

A fully featured cloud for the distributed edge

StarlingX is a complete cloud infrastructure software stack for the edge used by the most demanding applications in industrial IOT, telecom, video delivery and other ultra-low latency use cases. Based on mature software deployed for mission critical applications, newly open sourced StarlingX code is the base for edge implementations in scalable solutions that is ready for production now.

The StarlingX virtualization platform focuses on easy deployment, low touch manageability, rapid response to events and fast recovery -- think control at the edge, control between IoT and cloud, and control over your virtual machines.

Rather than reference platforms and gap definition for edge use cases, StarlingX provides a deployment-ready, scalable and highly reliable edge infrastructure software platform to build mission critical edge clouds. Tested and released as a complete stack, StarlingX ensures compatibility among diverse open source components. Its unique project components provide fault management and service management among others to ensure high availability of user applications. The StarlingX community has optimized the solution for security, ultra-low latency, extremely high service uptime, and streamlined operation.

Ready to explore StarlingX? Try it at starlingx.io



STARLINGX

Join the Community

StarlingX is an independent open source community collaboratively developing code under the Apache 2 license. Anyone is welcome to join and contribute code, documentation, and use cases. The project is supported by the Open Infrastructure Foundation.

Get Involved

Website: starlingx.io

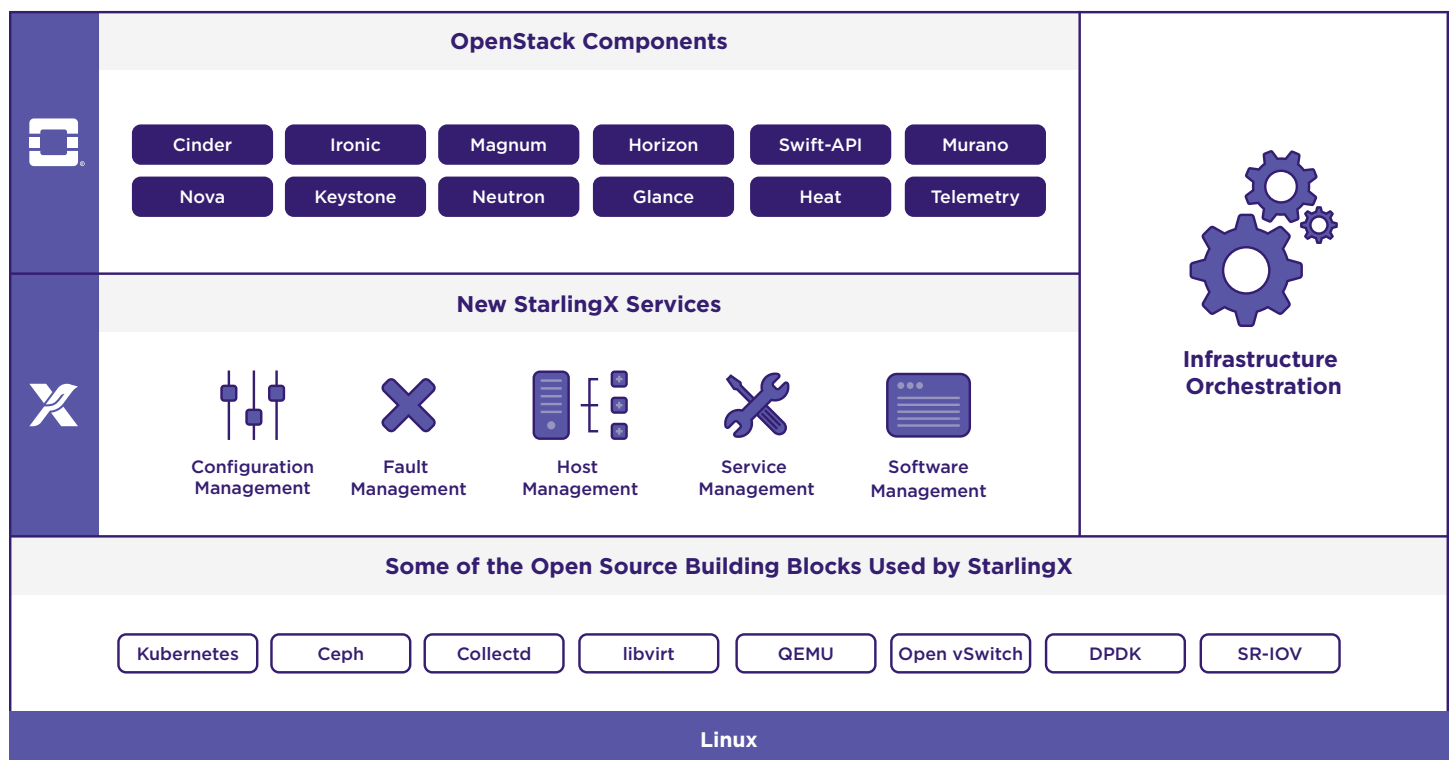
Git: git.starlingx.io

Docs: docs.starlingx.io

Freenode IRC: #starlingx

Mailing Lists: lists.starlingx.io

E-mail: info@starlingx.io

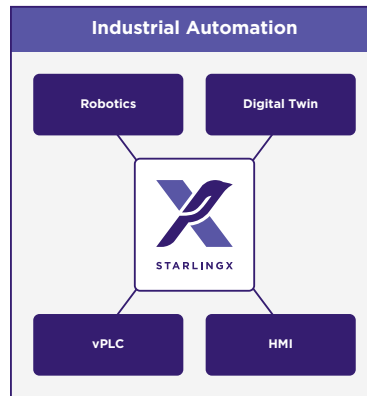


StarlingX Use Cases

StarlingX is designed for ultra-low latency edge applications that require location optimization, security, and high throughput. Some of the targeted use cases where StarlingX is being used include:

Ultra Low-latency 5G and Industrial IoT (IIoT)

- Autonomous vehicles (drones, cars and trucks)
- Industrial automation (robotics and virtual Programmable Logic Controller (vPLC))
- Cloud/virtual Radio Access Network (cRAN/vRAN)
- Smart city/buildings (metering and monitoring)



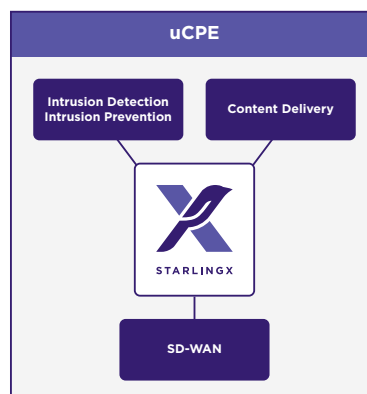
The diagram illustrates the Health Care use case. It features a central box with the StarlingX logo and the text 'STARLINGX'. Three boxes are connected to this central box: 'Imaging' (top left), 'Diagnostics' (top right), and 'Monitoring' (bottom). The entire set of components is enclosed within a larger box labeled 'Health Care' at the top.

High Bandwidth, Large Volume Applications

- Mobile HD video
- Content delivery
- Healthcare (imaging and diagnostics)
- Caching and surveillance

Multi-access Edge Computing (MEC)

- Augmented and virtual reality (AR/VR)
- Enterprise focused small cell services for stadiums and high-density locations
- Universal Customer Premise Equipment (uCPE) applications
- Retail



StarlingX Features

Reliability:

Fault management, fast secure VM failover and live migration minimizes downtime

Scalability:

Deployable on one to thousands of distributed nodes allowing for a single system to be used from edge to core

'Small Footprint':

Providing a platform for edge and IoT use cases even for environments with tight resource constraints

Ultra-low Latency:

Deterministic, tunable performance optimized for the use case

Edge Security:

Software security to avoid tampering at the edge, where physical security may be limited

Lifecycle Management:

Simplified deployment and operations with full system management through comprehensive orchestration suited for the edge