DATA SHEET

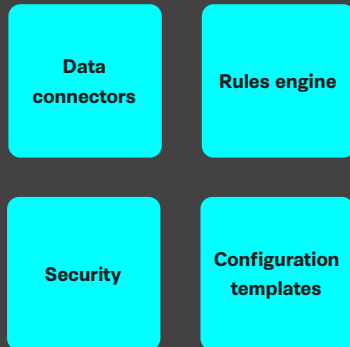# Adopt IoT technologies at speed and scale with CogniSense, our lightweight IoT framework

IoT-based applications are constantly evolving, with innovations and use cases being developed at a rapid pace. However, existing middleware frameworks pose many challenges due to interdisciplinary aspects. Developing prototypes and services using such frameworks is cost-intensive and requires developers to take considerable time and effort. Developing IoT-based collaborative services for device and domain-specific components is another challenge in existing frameworks/platforms.

Virtusa's CogniSense is an easy-to-use, cloud-based, lightweight IoT middleware framework that can help scale to the pace at which enterprises look to embark on their digital transformation journey. The framework comes packed with extensive capabilities from sensor data capture to cloud data migration to support advanced analytics and enhanced decision-making.

Capabilities

Designed for plug and play, and much like the Lego blocks concept, components and stacks are loosely coupled yet tightly integrated to form a full-scale end to end IoT platform, offering state of the art features

Edge

- Data connectors
- Rules engine
- Security
- Configuration templates

Middleware

- Algorithms
- Security
- Device management
- IoT recipes
- Microservices
- Point solutions

Cloud

- Cloud mediation
- Open source connectors
- Industry compliance
- Partner solutions
- UI widgets
- Data modelling

Features

1

Cloud mediation

- Fully cloud-native architecture
- High interoperability
- Data correlation and enhanced analytics on the cloud

2

Device management

- Adaptive device provisioning for all major workflows and device onboarding
- Remote monitoring of device
- Apply firmware updates over the air

3

Rules engine

- Single rules engine to handle all event processing needs
- Deploy rules on to Edge
- Support for multiple technology stacks

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4

Data modeling

- Model Zoo that with over 50+ ML models
- Models supporting both decision-making on the cloud as well as Edge
- Template-driven allowing for maximum configuration capabilities
- Full-fledged access to model workbench for creating models in a low code no code way

5

Microservices

- Microservices-based architecture
- Micro scalable features
- Fully dockerized capability

6

Security

- Transport level security
- Device-level security
- Certificate management
- Enhanced with Blockchain-based security

Benefits

Scale as you go

Being a lightweight framework, enterprises can choose features to kick start the implementation and add/subscribe to more features as they gain experience and confidence

Increased efficiency

CogniSense seamlessly integrates with incumbent data science platforms or Virtusa's data science platform, thereby saving enterprises time and effort in exploring options and investing heavily in new platforms

Time to market

CogniSense can be easily implemented and starts providing value instantly. It delivers all capabilities that any other industry-leading platforms offer, packaged in a single lightweight framework giving enterprises the freedom to implement without and hassles or spend unnecessary time on training and implementation

Why CogniSense?

Time-to-market

10-20% reduction in the overall timeline to roll out use cases

Diverse range of implementation

20+ cross-industry implementations leading to business process efficiencies and cost optimizations

Ecosystem play

CogniSense seamlessly integrates with other leading industrial platforms, device manufacturers, embedded technology, and cloud services to support clients' end to end digital transformation journey

Opensource stack

No additional license cost or maintenance since CogniSense is developed on an open-source technology stack

Build your own IoT platform

Leveraging various components, enterprises can build or configure the IoT platform to suit their needs and requirements

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Leverage IoT to scale the pace at which you embark on your digital transformation journey

To set up an assessment today, please email
marketing@virtusa.com

About Virtusa

Virtusa Corporation (NASDAQ GS: VRTU) is a global provider of digital business strategy, digital engineering, and information technology (IT) services and solutions that help clients change, disrupt, and unlock new value through innovation engineering. Virtusa serves Global 2000 companies in Banking, Financial Services, Insurance, Healthcare, Communications, Media, Entertainment, Travel, Manufacturing, and Technology.

Virtusa helps clients grow their business with innovative products and services that create operational efficiency using digital labor, future-proof operational and IT platforms, and rationalization and modernization of IT applications infrastructure. This is achieved through a unique approach blending deep contextual expertise, empowered agile teams, and measurably better engineering to create holistic solutions that drive business forward at unparalleled velocity enabled by a culture of cooperative disruption.

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