Unified AI Platform

PERSONA-BASED USER GUIDE

KAMAL RAJ

Contents

Introduction

The Unified AI Platform is designed to support different user roles, including system administrators, developers, and business users. This guide provides step-by-step instructions for each role to help you use the Unified AI Platform effectively. Use this guide to find the information that aligns with your tasks and responsibilities.

User Personas

Understanding your role will help you navigate this guide effectively. Below are the key responsibilities, requirements, and preferred tools for each persona.

System Administrator

Role	Manages IoT device setup, network security, and maintenance.
Needs	A comprehensive understanding of device management and security configurations.
Tools	Command-line interface (CLI) and network monitoring utilities.

Developer

Role	Builds and deploys applications that interact with IoT devices.
Needs	Requires access to API documentation, SDKs, and code samples for effective integration.
Tools	Integrated Development Environments (IDEs), command-line tools, and SDKs.

Business User

Role	Analyzes data and monitors device performance to make business decisions.
Needs	Needs access to dashboards, reports, and device controls.
Tools	Web dashboards and analytics tools.

Getting Started with the Unified AI Platform

This section provides step-by-step instructions tailored to each user role. Follow the instructions that best match your needs.

Install and Configure the Platform (System Administrators)

System administrators handle the installation, configuration, and network security of the platform. Follow these steps to set up the platform.

Install Unified AI Platform

To install the Unified AI Platform:

1. Download the installer from the Unified AI Platform.
2. Open the terminal.

3. Run the following command:

```
sudo unified-ai install
```

4. Set up device management by running:

```
export DEVICE_MANAGER_PATH=/usr/local/unified-ai/devices
```

Configure Network Security

Complete the following steps to configure the network:

1. Set up firewall rules with the built-in configuration tool:

```
unified-ai firewall setup --ruleset default
```

2. Verify the network status to ensure all devices are connected:

```
unified-ai network status
```

Integrate APIs and Set Up SDKs (Developers)

Developers use the platform's APIs and SDKs to integrate IoT devices into applications. Use the steps below to get started.

API Integration

Integrate the API with these steps:

1. On the dashboard, from the **API Access** section, get your API key
2. Use this Python code snippet to list devices using the SDK:

```python
import unified_ai_sdk


client = unified_ai_sdk.Client(api_key='YOUR_API_KEY')
devices = client.list_devices()
print(devices)
```

3. For detailed API usage, refer to the [API Documentation](#).

Set Up the SDK

Set up the SDK with these steps:

1. Download the Python SDK from the [Developer Portal](#).
2. Follow the examples in the [SDK documentation](#) to integrate it into your project.

Monitor and Generate Reports (Business Users)

Business users need quick access to data analytics and device performance reports. Here's how to use the dashboard for these tasks.

Access the Dashboard

Use the dashboard to view and monitor connected devices. To access the dashboard:

1. Log in to the [Unified AI Dashboard](#).

2. On the Dashboard, go to the **Devices** section to view and monitor connected devices.

Create Reports

Reports provide insights into platform usage and device information. To generate reports:

1. Select **Analytics** in the dashboard.
2. Select the date range and metrics you want to include.
3. Click **Export** to download the report in either CSV or PDF format.

Troubleshooting

Use this guide to resolve common issues based on your role. For additional help, contact support@unified-ai.com.

Device Connection Issues (System Administrators)

- **Problem**: Unable to connect to a device.
- **Solution**: Verify network configurations and firewall settings. Run the following command:

```
unified-ai network status
```

If issues persist, consult the network documentation or contact support.

API Access Problems (Developers)

- **Problem**: The API returns an 'Unauthorized' error.
- **Solution**: Check that your API key is included in the request headers. Refer to the *API Integration* section for setup details.

Dashboard Display Errors (Business Users)

- **Problem**: The dashboard is not displaying data.
- **Solution**: Check your internet connection and confirm that IoT devices are online. If the issue persists, contact support.

Best Practices

Follow these guidelines to ensure a smooth and secure experience with the Unified AI Platform.

- **Handle errors:** Add error-handling logic to your code to manage potential issues, such as invalid input or server errors. Use the API's error messages to provide helpful feedback to users.
- **Secure your API key**: Store your API key in a secure location, such as an environment variable or a secure vault. Avoid exposing the key in client-side code or public repositories.
- **Use consistent naming**: When deploying models, use clear, consistent names. This practice simplifies device management and retrieval.
- **Monitor usage**: Regularly check device status and API usage to optimize platform performance and avoid exceeding rate limits.

Additional Resources

For more in-depth guides and support, visit the following resources:

- **Unified AI Platform documentation**: Unified AI Docs
- **Developer portal**: Developer Resources
- **Support**: For assistance, contact support@unified-ai.com.