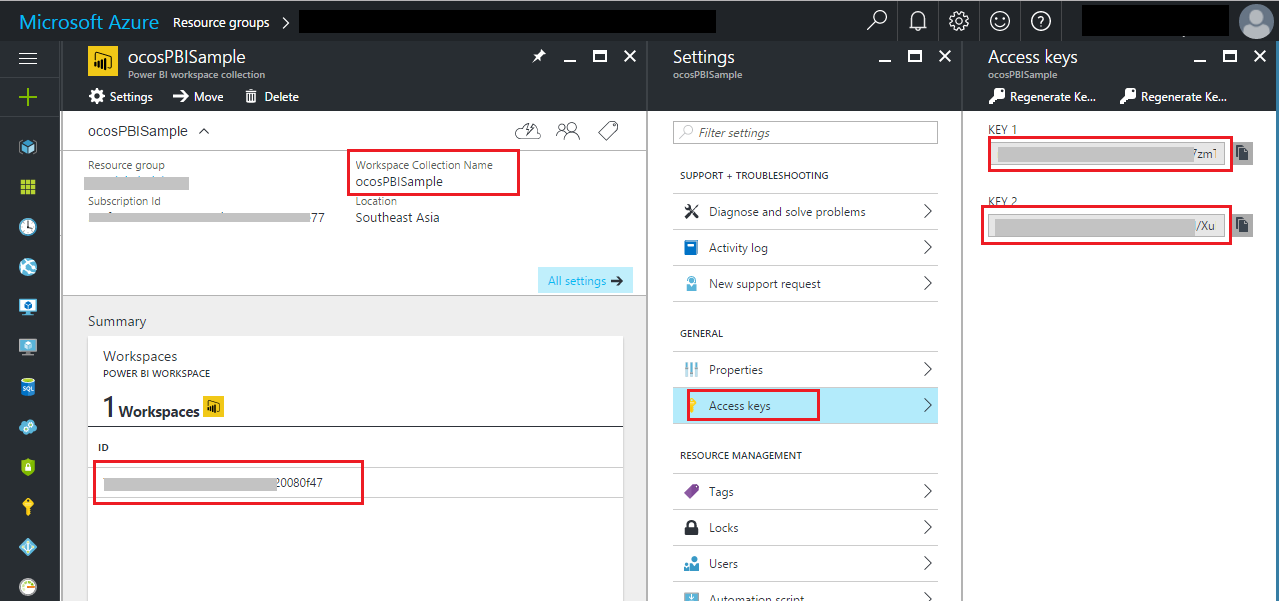
This sample demonstrates how to embed a Power BI report into a web page by Javascript.

Power BI Embedded is one of the Azure services. Only the ISV who uses Azure Portal is charged for usage fees (per hourly user session), and the user who views the report isn't charged or even require an Azure subscription.

## Sample prerequisites

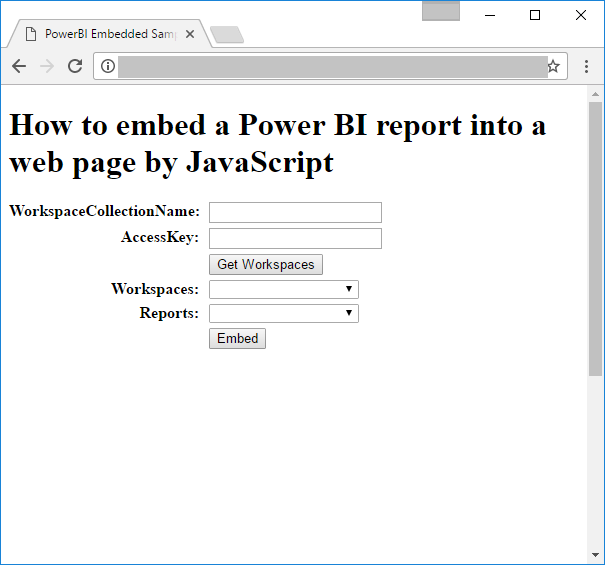
Before you run this sample, you should know your **Workspace Collection** name and Access Key. And in your **Workspace Collection**, there should be at least one workspace, and one report.

If you don’t have a Power BI Embedded service, you can follow this link <https://docs.microsoft.com/en-us/azure/power-bi-embedded/power-bi-embedded-get-started-sample> to create workspaces import report to it.

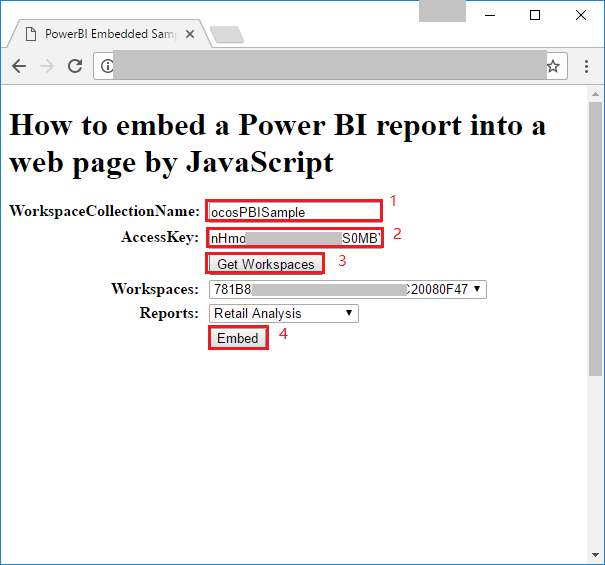


## Running the sample

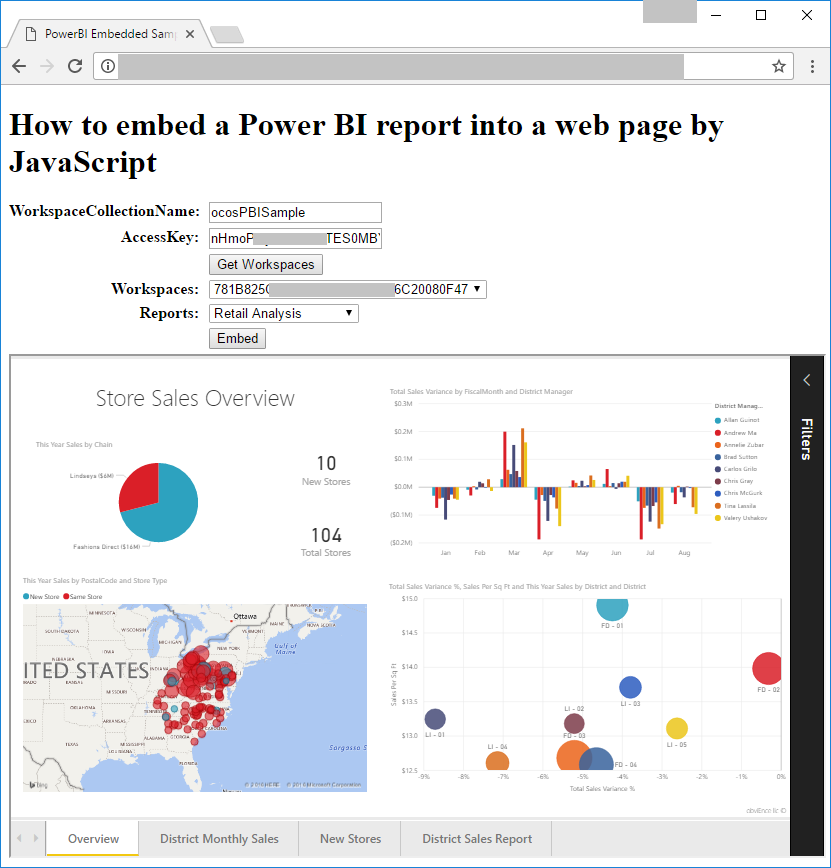
This is a static html page. Download the source and find the index.html. Open it in your Web Browser.



Input **Workspace Collection Name** and **Access Key**, then click **Get Workspaces**.



After the workspaces and reports are loaded, click Embed button. Then you can see the report.



**Using the code**

main.js

function getAccessToken(accessKey, workspaceId, reportId, workspaceCollectionName) {

var token1 = '{"alg": "HS256","typ": "JWT"}';

var nbf = new Date().getTime() / 1000 | 0;

var exp = new Date().setTime(new Date().getTime() + 60 \* 60 \* 1000) / 1000 | 0;

var token2 = '{"ver":"0.2.0","wcn":"' + workspaceCollectionName + '","wid": "' + workspaceId + '","rid":"' + reportId + '","iss":"PowerBISDK","aud":"https://analysis.windows.net/powerbi/api","exp":' + exp + ',"nbf":' + nbf + '}'

var endcodedToken = encode\_helper(token1) + '.' + encode\_helper(token2);

var hash = CryptoJS.HmacSHA256(endcodedToken, accessKey);

var hashInBase64 = CryptoJS.enc.Base64.stringify(hash);

var sig = formatString(hashInBase64);

var accessToken = endcodedToken + '.' + sig;

return accessToken;

}

function encode\_helper(arg) {

var response = btoa(arg);

return formatString(response);

}

//replace special char in the string

function formatString(arg) {

var response = arg;

response = response.replace(/\//g, "\_");

response = response.replace(/\+/g, "-");

response = response.replace(/=+$/, '');;

return response;

}

function getWorkspaces(workspaceCollectionName, accessKey) {

var requestUrl = "https://api.powerbi.com/v1.0/collections/" + workspaceCollectionName + "/workspaces";

var request = new Request(requestUrl, {

headers: new Headers({

'Authorization': 'AppKey ' + accessKey

})

});

fetch(request).then(function (response) {

if (response.ok) {

return response.json()

.then(function (data) {

listWorkspaces(data.value, workspaceCollectionName, accessKey);

});

}

});

}

function getReports(workspaceId, workspaceCollectionName, accessKey) {

var reportRequest = "https://api.powerbi.com/v1.0/collections/" + workspaceCollectionName + "/workspaces/" + workspaceId + "/reports";

var request1 = new Request(reportRequest, {

headers: new Headers({

'Authorization': 'AppKey ' + accessKey

})

});

fetch(request1).then(function (response) {

if (response.ok) {

return response.json().then(function (data) {

listReports(data.value);

});

}

});

}

function embedReport(report, accessKey, workspaceCollectionName, workspaceId) {

var embedUrl = report.embedUrl;

var name = report.name;

var reportId = report.id;

var webUrl = report.webUrl;

var token = getAccessToken(accessKey, workspaceId, reportId, workspaceCollectionName);

var embedConfiguration = {

type: 'report',

accessToken: token,

id: reportId,

embedUrl: embedUrl

};

var $reportContainer = $('#reportContainer');

var report = powerbi.embed($reportContainer.get(0), embedConfiguration);

}

## More information

[What is Microsoft Power BI Embedded](https://docs.microsoft.com/en-us/azure/power-bi-embedded/power-bi-embedded-what-is-power-bi-embedded)

[Get started with Microsoft Power BI Embedded](https://docs.microsoft.com/en-us/azure/power-bi-embedded/power-bi-embedded-get-started-sample)

[How to use Power BI Embedded with REST](https://docs.microsoft.com/en-us/azure/power-bi-embedded/power-bi-embedded-iframe)