# Edit host and app settings for logic apps in single-tenant Azure Logic Apps

05/25/2021 • 18 minutes to read • 📵 🚇





#### In this article

App settings, parameters, and deployment

Visual Studio Code project structure

Reference for app settings - local.settings.json

Manage app settings - local.settings.json

Reference for host settings - host.json

Manage host settings - host.json

Next steps

In single-tenant Azure Logic Apps, the app settings for a logic app specify the global configuration options that affect all the workflows in that logic app. However, these settings apply only when these workflows run in your local development environment. While running locally, the workflows can access these app settings as local environment variables, which are used by local development tools for values that can often change between environments. For example, these values can contain connection strings. When you deploy to Azure, app settings are ignored and aren't included with your deployment.

Your logic app also has host settings, which specify the runtime configuration settings and values that apply to all the workflows in that logic app, for example, default values for throughput, capacity, data size, and so on, whether they run locally or in Azure.

## App settings, parameters, and deployment

In multi-tenant Azure Logic Apps, deployment depends on Azure Resource Manager templates (ARM templates), which combine and handle resource provisioning for both logic apps and infrastructure. This design poses a challenge when you have to maintain environment variables for logic apps across across various dev, test, and production environments. Everything in an ARM template is defined at deployment. If you need to change just a single variable, you have to redeploy everything.

In *single-tenant* Azure Logic Apps, deployment becomes easier because you can separate resource provisioning between apps and infrastructure. You can use *parameters* to abstract values that might change between environments. By defining parameters to use in your workflows, you can first focus on designing your workflows, and then insert your environment-specific variables later. You can call and reference your environment variables at runtime by using app settings and parameters. That way, you don't have to redeploy as often.

App settings integrate with Azure Key Vault. You can directly reference secure strings, such as connection strings and keys. Similar to Azure Resource Manager templates (ARM templates), where you can define environment variables at deployment time, you can define app settings within your logic app workflow definition. You can then capture dynamically generated infrastructure values, such as connection endpoints, storage strings, and more. However, app settings have size limitations and can't be referenced from certain areas in Azure Logic Apps.

For more information about setting up your logic apps for deployment, see the following documentation:

- Create parameters for values that change in workflows between environments for single-tenant Azure Logic Apps
- DevOps deployment overview for single-tenant based logic apps
- Set up DevOps deployment for single-tenant based logic apps

#### Visual Studio Code project structure

In Visual Studio Code, your logic app project has either of the following types:

- Extension bundle-based (Node.js), which is the default type
- NuGet package-based (.NET), which you can convert from the default type

Based on these types, your project includes slightly different folders and files. A NuGet-based project includes a .bin folder that contains packages and other library files. A bundle-based project doesn't include the .bin folder and other files. Some scenarios require a NuGet-based project for your app to run, for example, when you want to develop and run custom built-in operations. For more information about converting your project to use NuGet, review Enable built-connector authoring.

For the default bundle-based project, your project has a folder and file structure that is similar to the following example:

```
Copy
text
{\bf MyBundle Based Logic App Project Name}
  .vscode
 Artifacts
  || Maps
     ||| MapName1
     ||| ...
  || Schemas
     ||| SchemaName1
     ||| ...
 WorkflowName1
  || workflow.json
  || ...
| WorkflowName2
  || workflow.json
  || ...
 workflow-designtime
  .funcignore
 connections.json
  host.json
  local.settings.json
```

At your project's root level, you can find the following files and folders with other items:

Name	Folder or file	Description
.vscode	Folder	Contains Visual Studio Code-related settings files, such as extensions.json, launch.json, settings.json, and tasks.json files.
Artifacts	Folder	Contains integration account artifacts that you define and use in workflows that support business-to-business (B2B) scenarios. For example, the example structure includes maps and schemas for XML transform and validation operations.
	Folder	For each workflow, the folder includes a workflow.json file, which contains that workflow's underlying JSON definition.
workflow- designtime	Folder	Contains development environment-related settings files.
.funcignore	File	Contains information related to your installed Azure Functions Core Tools.

Name	Folder or file	Description
connections.json	File	Contains the metadata, endpoints, and keys for any managed connections and Azure functions that your workflows use.  Important: To use different connections and functions for each environment, make sure that you parameterize this connections.json file and update the endpoints.
host.json	File	Contains runtime-specific configuration settings and values, for example, the default limits for the single-tenant Azure Logic Apps platform, logic apps, workflows, triggers, and actions. At your logic app project's root level, the <b>host.json</b> metadata file contains the configuration settings and default values that <i>all workflows</i> in the same logic app use while running, whether locally or in Azure.
local.settings.json	File	Contains app settings, connection strings, and other settings that your workflows use while running locally. In other words, these settings and values apply <i>only</i> when you run your projects in your local development environment. During deployment to Azure, the file and settings are ignored and aren't included with your deployment.  This file stores settings and values as <i>local environment</i> variables that are used by your local development tools as the appSettings values. You can call and reference these environment variables both at runtime and deployment time by using <i>app settings</i> and <i>parameters</i> .
		Important: The local.settings.json file can contain secrets, so make sure that you also exclude this file from your project source control.

## Reference for app settings - local.settings.json

In Visual Studio Code, at your logic app project's root level, the **local.settings.json** file contain global configuration options that affect *all workflows* in that logic app while running in your local development environment. When your workflows run locally, these settings are accessed as local environment variables, and their values can often change

between the various environments where you run your workflows. To view and manage these settings, review Manage app settings - local.settings.json.

App settings in Azure Logic Apps work similarly to app settings in Azure Functions or Azure Web Apps. If you've used these other services before, you might already be familiar with app settings. For more information, review App settings reference for Azure Functions and Work with Azure Functions Core Tools - Local settings file.

Setting	Default value	Description
AzureWebJobsStorage	None	Sets the connection string for an Azure storage account.
Workflows. <workflowname>.FlowState</workflowname>	None	Sets the state for <workflowname>.</workflowname>
Workflows. <workflowname>.RuntimeConfiguration.RetentionInDays</workflowname>	None	Sets the operation options for <pre><workflowname>.</workflowname></pre>
Workflows.Connection.AuthenticationAudience	None	Sets the audience for authenticating an Azure-hosted connection.
Workflows.WebhookRedirectHostUri	None	Sets the host name to use for webhook callback URLs.
WEBSITE_LOAD_ROOT_CERTIFICATES	None	Sets the thumbprints for the root certificates to be trusted.

## Manage app settings - local.settings.json

To add, update, or delete app settings, select and review the following sections for Visual Studio Code, Azure portal, Azure CLI, or ARM (Bicep) template. For app settings specific to logic apps, review the reference guide for available app settings - local.settings.json.

Azure portal Azure CLI. To review the app settings for your logic app in Visual Studio Code, follow these steps:

- 1. In your logic app project, at the root project level, find and open the **local.settings.json** file.
- 2. In the Values object, review the app settings for your logic app.

For more information about these settings, review the reference guide for available app settings - local.settings.json.

To add an app setting, follow these steps:

- 1. In the local.settings.json file, find the Values object.
- 2. In the Values object, add the app setting that you want to apply when running locally in Visual Studio Code. Some settings enable you to add a setting for a specific workflow, for example:

## Reference for host settings - host.json

In Visual Studio Code, at your logic app project's root level, the **host.json** metadata file contains the runtime settings and default values that apply to *all workflows* in a logic app resource whether running locally or in Azure. To view and manage these settings, review Manage host settings - host.json. You can also find related limits information in the Limits and configuration for Azure Logic Apps documentation.

#### Job orchestration throughput

These settings affect the throughput and capacity for single-tenant Azure Logic Apps to run workflow operations.

Setting	Default value	Description
Jobs.BackgroundJobs.DispatchingWorkersPulseInterval	00:00:01 (1 sec)	Sets the interval for job dispatchers to poll the job queue when the previous poll returns no jobs. Job dispatchers poll the queue immediately when the previous poll returns a job.
Jobs.BackgroundJobs.NumWorkersPerProcessorCount	192 dispatcher worker instances	Sets the number of dispatcher worker instances or job dispatchers to have per processor core. This value affects the number of workflow runs per core.
Jobs.BackgroundJobs.NumPartitionsInJobTriggersQueue	1 job queue	Sets the number of job queues monitored by job dispatchers for jobs to process. This value also affects the number of storage partitions where job queues exist.

Setting	Default value	Description
Jobs.BackgroundJobs.NumPartitionsInJobDefinitionsTable	4 job partitions	Sets the number of job partitions in the job definition table. This value controls how much execution throughput is affected by partition storage limits.

## Run duration and history

Setting	Default value	Description
Runtime.FlowRetentionThreshold	90.00:00:00 (90 days)	Sets the amount of time to keep workflow run history after a run starts.
Runtime.Backend.FlowRunTimeout	90.00:00:00 (90 days)	Sets the amount of time a workflow can continue running before forcing a timeout.
		<b>Important</b> : Make sure this value is less than or equal to the
		Runtime.FlowRetentionThreshold value. Otherwise, run histories can get deleted before the associated jobs are complete.

#### Inputs and outputs

Setting	Default	Description
	value	

Setting	Default value	Description
Runtime.FlowRunActionJob.MaximumActionResultSize	209715200 bytes	Sets the maximum size in bytes that the combined inputs and outputs can have in an action.
Runtime.ContentLink.MaximumContentSizeInBytes	104857600 characters	Sets the maximum size in characters that an input or output can have in a trigger or action.

## **Pagination**

Setting	Default value	Description
Runtime.FlowRunRetryableActionJobCallback.MaximumPageCount	1000	When pagination
	pages	is supported and enabled on an
		operation, sets
		the maximum
		number of pages
		to return or
		process at
		runtime.

## Chunking

Setting	Def valu
Runtime. Flow Run Retry able Action Job Callback. Maximum Content Length In Bytes For Partial Content Section Fo	107: byte

Setting	Def valu
Runtime.FlowRunRetryableActionJobCallback.MaxChunkSizeInBytes	5242 byte
Runtime.FlowRunRetryableActionJobCallback.MaximumRequestCountForPartialContent	1000 requ

#### **Trigger concurrency**

Setting	Default value	Description
Runtime.Trigger.MaximumRunConcurrency	100 runs	Sets the maximum number of concurrent runs that a trigger can start. This value appears in the trigger's concurrency definition.
Runtime.Trigger.MaximumWaitingRuns	200 runs	Sets the maximum number of runs that can wait after concurrent runs meet the maximum. This value appears in the trigger's concurrency definition.

#### For each loops

Setting	Default value	Description
Runtime.Backend.FlowDefaultForeachItemsLimit	100000 (100K array items)	For a stateful workflow, sets the maximum number of array items to process in a For each loop.
Runtime.Backend.Stateless.FlowDefaultForeachItemsLimit	100 items	For a stateless workflow, sets the maximum number of array items to process in a For each loop.

Setting	Default value	Description
Runtime.Backend.ForeachDefaultDegreeOfParallelism	20 iterations	Sets the default number of concurrent iterations, or degree of parallelism, in a For each loop. To run sequentially, set the value to 1.
Runtime.Backend.FlowDefaultSplitOnItemsLimit	100000 (100K array items)	Sets the maximum number of array items to debatch or split into multiple workflow instances based on the SplitOn setting.

## **Until loops**

Setting	Default value	Description
Runtime.Backend.MaximumUntilLimitCount	5000 iterations	For a stateful workflow, sets the maximum number possible for the Count property in an Until action.
Runtime.Backend.Stateless.MaximumUntilLimitCount	100 iterations	For a stateless workflow, sets the maximum number possible for the Count property in an Until action.
Runtime.Backend.Stateless.FlowRunTimeout	00:05:00 (5 min)	Sets the maximum wait time for an Until loop in a stateless workflow.

#### **Variables**

Setting	Default value	Description
Runtime.Backend.DefaultAppendArrayItemsLimit	100000 (100K array items)	Sets the maximum number of items in a variable with the Array type.
Runtime.Backend.VariableOperation.MaximumVariableSize	Stateful workflow: 104857600 characters	Sets the maximum size in characters for the content that a variable can store.
	Stateless workflow: 1024 characters	

## **HTTP** operations

Setting	Default value	Description
Runtime.Backend.HttpOperation.RequestTimeout	00:03:45 (3 min and 45 sec)	Sets the request timeout value for HTTP triggers and actions.
Runtime.Backend.HttpOperation.MaxContentSize	104857600 bytes	Sets the maximum request size in bytes for HTTP triggers and actions.
Runtime.Backend.HttpOperation.DefaultRetryCount	4 retries	Sets the default retry count for HTTP triggers and actions.

Setting	Default value	Description
Runtime.Backend.HttpOperation.DefaultRetryInterval	00:00:07 (7 sec)	Sets the default retry interval for HTTP triggers and actions.
Runtime.Backend.HttpOperation.DefaultRetryMaximumInterval	01:00:00 (1 hour)	Sets the maximum retry interval for HTTP triggers and actions.
Runtime.Backend.HttpOperation.DefaultRetryMinimumInterval	00:00:05 (5 sec)	Sets the minimum retry interval for HTTP triggers and actions.

## **HTTP Webhook operations**

Setting	Default value	Description
Runtime.Backend.HttpWebhookOperation.RequestTimeout	00:02:00 (2 min)	Sets the request timeout value for HTTP webhook triggers and actions.
Runtime.Backend.HttpWebhookOperation.MaxContentSize	104857600 bytes	Sets the maximum request size in bytes for HTTP webhook triggers and actions.

Setting Runtime.Backend.HttpWebhookOperation.DefaultRetryCount	Default 4 retries 4 alue	Description Sets the default retry count for HTTP webhook triggers and actions.
Runtime.Backend.HttpWebhookOperation.DefaultRetryInterval	00:00:07 (7 sec)	Sets the default retry interval for HTTP webhook triggers and actions.

Runtime.Backend.HttpWebhookOperation.DefaultRetryMaximumInterval	01:00:00 (1 hour)	Sets the maximum retry interval for HTTP webhook triggers and actions.
Runtime.Backend.HttpWebhookOperation.DefaultRetryMinimumInterval	00:00:05 (5 sec)	Sets the minimum retry interval for HTTP webhook triggers and actions.

trigger	wakeup interval for HTTP webhook trigger and action jobs.	ਹਿeਜੋੜਪਾ <del>।</del> value	Setting
---------	--	--------------------------------	---------

## **Built-in Azure Functions operations**

Setting	Default value	Description
Runtime.Backend.FunctionOperation.RequestTimeout	00:03:45 (3 min and 45 sec)	Sets the request timeout value for Azure Functions actions.
Runtime.Backend.FunctionOperation.MaxContentSize	104857600 bytes	Sets the maximum request size in bytes for Azure Functions actions.
Runtime.Backend.FunctionOperation.DefaultRetryCount	4 retries	Sets the default retry count for Azure Functions actions.

Setting	Default value	Description
Runtime.Backend.FunctionOperation.DefaultRetryInterval	00:00:07 (7 sec)	Sets the default retry interval for Azure Functions actions.
Runtime.Backend.FunctionOperation.DefaultRetryMaximumInterval	01:00:00 (1 hour)	Sets the maximum retry interval for Azure Functions actions.
Runtime.Backend.FunctionOperation.DefaultRetryMinimumInterval	00:00:05 (5 sec)	Sets the minimum retry interval for Azure Functions actions.

#### **Built-in SQL operations**

Setting	Default value	Description
Runtime.ServiceProviders.Sql.QueryExecutionTimeout	00:00:30 (30 sec)	Sets the request timeout value for SQL service provider operations.

## **Built-in Azure Service Bus operations**

Setting	Default De value

Setting	Default value	De
Runtime.ServiceProviders.ServiceBus.MessageSenderPoolSizePerProcessorCount	64 message senders	Set nui Azi Sei me ser pro coi in t me
		ser po
4		<b>&gt;</b>

## **Managed API connector operations**

Setting	Default value	Descript
Runtime.Backend.ApiConnectionOperation.RequestTimeout	00:02:00 (2 min)	Sets the request timeout value for managed API connecto triggers a actions.
Runtime.Backend.ApiConnectionOperation.MaxContentSize	104857600 bytes	Sets the maximur request s

Setting	Default value	in bytes for <b>Descripti</b> managed API connector triggers a actions.
Runtime.Backend.ApiConnectionOperation.DefaultRetryCount	4 retries	Sets the default re count for managed API connector triggers a actions.
Runtime.Backend.ApiConnectionOperation.DefaultRetryInterval	00:00:07 (7 sec)	Sets the default re interval for managed API connector triggers a actions.
Runtime.Backend.ApiWebhookOperation.DefaultRetryMaximumInterval	01:00:00 (1 day)	Sets the maximum retry interval for managed API connector webhook triggers a actions.
Runtime.Backend.ApiConnectionOperation.DefaultRetryMinimumInterval	00:00:05 (5 sec)	Sets the minimum

(1 day) defau wakeu interv mana API conne webbe trigge	Setting	Default value	interly interly managed API connecto triggers a actions.
action	Runtime.Backend.ApiWebhookOperation.DefaultWakeUpInterval		Sets the default wakeup interval for managed API connecto webhook trigger ar action jol

## **Blob storage**

Setting	Default value	Description
Runtime.ContentStorage.RequestOptionsServerTimeout	00:00:30 (30 sec)	Sets the timeout value for blob requests from the Azure Logic Apps runtime.
Runtime.DataStorage.RequestOptionsMaximumExecutionTime	00:02:00 (2 min)	Sets the operation timeout value, including retries, for table and queue storage requests from the Azure Logic Apps runtime.

Setting	Default value	Description
Runtime.ContentStorage.RequestOptionsDeltaBackoff	00:00:02 (2 sec)	Sets the backoff interval between retries sent to blob storage.
Runtime.ContentStorage.RequestOptionsMaximumAttempts	4 retries	Sets the maximum number of retries sent to table and queue storage.

#### Store content inline or use blobs

5	Setting	Default value	Des
	Runtime.FlowRunEngine.ForeachMaximumItemsForContentInlining	20 items	Wh
			eacl
			run
			eac
			valı
			stoi
			eith
			with
			me
			tab
			stoı
			sep
https:	://docs.microsoft.com/en-us/azure/logic-apps/edit-app-settings-host-settings?tabs=visual-studio-code		

Setting	Default value	stor Sets nun iten stor with
Runtime.FlowRunRetryableActionJobCallback.MaximumPagesForContentInlining	20 pages	Sets max nun pag stor inlir con tab stor blol stor
Runtime.FlowTriggerSplitOnJob.MaximumItemsForContentInlining	40 items	Wh Spl sett deb arra into mu wor inst eac valu stor

Setting	Default value	eith Des with med tab stor sep in b stor Sets nun iten stor
Runtime.ScaleUnit.MaximumCharactersForContentInlining	8192 characters	Sets max num ope inprout cha to s inlir tab stor before stor blor stor
4		•

#### Table and queue storage

Setting	Default value	Description
Runtime.DataStorage.RequestOptionsServerTimeout	00:00:16 (16 sec)	Sets the timeout value for table and queue storage requests from the Azure Logic Apps runtime.

Setting	Default value	Description
Runtime.DataStorage.RequestOptionsMaximumExecutionTime	00:00:45 (45 sec)	Sets the operation timeout value, including retries, for table and queue storage requests from the Azure Logic Apps runtime.
Runtime.DataStorage.RequestOptionsDeltaBackoff	00:00:02 (2 sec)	Sets the backoff interval between retries sent to table and queue storage.
Runtime.DataStorage.RequestOptionsMaximumAttempts	4 retries	Sets the maximum number of retries sent to table and queue storage.

## Retry policy for all other operations

Setting	Default value	Description
Runtime.ScaleMonitor.MaxPollingLatency	00:00:30 (30 sec)	Sets the maximum polling latency for runtime scaling.
Runtime.Backend.Operation.MaximumRetryCount	90 retries	Sets the maximum number of retries in the retry policy definition for a workflow operation.
Runtime.Backend.Operation.MaximumRetryInterval	01:00:00:01 (1 day and 1 sec)	Sets the maximum interval in the retry policy definition for a workflow operation.

Setting	Default value	Description
Runtime.Backend.Operation.MinimumRetryInterval	00:00:05 (5 sec)	Sets the minimum interval in the retry policy definition for a workflow operation.

#### Manage host settings - host.json

You can add, update, or delete host settings, which specify the runtime configuration settings and values that apply to *all the workflows* in that logic app, such as default values for throughput, capacity, data size, and so on, *whether they run locally or in Azure*. For host settings specific to logic apps, review the reference guide for available runtime and deployment settings - host.json.

#### Visual Studio Code - host.json

To review the host settings for your logic app in Visual Studio Code, follow these steps:

- 1. In your logic app project, at the root project level, find and open the host.json file.
- 2. In the extensions object, under workflows and settings, review any host settings that were previously added for your logic app. Otherwise, the extensions object won't appear in the file.

For more information about host settings, review the reference guide for available host settings - host.json.

To add a host setting, follow these steps:

1. In the **host.json** file, under the extensionBundle object, add the extensions object, which includes the workflow and settings objects, for example:

```
JSON

{
    "version": "2.0",
    "extensionBundle": {
        "id": "Microsoft.Azure.Functions.ExtensionBundle",
```

```
"version": "[1.*, 2.0.0)"
},
"extensions": {
    "workflow": {
        "settings": {
         }
     }
}
```

2. In the settings object, add a flat list with the host settings that you want to use for all the workflows in your logic app, whether those workflows run locally or in Azure, for example:

#### Azure portal - host.json

To review the host settings for your single-tenant based logic app in the Azure portal, follow these steps:

- 1. In the Azure portal search box, find and open your logic app.
- 2. On your logic app menu, under **Development Tools**, select **Advanced Tools**.
- 3. On the **Advanced Tools** page, select **Go**, which opens the **Kudu** environment for your logic app.
- 4. On the Kudu toolbar, from the **Debug console** menu, select **CMD**.
- 5. In the Azure portal, stop your logic app.

- a. On your logic app menu, select **Overview**.
- b. On the **Overview** pane's toolbar, select **Stop**.
- 6. On your logic app menu, under **Development Tools**, select **Advanced Tools**.
- 7. On the **Advanced Tools** pane, select **Go**, which opens the Kudu environment for your logic app.
- 8. On the Kudu toolbar, open the **Debug console** menu, and select **CMD**.

A console window opens so that you can browse to the **wwwroot** folder using the command prompt. Or, you can browse the directory structure that appears above the console window.

- 9. Browse along the following path to the wwwroot folder: ...\home\site\wwwroot.
- 10. Above the console window, in the directory table, next to the **host.json** file, select **Edit**.
- 11. After the **host.json** file opens, review any host settings that were previously added for your logic app.

For more information about host settings, review the reference guide for available host settings - host.json.

To add a setting, follow these steps:

- 1. Before you add or edit settings, stop your logic app in the Azure portal.
  - a. On your logic app menu, select Overview.
  - b. On the **Overview** pane's toolbar, select **Stop**.
- 2. Return to the **host.json** file. Under the extensionBundle object, add the extensions object, which includes the workflow and settings objects, for example:

```
}
   }
}
```

3. In the settings object, add a flat list with the host settings that you want to use for all the workflows in your logic app, whether those workflows run locally or in Azure, for example:

```
JSON
                                                                       Copy
{
   "version": "2.0",
   "extensionBundle": {
      "id": "Microsoft.Azure.Functions.ExtensionBundle",
      "version": "[1.*, 2.0.0)"
   },
   "extensions": {
      "workflow": {
         "settings": {
            "Runtime.Trigger.MaximumWaitingRuns": "100"
      }
   }
}
```

- 4. When you're done, remember to select Save.
- 5. Now, restart your logic app. Return to your logic app's **Overview** page, and select Restart.

#### Next steps

- Create parameters for values that change in workflows between environments for single-tenant Azure Logic Apps
- Set up DevOps deployment for single-tenant Azure Logic Apps

#### Is this page helpful?





#### Recommended content

DevOps deployment for single-tenant Azure Logic Apps - Azure Logic Apps Learn about DevOps deployment for single-tenant Azure Logic Apps.

Create workflows with single-tenant Azure Logic Apps (Standard) in the Azure portal - Azure Logic Apps

Create automated workflows to integrate apps, data, services, and systems with single-tenant Azure Logic Apps (Standard) in the Azure portal.

Set up DevOps for single-tenant Azure Logic Apps - Azure Logic Apps

How to set up DevOps deployment for workflows in single-tenant Azure Logic Apps.

Create workflows with single-tenant Azure Logic Apps (Standard) in Visual Studio Code - Azure Logic Apps

Create automated workflows to integrate apps, data, services, and systems with single-tenant Azure Logic Apps (Standard) in Visual Studio Code.

Show more ✓