

# Guide: Using Azure CLI to Connect to IoT Hub and View Device Logs

## 1. Install and Configure Azure CLI

1. Download and install the Azure CLI: <https://learn.microsoft.com/en-us/cli/azure/install-azure-cli>
2. Log in to your Azure account:  

```
az login
```

If you have multiple subscriptions:

```
az account list -o table
```

```
az account set --subscription "<SUBSCRIPTION_NAME_OR_ID>"
```
3. Confirm you're connected:  

```
az account show
```

## 2. Install IoT CLI Extension

Install the IoT extension required for IoT Hub commands:

```
az extension add --name azure-iot
```

Check installed extensions:

```
az extension list -o table
```

## 3. Get IoT Hub Connection String

Fetch the IoT Hub connection string to avoid subscription mismatches:

```
az iot hub show-connection-string --hub-name vynd-dev-migration-iot --resource-group vynd-dev-fu
```

Example output:

```
HostName=vynd-dev-migration-iot.azure-devices.net;SharedAccessKeyName=iothubowner;SharedAccessKe
```

## 4. Monitor Device Logs (Telemetry)

Option A – Filter by Device:

```
az iot hub monitor-events --login "<IOTHUB_CONNECTION_STRING>" --device-id SIM-001
```

Option B – See All Devices:

```
az iot hub monitor-events --login "<IOTHUB_CONNECTION_STRING>"
```

Option C – Include Historical Messages (last 10 minutes):

```
az iot hub monitor-events --login "<IOTHUB_CONNECTION_STRING>" --enqueued-time "now-10m"
```

## 5. Routing Notes

If only custom routes exist (e.g., to Service Bus), the built-in Event Hub endpoint may not get To enable CLI monitoring, add a route to the built-in endpoint:

```
az iot hub message-route create --resource-group vynd-dev-full-rg --hub-name vynd-dev-migration-
```

Confirm routes:

```
az iot hub message-route list --resource-group vynd-dev-full-rg --hub-name vynd-dev-migration-io
```

## 6. Troubleshooting

No logs showing?

- Check routing to ensure telemetry reaches 'events'.

Authentication issues?

- Ensure the IoT Hub connection string is correct.

Check device connectivity:

```
az iot hub device-identity show --hub-name vynd-dev-migration-iot --resource-group vynd-dev-full
```

## Summary

- Use az login to authenticate.
- Always fetch and pass the IoT Hub connection string with --login.
- Use az iot hub monitor-events to view telemetry.
- If using custom routes, add one to 'events' for CLI monitoring.