

# RZ Ecosystem Partner Solution

## IoT83 Smart Edge/Smart Cloud Convergence



### Solution Summary

IoT83 has developed this cloud-based platform that helps create end-to-end Vision AI applications and load models to RZ/V series MPUs in the Renesas Virtual Lab, for detailed real-world validation of the Vision AI models. The solution supports RZ/V2M and RZ/V2L evaluation boards, with standard models (e.g., ONNX format), a DRP-AI translator to convert any ONNX pre-trained model into executable binary. This solution performs AI inference while reporting key metrics such as FPS, FPS/Watt, Inference Time etc.

### Features/Benefits

- Zero-Touch client on-boarding allows users to simply sign up and start using the service.
- A highly streamlined workflow for smart edge model building and validation on RZ/V MPUs.
- Users can build & validate different smart edge models & validate in Renesas Virtual Lab.
- SaaS/multi-tenant Application Enablement Platform allows easy solution expansion

### Diagram/Graphics

Name	Deployed Model	Type	Lab Info	Assignee
AnthonyLab		RZ/V2L	Unassigned Category: REAL	Rohit Verma ACCOUNT_ADMIN
Akhil Lab		RZ/V2L	Unassigned Category: REAL	Nikura Kentarou ACCOUNT_ADMIN
AkhilHome		RZ/V2L	Unassigned Category: VRTalk	Unassigned
Demodevice		RZ/V2M	Unassigned Category: VRTalk	Manny Manny DEVELOPER

Device Type	Lab Name	Downloaded Model
RZ/V2L		NactiDataModel-2

```

[END] DRP-AI
Input: sample.bmp
Top 1 [ 94.9% ] :
Top 2 [ 2.7% ] :
Top 3 [ 1.2% ] :
Top 4 [ 0.1% ] :
Top 5 [ 0.1% ] :
    
```

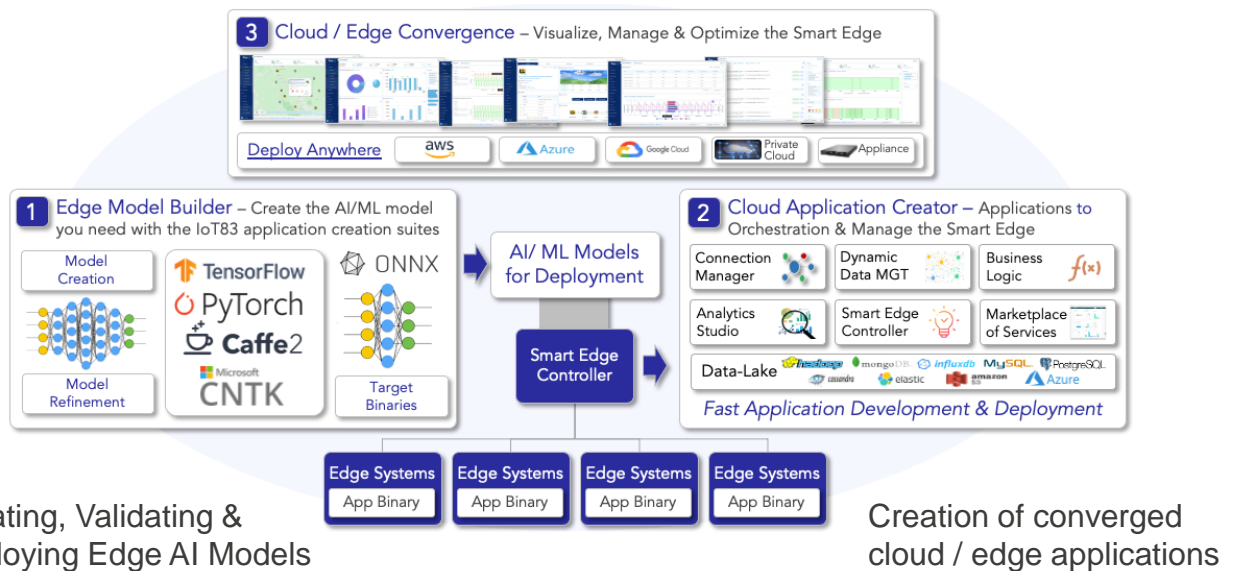
### Target Markets and Applications

- Allow OEMs to add Vision AI Intelligent Edge Solutions according to the product needs.
- Accelerate new Cloud/Edge Convergence AI-IoT solutions for smart building, smart city, retail, security, manufacturing, service, and maintenance applications

# Smart Edge / Smart Cloud Convergence with AI-IoT

IoT83's Application Enablement Platform (AEP) dramatically simplifies the three key elements of Smart Edge / Cloud Convergence :

Deploying highly flexible, scalable & secure solutions – on private or public clouds or even on appliances.

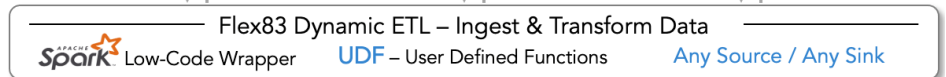


**A Complete Analytics & AI Development Suite:** The IoT83 AEP provides a powerful & versatile set of tools & studios to build, deploy & operate powerful smart solutions.

Connect to virtually anything with the **Connection Manager**



Ingest, normalize & transform data with the **Dynamic ETL**

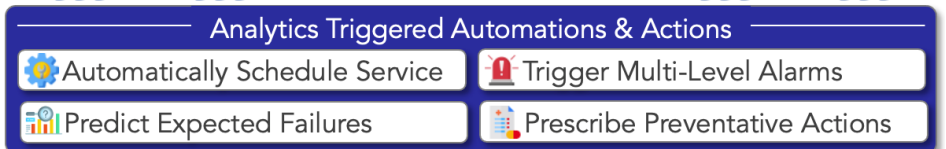


Use the **Code Engine** to easily build custom Application logic



Use the **Analytics Engine** to add dimensions of intelligence

**Smart System Intelligence** lets you build & deploy advanced automations & Actions



**About IoT83:** IoT83's business mission is to dramatically simplify the cost, risk, and time to market for big-data & IoT solutions. In short, we democratize big-data & IoT and provide a highly scalable, portable, & secure IoT core to deploy your solutions, along with the powerful workflows, tools, studios & templates to truly simplify the creation of powerful & expansive applications. Visit us at <https://iot83.com>. Contact: [sales@iot83.com](mailto:sales@iot83.com) / [akhil.arora@iot83.com](mailto:akhil.arora@iot83.com)