

Log types in Container Apps

Container console logs

Log streams from your container console.
Logs from stderr and stdout.

System logs

Logs generated by the Azure Container Apps service.
Logs about Dapr, mounted volumes, domain names, auth, traffic split,
revision, etc.

Logging options for Container Apps

The screenshot shows the Azure Container Apps environment configuration page for 'aca-environment'. The left sidebar includes sections for Settings (Dapr components, Certificates, Custom DNS suffix (Preview), Azure Files, Locks), Apps, and Monitoring (Logs, Log stream, Logging options). The main area displays the 'Logging options' configuration, which asks where to store logs. It offers three choices: 'Azure Log Analytics' (selected), 'Azure Monitor', and 'Don't save logs'. Below this, the 'Log Destination Configuration' section shows the selected subscription 'Microsoft-Azure-0', resource group 'rg-containerapps-terraform-04', and Log Analytics workspace 'workspace-aca'. A 'Create new' button is also present.

aca-environment | Logging options

Container Apps Environment

Search

Refresh Send us your feedback

Where do you want to store logs for this environment?

Logs Destination

Azure Log Analytics: Search and analyze logs at any scale.

Azure Monitor: View, analyze, and act on log data. If selected, you'll route logs to one or more destinations in Diagnostic settings.

Don't save logs: Stream logs without storing them.

Log Destination Configuration

Subscription *

Microsoft-Azure-0

Resource group *

rg-containerapps-terraform-04

Log Analytics workspace *

workspace-aca

Create new

Getting container logs

The screenshot shows the Azure Container Apps Log stream interface for a 'containerapps-helloworld' application. The left sidebar includes options for Dapr, Identity, Service Connector (preview), CORS (preview), Locks, Revision management, Containers, Scale and replicas, Alerts, Metrics, Logs (selected), Log stream (selected), Console, and Advisor recommendations. The main area displays a search bar, a refresh button, and tabs for Logs, Console (selected), and System. It shows a revision dropdown set to 'containerapps-helloworld--pueete2', a replica dropdown set to 'containerapps-helloworld--pueete2-57b48957d9-hmr9x', and a container dropdown set to 'helloworld-app'. Below these are buttons for Stop, Copy, and Clear, and a Maximize icon. The log output area contains the following text:

```
2023-05-18T19:01:08.864103001Z 100.100.0.36 - - [18/May/2023:19:01:08 +0000] "GET / HTTP/1.1" 304 0 "https://sandbox-52-23.reactblade.portal.azure.net/" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/113.0.0.0 Safari/537.36 Edg/113.0.1774.42" "176.177.25.47"
2023-05-18T19:01:09.052190062Z 100.100.0.36 - - [18/May/2023:19:01:09 +0000] "GET / HTTP/1.1" 304 0 "https://sandbox-52-23.reactblade.portal.azure.net/" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/113.0.0.0 Safari/537.36 Edg/113.0.1774.42" "176.177.25.47"
2023-05-18T19:01:09.228156933Z 100.100.0.36 - - [18/May/2023:19:01:09 +0000] "GET / HTTP/1.1" 304 0 "https://sandbox-52-23.reactblade.portal.azure.net/" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/113.0.0.0 Safari/537.36 Edg/113.0.1774.42" "176.177.25.47"
2023-05-18T19:01:09.404083610Z 100.100.0.36 - - [18/May/2023:19:01:09 +0000] "GET / HTTP/1.1" 304 0 "https://sandbox-52-23.reactblade.portal.azure.net/" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/113.0.0.0 Safari/537.36 Edg/113.0.1774.42" "176.177.25.47"
2023-05-18T19:02:55.34083 No logs since last 60 seconds
2023-05-18T19:03:55.83309 No logs since last 60 seconds
```

Debugging Container Apps using console

The screenshot shows the Azure Container Apps 'Console' interface for the 'containerapps-helloworld' app. The interface has a dark theme with light-colored text and buttons.

Header: containerapps-helloworld | Console ⭐ ...

Left Sidebar:

- Search bar
- Refresh button
- Dapr
- Identity
- Service Connector (preview)
- CORS (preview)
- Locks
- Revisions**
 - Revision management
 - Containers
 - Scale and replicas
- Monitoring**
 - Alerts
 - Metrics
 - Logs
 - Log stream
 - Console** (selected)
 - Advisor recommendations

Main Content Area:

Select a container instance in an active revision to connect to console.

Revision: containerapps-helloworld--pueete2
Not seeing your revision? [Click here to find and activate an existing revision.](#)

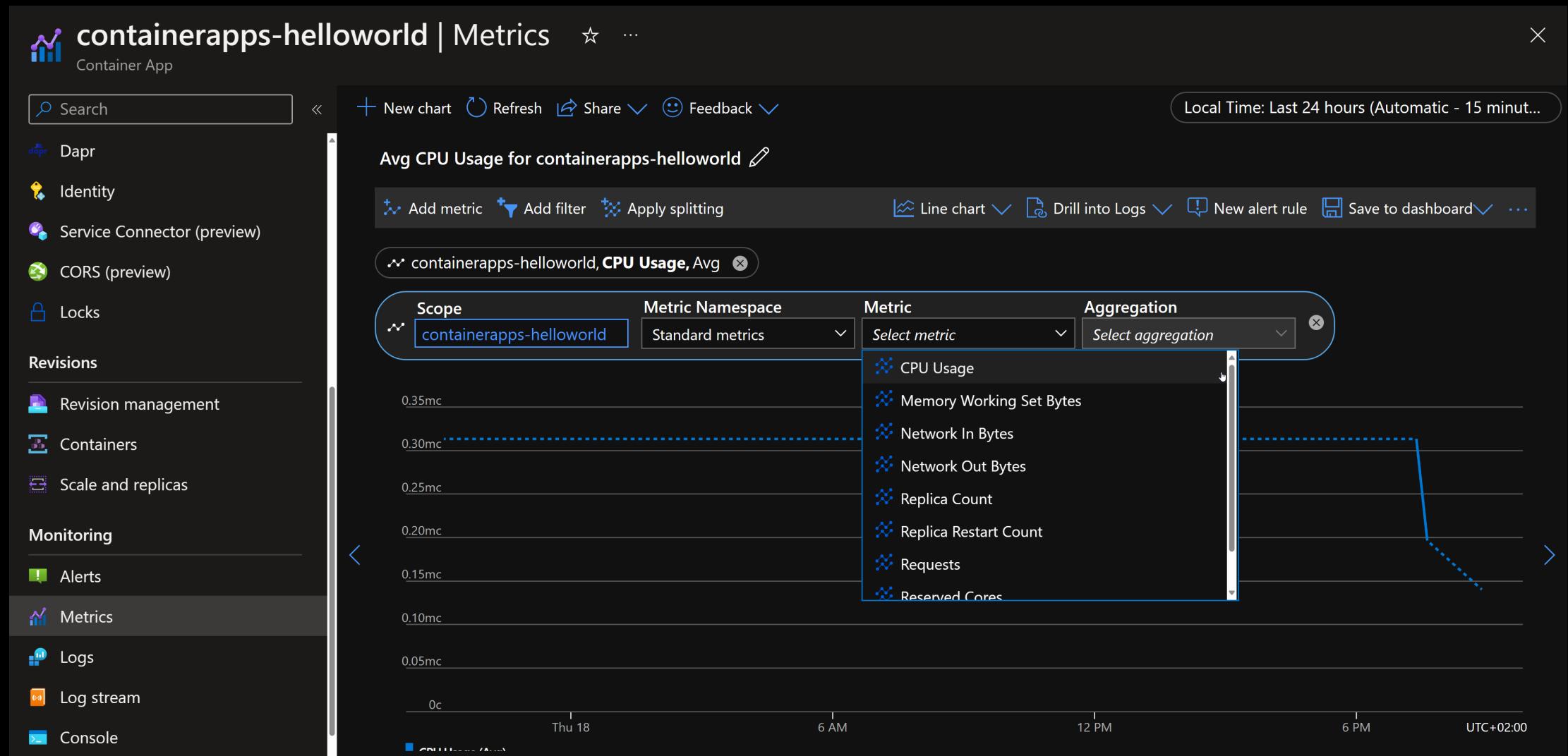
Replica: containerapps-helloworld--pueete2-57b48957d9-hmr9x

Container: helloworld-app

Reconnect: INFO: Connecting to the container 'helloworld-app'...
INFO: Successfully connected to container: 'helloworld-app'. [Revision: 'containerapps-helloworld--pueete2', Replica: 'containerapps-helloworld--pueete2-57b48957d9-hmr9x']

printenv
CONTAINER_APP_HOSTNAME=containerapps-helloworld--pueete2.wittysea-588bf691.westeurope.azurecontainerapps.io
KUBERNETES_SERVICE_PORT=443
KUBERNETES_PORT=tcp://100.100.128.1:443
HOSTNAME=containerapps-helloworld--pueete2-57b48957d9-hmr9x
HOME=/root
CONTAINER_APP_ENV_DNS_SUFFIX=wittysea-588bf691.westeurope.azurecontainerapps.io
PKG_RELEASE=1~bullseye
CONTAINER_APP_REVISION=containerapps-helloworld--pueete2
CONTAINER_APP_REPLICA_NAME=containerapps-helloworld--pueete2-57b48957d9-hmr9x

Metrics from Container Apps



Container logs from Log Analytics

The screenshot shows the Azure Container Apps Environment Logs interface. On the left, there's a sidebar with navigation links for Overview, Activity log, Access control (IAM), Tags, Settings (Dapr components, Certificates, Custom DNS suffix (Preview), Azure Files, Locks), Apps (Logs, Log stream, Logging options), Monitoring (Logs, Log stream, Logging options), Automation (Tasks (preview)), and Feedback.

The main area is titled "New Query 1*" and shows a query editor with the following code:

```
1 ContainerAppConsoleLogs_CL
2 // | where ContainerAppName_s == 'album-api'
3 | project Time=TimeGenerated, AppName=ContainerAppName_s, Revision=RevisionName_s,
Container=ContainerName_s, Message=Log_s
4 | take 100
```

The "Run" button is highlighted. Below the query editor is a "Results" table with columns: Time [UTC], AppName, Revision, Container, and Message. The table displays log entries for the "aca-demo-app" container, specifically for the "nginx" component, showing repeated errors related to port binding.

Time [UTC]	AppName	Revision	Container	Message
> 5/18/2023, 5:13:29.906 PM	aca-demo-app	aca-demo-app--hw6xnij	nginx	/docker-entrypoint.sh: Launching /docker-e
> 5/18/2023, 5:13:29.906 PM	aca-demo-app	aca-demo-app--hw6xnij	nginx	/docker-entrypoint.sh: Configuration comp
> 5/18/2023, 5:15:27.637 PM	aca-demo-app	aca-demo-app--nginx	nginx	2023/05/18 17:15:25 [emerg] 1#1: bind() to
> 5/18/2023, 5:15:27.637 PM	aca-demo-app	aca-demo-app--nginx	nginx	nginx: [emerg] bind() to 0.0.0.0:80 failed (98: Ad
> 5/18/2023, 5:15:27.637 PM	aca-demo-app	aca-demo-app--nginx	nginx	2023/05/18 17:15:25 [emerg] 1#1: bind() to
> 5/18/2023, 5:15:27.637 PM	aca-demo-app	aca-demo-app--nginx	nginx	nginx: [emerg] bind() to :::80 failed (98: Ad
> 5/18/2023, 5:15:27.637 PM	aca-demo-app	aca-demo-app--nginx	nginx	2023/05/18 17:15:25 [notice] 1#1: try again
> 5/18/2023, 5:15:27.637 PM	aca-demo-app	aca-demo-app--nginx	nginx	2023/05/18 17:15:25 [emerg] 1#1: bind() to
> 5/18/2023, 5:15:27.637 PM	aca-demo-app	aca-demo-app--nginx	nginx	nginx: [emerg] bind() to 0.0.0.0:80 failed (98: Ad
> 5/18/2023, 5:15:27.637 PM	aca-demo-app	aca-demo-app--nginx	nginx	2023/05/18 17:15:25 [emerg] 1#1: bind() to
> 5/18/2023, 5:15:27.637 PM	aca-demo-app	aca-demo-app--nginx	nginx	nginx: [emerg] bind() to :::80 failed (98: Ad
> 5/18/2023, 5:15:27.637 PM	aca-demo-app	aca-demo-app--nainx	nainx	2023/05/18 17:15:25 [notice] 1#1: try again

At the bottom, it says "0s 578ms | Display time (UTC+00:00) ▾". On the right, there are "Query details" and "34 - 45 of 100" buttons.

System logs from Log Analytics

The screenshot shows the Azure Container Apps Environment Logs page. The left sidebar includes sections for Overview, Activity log, Access control (IAM), Tags, Settings (Dapr components, Certificates, Custom DNS suffix (Preview), Azure Files, Locks), Apps (Apps, LogManagement, Custom Logs), Monitoring (Logs, Log stream, Logging options), Automation (Tasks (preview), Export template), and a Feedback button.

The main area displays a "New Query 1*" editor with the following Kusto query:

```
workspace-aca
| where ContainerAppName_s == 'album-api'
| project Time=TimeGenerated, EnvName=EnvironmentName_s, AppName=ContainerAppName_s, Revision=RevisionName_s, Message=Log_s
| take 100
```

The "Run" button is highlighted in blue. The time range is set to "Last 24 hours". Below the query editor is a "Results" table with columns: Time [UTC], EnvName, AppName, Revision, and Message. The table lists 100 log entries for the "album-api" container app across two environments (EnvName: wittysea-588bf691 and EnvName: acapp-588bf691). The log entries show various events such as readiness probe failed, stopping container, and deactivated apps.

Time [UTC]	EnvName	AppName	Revision	Message
> 5/18/2...	wittysea-588bf691	aca-app-backend-api	aca-app-backend-api--m7mdk...	Deactivated apps/v1.Deployme...
> 5/18/2...	wittysea-588bf691	aca-app-backend-api	aca-app-backend-api--m7mdk...	Deactivated apps/v1.Deployme...
> 5/18/2...	wittysea-588bf691	aca-app-backend-api	aca-app-backend-api--m7mdk...	Stopping container backend-api
> 5/18/2...	wittysea-588bf691	aca-app-backend-api	aca-app-backend-api--m7mdk...	readiness probe failed: connect...
> 5/18/2...	wittysea-588bf691	aca-app-backend-api	aca-app-backend-api--m7mdk...	readiness probe failed: connect...
> 5/18/2...	wittysea-588bf691	aca-app-backend-api	aca-app-backend-api--m7mdk...	readiness probe failed: connect...
> 5/18/2...	wittysea-588bf691	aca-app-frontend-ui	aca-app-frontend-ui--2deprk1	Deactivated apps/v1.Deployme...
> 5/18/2...	wittysea-588bf691	aca-app-frontend-ui	aca-app-frontend-ui--2deprk1	Deactivated apps/v1.Deployme...
> 5/18/2...	wittysea-588bf691	aca-app-frontend-ui	aca-app-frontend-ui--2deprk1	Stopping container frontend-ui
> 5/18/2...	wittysea-588bf691	aca-app-frontend-ui	aca-app-frontend-ui--2deprk1	readiness probe failed: connect...
> 5/18/2...	wittysea-588bf691	aca-app-frontend-ui	aca-app-frontend-ui--2deprk1	readiness probe failed: connect...
> 5/18/2...	wittysea-588bf691	aca-app-backend-api	aca-app-backend-api--m7mdk...	readiness probe failed: connect...