Marvis AI leads networking transformation

Juniper Mist's AI engine reshapes the landscape for network operations.
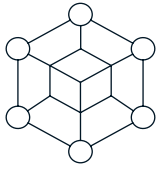
Kubus | JUNIPER NETWORKS

Marvis AI leads networking transformation

Juniper Mist's AI engine reshapes the landscape for network operations

AI affects almost every aspect of our lives. So it's little wonder that network management is a prime target. Dogged by rapidly rising complexity and costs, 78% of business executives told IDC recently that they were moving to an AI powered platform approach for networking.

Juniper Mist is pivotal in the AI network revolution, using AI-native automation to deliver streamlined operations, proactive troubleshooting and exceptional user experience. At its heart is Marvis AI, the industry's first and only AI-native AI engine with a virtual AI assistant.

Building on ten years of data science know-how, Juniper is evolving a series of dynamic new Marvis data science tools. Each builds on the strengths of the others to transform performance and business potential for organisations in every industry sector and size of operation across the world.

Kubus

Strong together

The essence of Mist AI is the ways it anticipates networking issues and addresses them before they impact users. The AI-native approach means that the platform doesn't just monitor network performance, it continuously learns, adjusts, and optimises performance.

Marvis identifies potential issues on the network based on historic and real-time data, simulating interactions across the network while checking network performance. It then takes proactive action to fix those issues before users find out about them. It continuously learns from every interaction and identified issue to optimise performance for the most important applications.
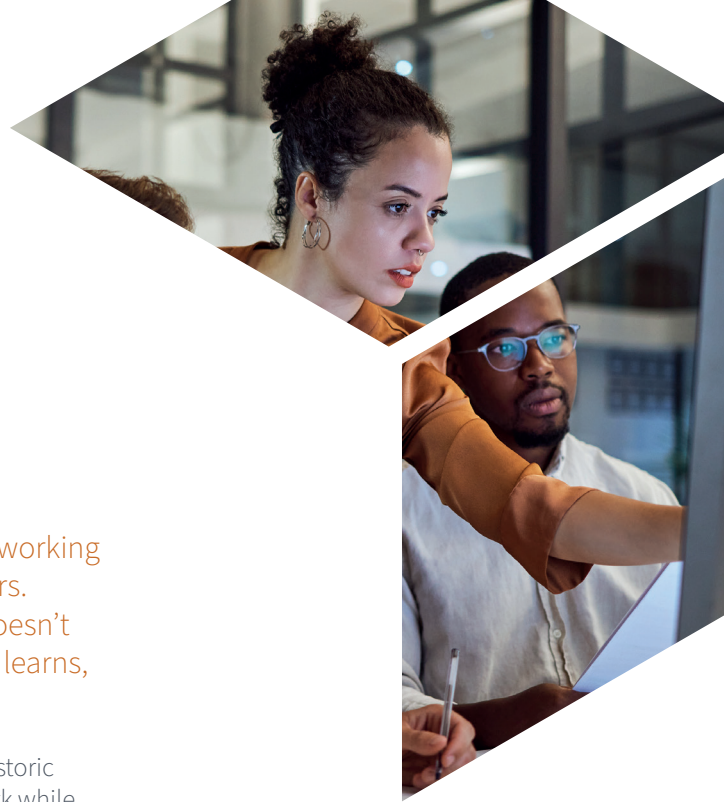
These are prime Marvis tools that work together to complete the automation process:

Marvis AI Assistant

Marvis is the first conversational assistant designed to help networking teams stay on top of potential trouble of all kinds.

Using natural language conversation, Marvis AI Assistant invites IT teams to call out possible network issues simply by asking questions like "Why is the connection slow on Floor 3?".

The power of the Marvis conversational interface is that it can contextualise these requests, making intelligent decisions about how to respond. For example, it might decide to troubleshoot a potential issue for rapid resolution by taking action during the conversation. Or from the context of the dialogue it might judge that the issue is not going to affect network service and provide appropriate feedback instead.

Kubus

Marvis Actions

Marvis Actions helps IT network support teams switch from traditional reactive troubleshooting to AI enabled proactive action. It speeds up issue resolution and improves productivity and resource management, giving IT teams more time to broaden their responsibilities and strategic value. It also means enhanced user experience and satisfaction.

Marvis Actions proactively identifies the root cause of issues across IT domains (WLAN, LAN, WAN and Security) and will either automatically resolve the issue (self-driving mode) or recommend an action that requires user intervention (driver assist mode). Once completed, Marvis closes the feedback loop by validating the actions are correct in the Mist AI engine, thus helping Marvis (and the IT teams) learn from the experience.

Marvis Actions also brings visibility across network issues so that administrators know exactly what they need to prioritise and focus on for the day. As new sites get added, Marvis Actions can handle the extra oversight with ease.

Marvis Minis

Marvis Minis is a network digital twin, which uses the network infrastructure to assess connectivity and service reachability of the network. By proactively simulating user connections, Marvis Minis can help detect and resolve issues – again before they impact users. Marvis Minis is always on and can be initiated on-demand.

Marvis Minis validation will also happen automatically if it finds any imminent network service failure, even when users aren't connected to the network. Then it revalidates the failure and expands the validation scope to other access points and switches, in order to determine if an issue affects the entire site or just a specific switch or access point.

Marvis Large Experience Model (LEM)

This is particularly aimed at network activity involving collaboration and video conferencing apps. Marvis LEM uses billions of data points from Marvis Minis, as well as apps such as Zoom and Teams to pinpoint network issues. By ingesting labelled telemetry and applying deep learning, Marvis LEM will predict and explain user experience degradations before they occur, again enabling IT to shift from firefighting to foresight.

Users can invite Marvis LEM to be a part of their collaboration helping administrators list and query any degraded user or site experiences and enhancing user experience in the process. Marvis also applies the power of Marvis AI Assistant to help network operations identify and resolve any ongoing network issues with collaboration apps. Marvis can then measure and optimise the user experience.

Kubus

Simpler, speedier, smarter
network operations

Marvis is the first cloud-based AI engine for network operations and troubleshooting. It's the product of a straightforward aim: use AI to answer networking questions and run networks as effectively as they can be run.

Achieving that vison requires monitoring and analysing of network data, understanding natural language queries, providing actionable insights, and automating operating tasks. The end result is simplified, speeded up, and smarter network operations.

Marvis is an integral part of the Juniper Mist AI microservice cloud platform, which collects and processes huge amounts of real-time network data from user devices, Juniper access points, switches, routers, and third-party cloud applications. It applies deep learning and natural language processing to learn from this data and provides answers, insights, and automation for network operators.

Marvis is arguably the next step in the evolution of AI automation in network management, adapting to the changing needs of networks and moving us to an era that mimics the cognitive reasoning of humans.

Kubus

Kubus

Contact us to power your cloud
with seamless, secure IT solutions.

T: 01285 771600
E: sales@kubus.com

www.kubus.com