PRODUCT SHEET
OneBox & OneCloud

I-LAN
EDGE COMPUTING &
MANAGEMENT SYSTEM

Product Guide

i-LAN *- Edge Solution*

Say goodbye to unnecessary IT expenses and embrace a more efficient, cost-effective solution for your Business and daily IT operations. Experience the transformative change of edge computing, a game-changer in maximizing security, business continuity and performance.

Let the innovation of edge compute redefine efficiency while significantly lowering your total cost of ownership.

- Business continuity
  - High resilient hardware platform
  - Full enterprise level security
  - Easy deployment
  - Easy management
  - Future technology proof
  - Multiple Media Wifi, 4G(optional), LAN, WAN
  - UPS optional
- Easy deployment
- Security baseline by standardization
- Identity Access Management
  - Partner access to dedicated resources
  - Admin access to full environment
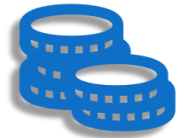 - User access to dedicated systems or applications

Business continuity

Security + data protection

Easy and remote management

Small form factor

Cost reduction

i-LAN - *platform*

The i-LAN platform is your gateway to unified and centralized control of your IT infrastructure, regardless of its location or complexity. It comprises three key components: the OneBox, the OneCloud standard and the OneCloud advanced.

OneBox An edge compute-system, a micro-datacenter virtualized in a box. Represents a significant leap forward in harnessing the potential of edge computing, offering a comprehensive solution that enhances performance, scalability, and security while bringing the benefits of localized data processing closer to the point of action. The Edge

OneCloud

OneCloud standard A centralized solution providing consolidated console access to all infrastructure components used in the OneBox units around the world.
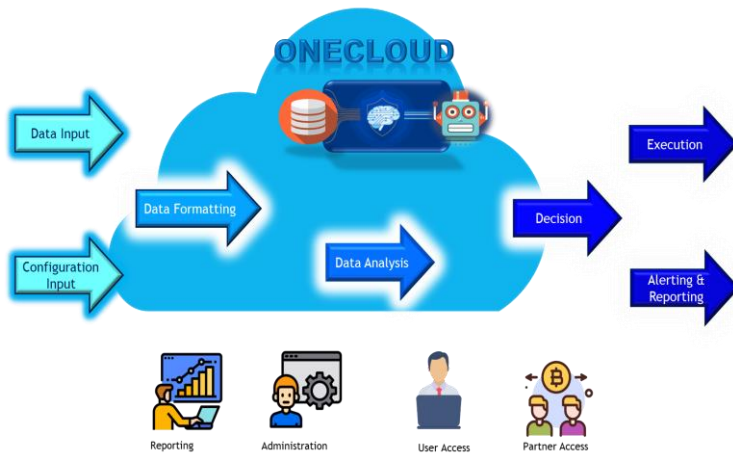
OneCloud advanced By leveraging the OneCloud advanced solution, organizations can automate the daily operational tasks like network and compute configurations and updates, streamline infrastructures and business processes, ensure consistency of the service, enhance security, and optimize the efficiency of all the sites around the world with machine learning technology.

By integrating AI into its data analysis framework, OneCloud empowers organizations to harness the full potential of their data, enabling smarter decision-making, proactive insights discovery, and fostering innovation across various industries. It facilitates the democratization of AI-driven insights, enabling users with varying levels of expertise to leverage cutting-edge technologies for impactful data analysis.

OneBox

Go Small and get Big. The smallest of the family is the **OneBox** NUC. At its core, the **OneBox** system embodies simplicity, security and sophistication, offering a compact yet powerful hardware setup designed to bring the capabilities of edge computing closer to users and devices. This all-in-one system combines processing, storage, and networking functionalities, creating a centralized hub for data processing at the edge of the network.

A high-available system that starts from minimum 3 nodes in a standard cluster unit up to 25 nodes. The **OneBox** NUC appliance is a small, all-flash, NVMe storage-based compute appliance that delivers all the simplicity, efficiency, and enterprise-ready virtualization associated with **OneBox** edge Computing Operating system. Built specifically for sites that need full security and a highly available infrastructure, the **OneBox** can be deployed almost anywhere, without requiring a full deployment team.

Taking up only very little space, it also includes Identity Access management (IAM), full cyber security, WAF, disaster recovery, business continuity, rolling upgrades and integrated data protection.

The extremely small form factor consumes a small amount of power, offers ease of installation and an ability to rapidly add devices that scale up rapidly, along with the reliability needed for edge computing and IoT applications:

- High Performance: Powered by cutting-edge processors and advanced hardware, the **OneBox** delivers exceptional computational performance, enabling rapid data processing and analysis at the edge in real time.
- Scalability: The system is designed to scale seamlessly, accommodating evolving workloads and requirements. Its modular architecture allows for easy expansion and customization to suit specific business needs.
- Versatility: The **OneBox** system supports a wide array of applications and use cases, ranging from IoT deployments to AI-driven analytics, empowering businesses across various industries to leverage edge computing efficiently.
- Networking and Security: With a robust built-in security and networking layer the **OneBox** ensures data integrity, confidentiality, and resilience against potential threats, safeguarding critical information.
- Backup and DRP: Build into our core system, backup and restore functionalities are standard out of the box. Due to our design, we can offer DRP and general protection against crypto malware capabilities no one else can offer.
- Ease of Management: Its user-friendly interface and intuitive management tools simplify system monitoring, configuration, and maintenance, reducing operational complexities for administrators.

OneBox (NUC)

Technical specifications

Core Compute

- 3 x Intel Core i7 – 10710U
- 192 GB RAM
- 12 TB SSD Raw storage

2 x Intelligent/Firewall Switch

- 24x Gigabit Ethernet, 4x SFP
- 2/Layer 3 switch (QoS en VLAN)
- Static routing
- Zero touch deployment
- SD-WAN/Branch
- Limited Lifetime Warranty

CPU: Intel® Core	i5-1145G7 4C/8T 2.6-4.4GHz, i7-1185G7 4C/8T 3.0-4.8GHz
RAM	8GB, 16GB, 32GB, 64GB Type: DDR4

The NUC Series combines Scale Computing's self-healing platform for autonomously running applications at the edge, with a small, all-flash, NVMe storage-based compute appliance that delivers all the simplicity, efficiency, and enterprise-ready virtualization associated with Scale Computing Platform.

Built specifically for sites that need highly available infrastructure, the NUC series can be deployed almost anywhere, without requiring a rack or server closet. The NUC Series provides a fully functional, integrated platform for running applications, including high availability clustering, rolling upgrades, and integrated data protection.

STORAGE	1 x M.2 NVMe 250GB, 500GB, 1TB, 2TB, 4TB
NETWORK	2 x 2.5GbE
Dimensions	2.13" (54mm) H x 4.6" (117mm) W x 4.4" (112mm) D
Power	1 x 90W Power Supply Unit

The cutting-edge construction and connectivity come ready for industrial and IoT applications. The extremely small form factor consumes a small amount of power, offers ease of installation, an ability to rapidly add devices that scale up quickly, and the reliability needed for edge computing and IoT applications.

OneBox *(Rack)*

Technical specifications

Form factor: 1U rack-mount (3 nodes cluster for majority node set)

**Processor:** 3 x Intel Core i3, Pentium Gold

Chipset: Intel C246.

Memory: 4 DIMM sockets (2memory channels with 2 DIMMs per channel).
Support for ECC UDIMMs. Memory speed up to 2666 MHz.

Memory capacity:

- Xeon E Series: Up to 128 GB (4x 32 GB UDIMMs; 32 GB UDIMMs require the UEFI version ISE114H or later).
- Core i3, Pentium Gold, Celeron G Series: Up to 64 GB (4x 16 GB UDIMMs)

Drive types:

- 2.5-inch hot-swap drives:
- 12 Gbps SAS HDDs up to 2.4 TB
- 12 Gbps SAS HDD SEDs up to 300 GB
- 12 Gbps NL SAS HDDs up to 2 TB
- 6 Gbps NL SATA HDDs up to 2 TB
- 6 Gbps SATA SSDs up to 960 GB
- U.2 NVMe PCIe 3.0 x4 SSDs up to 1 TB
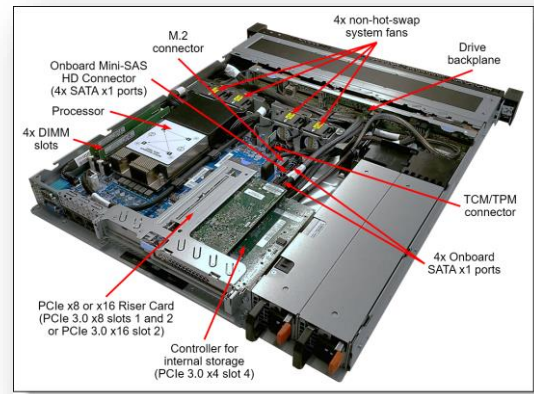
Networking & Security:

- 2 x 16-port PoE+ Gigabit Ethernet Managed Switch
- 16-port PoE+ Gigabit Ethernet Managed Switch
- 2/Layer 3 switch (QoS en VLAN)
- Static routing
- Zero touch deployment
- SD-WAN/Branch
- 10G Ports (375W Power Budget)

OneCloud

Central cloud management system, connecting all your Edge infrastructures into one platform

The OneCloud is a platform that provides a flexible setup between Remote Branches and the central management system.

This OneCloud central management platform is the command center that orchestrates and oversees the functionality, configuration, and maintenance of the **OneBox** edge compute system. This centralized platform offers a unified interface and robust tools to efficiently manage and optimize multiple **OneBox** micro-datacenters across diverse locations from a single, user-friendly dashboard.

The power of OneCloud central management, is the ease of set up. Automated processes will provide a flexible and automated deployment of the Remote Branch and Offices.

The uses of enterprise technology will protect and serve all business processes and data. Our patented technology will ensure industries best standards to protect all the remote environments. The efficiency in deploying and maintaining servers, networks, applications, data and finally your business processes is guaranteed by the service of our OneCloud management system.

OneCloud *standard*

The OneCloud standard, central management platform is the command center that orchestrates and oversees the functionality, configuration, and maintenance of the **OneBox** edge compute-system. This centralized platform offers a unified interface and robust tools to efficiently manage and optimize multiple **OneBox** deployments across diverse locations from a single, user-friendly dashboard.
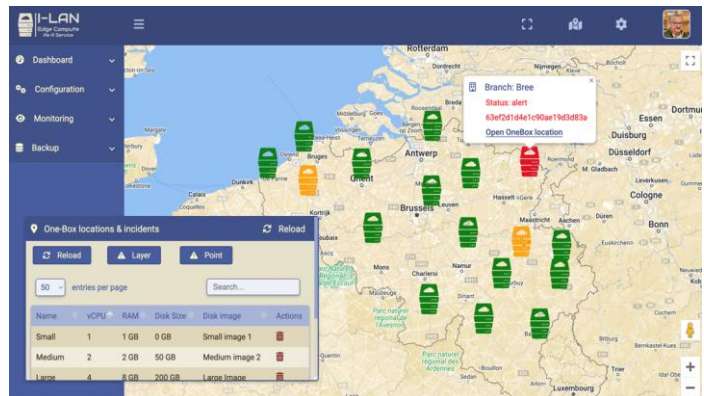

Key features of the OneCloud central management platform include:

- Unified Control: It provides a single-pane-of-glass view, allowing administrators to monitor and manage all **OneBox** local networks, compute, backup, security, applications, and data. Simplifying management tasks and ensuring consistency. OneCloud standard offers console access to all infrastructure components.
- Configuration Management: Administrators can easily configure and update settings, software, and applications on individual or groups of **OneBox** systems remotely, streamlining deployment processes and ensuring uniformity.
- Monitoring and Analytics: Real-time monitoring tools enable continuous performance monitoring, resource utilization tracking, and the ability to gather actionable insights into the health and status of each **OneBox** unit.
- Automated Updates and Maintenance: OneCloud facilitates seamless updates, patches, and maintenance tasks across distributed **OneBox** deployments, minimizing downtime and ensuring systems remain up-to-date and secure. From network to server operating system, from application to data.
- Security and Access Control: Robust security features enable administrators to enforce access controls, implement security policies, and monitor compliance across all **OneBox** devices, ensuring data integrity and protection.
- Scalability and Flexibility: The platform is designed to scale alongside growing deployments, allowing for easy integration of new **OneBox** units and adapting to changing business needs without compromising efficiency.
- User-Friendly Interface: Its intuitive interface and user-friendly tools empower administrators with the ability to efficiently navigate and manage complex edge computing infrastructures without extensive training.

OneCloud advanced

OneCloud solution uses data analysis technology that represents a powerful convergence of cloud-based infrastructure and artificial intelligence capabilities aimed at revolutionizing how organizations derive insights and value from their data.

Here's an overview of how OneCloud integrates AI into its data analysis capabilities:
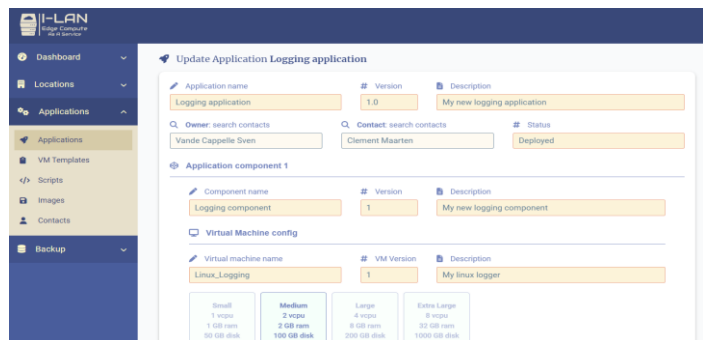
- **AI-Powered Data Processing**: OneCloud leverages AI algorithms to process vast amounts of data efficiently. AI-enhanced data processing enables quick extraction, transformation, and loading of data from multiple sources, accelerating the analysis pipeline.

- **Advanced Analytics and Machine Learning**: The platform offers a suite of advanced analytics tools powered by machine learning algorithms. These tools enable predictive modeling, anomaly detection, clustering, classification, and regression analysis, among others, uncovering valuable insights from complex datasets.

- **Recommendation Engines:** Utilizing AI-driven recommendation engines, OneCloud can suggest relevant analyses, data models, or actions based on user behavior and historical data patterns, enhancing the efficiency of decision-making processes.

- **Deep Learning Capabilities**: For complex pattern recognition and image analysis tasks, OneCloud supports deep learning frameworks, enabling businesses to leverage neural networks for image classification, object detection, and more.

- **AutoML and Model Building**: Automated Machine Learning (AutoML) features within OneCloud streamline the model-building process, assisting users in selecting the best algorithms, tuning hyperparameters, and deploying models without extensive manual intervention.

- **Continuous Learning and Improvement**: OneCloud's AI capabilities facilitate continuous learning by analyzing new data and improving models over time, ensuring that insights remain relevant and accurate as the data landscape evolves.

- **Interoperability and Integration**: The platform's AI tools and models seamlessly integrate with existing data analysis workflows and third-party applications through APIs (like Salesforces, governmental or banking services), fostering interoperability and expanding the scope of AI-driven insights. Our OneCloud offers the possibility to integrate with 3rd party online services.