The future foundation for digital transformation: Secure, sustainable, reliable networks from Atos and Juniper

Teams at Atos and Juniper combine their expertise to deliver the network foundations of the future enabled by Atos' Intelligent Data Centre Fabric and AI-driven networks, managed by Juniper.

Atos | JUNIPER NETWORKS®

Why now?

Today's enterprises depend on secure, sustainable, and reliable networks to drive their digital transformation initiatives. However, the increasing complexity of networks, extending from the campus to the cloud and the edge, creates significant challenges for IT teams. These teams must navigate a range of skills across multiple vendors, manage a high volume of devices, and contend with siloed working, which increases the risk of human error. Such challenges impact the IT team's ability to deliver an exceptional, secure user experience and create a major roadblock to innovation.

To overcome these challenges, they require advanced solutions that streamline network management, reduce complexity, and create a solid foundation for the future. Our customers are seeking a unified data fabric that delivers standardized data management practices and practicalities across cloud, on-premises, and edge devices regardless of the vendor and whether it is a wired or wireless network. In addition, they want an intelligent network that uses predictive AI (Artificial Intelligence) and automation to eliminate human error and dependence, enabling IT teams to deliver exceptional, secure user experiences, and accelerate business transformation.

We deliver the expertise and technical solutions customers require to build the future foundations for their digital transformation.

Atos Intelligent Data Center Fabric managed by Juniper Apstra and Atos AI-driven network from Juniper Mist provide the future foundations for digital transformation.

For over a decade, dedicated teams at Atos and Juniper have joined forces to transform clients' networks, delivering complex use cases across data centers, campuses, branches, and edge locations. They have delivered Atos Intelligent Data Centre Fabrics, managed by Juniper Apstra, to provide a unified view across all data and infrastructure and integrating on-prem, cloud, and edge resources for efficient network management.

Atos AI-driven network from Juniper Mist™ utilizes machine learning and data science to simplify operations in complex wireless access, wired access, and SD-WAN domains. It enhances network performance, optimizes resource allocation, and improves operational efficiency. Together, expertise from across our combined teams enables organizations to unlock their full potential, using the network as an enabler rather than a barrier. In this way we empower IT personnel to easily navigate modern network complexities, and to spend more time on strategic digital transformation initiatives.

Atos Intelligent Data Centre Fabric managed by Juniper Apstra

We enable a future fit agile network by simplifying complex network management.

Data in the core, cloud, and edge are becoming increasingly complex. Fuelled by growing mobile and Internet of Things (IoT) devices, enterprises are moving from on-prem to the public cloud. Combined with the added complexity of a substantial amount of data remaining on-premises they need secure connections to the cloud and may need to maintain access to a mainframe while connecting to the far edge and/or IoT.

We remove network complexity by integrating the data center and network seamlessly. The Atos Intelligent Data Centre Fabric, managed by Juniper Apstra, gives one view across all data and the complex infrastructure - from on-premises to the edge. Our highly experience network and data center consultants work with customers to create a future fit architecture. They use Juniper Apstra intent-based networking software to simplify the rollout of data centre configurations by automating and validating the design, deployment, and operations of data center networks.

Enterprise networks today are incredibly complex. Organizations are looking for more cohesively managing disparate parts of their network.

IDC 2022

Atos Intelligent Data Centre Fabric managed by Juniper Apstra

We create the reliable network of the future by removing human error and cost.

Organizations seek automation for cost savings, yet still rely on manual network management. Network engineers manually code devices and create artisanal playbooks, requiring specialist and costly skills such as Python and DevOps. They face pressure to deploy applications quickly, increasing the risk of human error, with manual input leading to unique, unstandardized networks.

Our Intelligent Data Centre Fabric, managed by Juniper Apstra, provides an end-to-end overlay that removes the reliance on humans, removing the pressure and intensive focus required, to create scalable standardization through automation. Validated templates and zero-touch provisioning ensure reliable data center operations and reduce deployment times, and Apstra's Freeform capability enables additional customization.

70-75% of all data center and service outages are caused by human error. Rapid advancements in technology have exponentially expanded and complicated networks to the extent that manually setting them up and managing them has turned into a mission impossible.

Juniper 2022

Atos Intelligent Data Centre Fabric managed by Juniper Apstra

We create a high-performance network and guarantee exceptional user experience by fast resolution of the network issues.

Organizations require scalable networks and a centralized performance source to navigate increasing complexity. They need a comprehensive understanding of their network, including its system architecture, issue locations, and security status. This prevents blame-shifting between application and network teams when problems arise. Additionally, delivering an outstanding user experience relies on a robust data fabric and the flexibility to implement changes effortlessly.

Our Intelligent Data Centre Fabric, managed by Juniper Apstra, uses a single source of truth, powerful analytics, and root-cause identification, allowing network teams to pinpoint and resolve issues delivering high-quality user experiences quickly. The solution also averts outages with predictive insights. Features like testing through digital twin simulations and the capability to revert changes if problems occur ensure smooth operations. The software shortens the time to resolution with advanced telemetry and diminishes human error with change control and fast, all-network rollback.

Enabling a secure and highly performant network across multiple domains with a growing number of users and devices accessing higher-bandwidth applications that are increasingly distributed requires that organizations have advanced management platforms.

IDC 2022

Atos Intelligent Data Centre Fabric managed by Juniper Apstra

We build a robust and secure platform to drive transformation with the network of the future.

Multivendor networks pose a challenge for businesses aiming to create a comprehensive end-to-end network management solution. The need for individual playbooks for each technology makes it difficult to achieve a unified view. This leads to legacy issues and a scarcity of skilled resources. Consequently, engineers manually configure data centers, resulting in configuration drift, human errors, and technical debt. Moreover, siloed skills and disparate methodologies hinder network capabilities to meet the demands of digital transformation initiatives.

Our Intelligent Data Centre Fabric, managed by Juniper Apstra, is the only solution with multivendor support, empowering organizations to automate and manage their networks across virtually any data center location, vendor, and topology, creating one innovative platform. It scales across the largest data centers in the world, supporting hundreds of thousands of connected servers down to Edge data centers. Consolidating operations into a single management interface enables rapid transformation through one platform.

Atos and Juniper delivered a country-wide digital ID platform, including data center infrastructure and integration with security systems needed to manage sensitive data. The approach included continuous engagement, proactive enablement sessions, and detailed documentation were the key steps taken to ensure success.

Atos AI-driven network managed by Juniper Mist

Enable a future fit agile network by simplifying complex network management.

Modern enterprise networks are highly intricate, requiring cohesive management of their diverse components. This includes campus networks comprising LANs and WLANs, branches relying on SD-WAN to accommodate distributed users and devices, and access to applications hosted across multiple clouds. Effectively managing these disparate elements poses challenges for IT departments, which face mounting pressure to reduce costs while maintaining efficient network operations.

The Atos AI-driven network managed by Juniper Mist uses a combination of machine learning and data science techniques to simplify operations across complex campuses, distributed wireless and wired access, and SD-WAN domains. For example, the Mist Asset Visibility services analyzes up to 30 days of data, simplifying the process of extracting network insights from data and analytics across your enterprise. This allows you to simplify the alignment of support resources or introduce enhanced premium services.
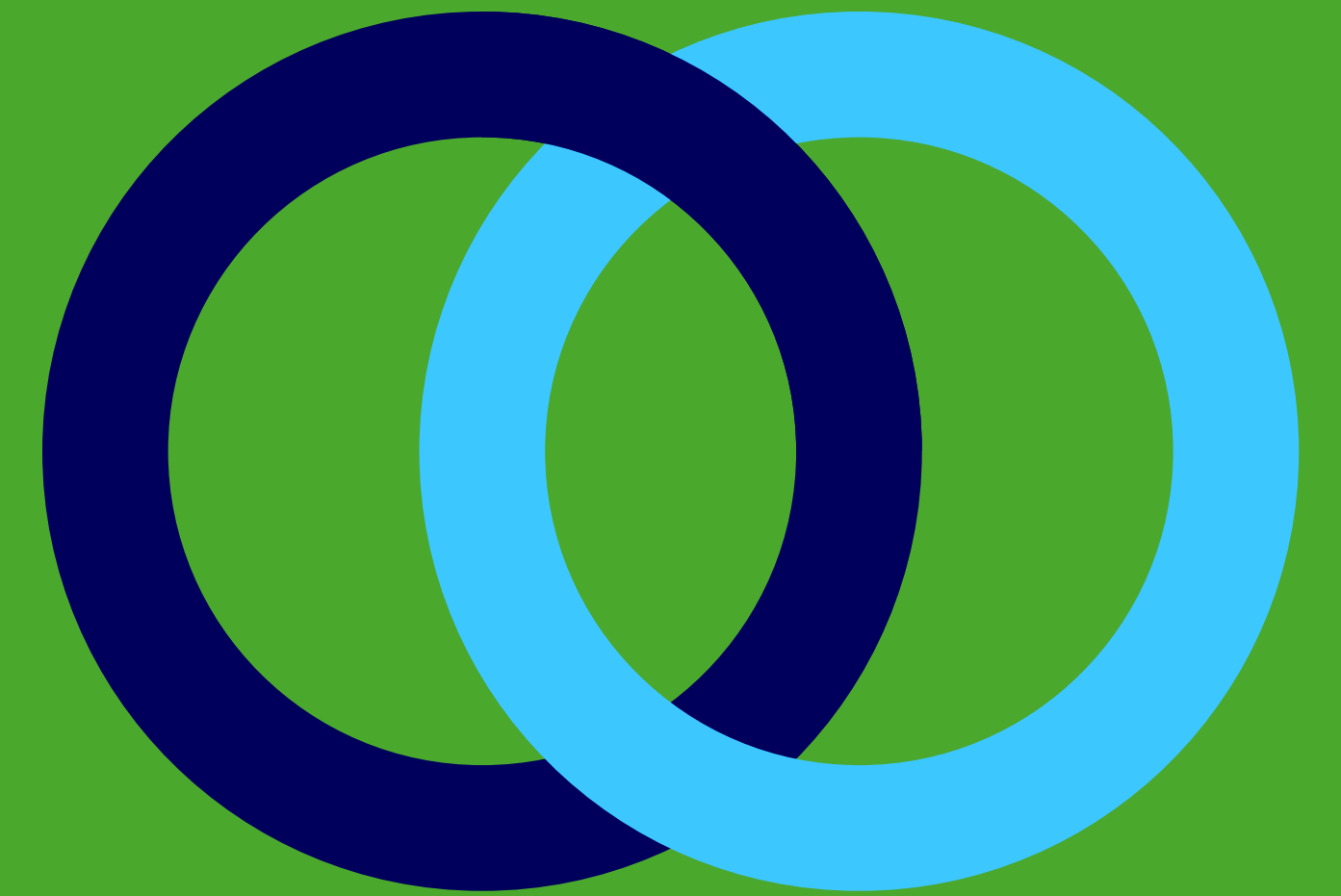
A global enterprise was experiencing significant admin overhead and issues with guest network access. Working with Atos and Juniper they used MIST to move to a fully automated solution, transforming user experience.
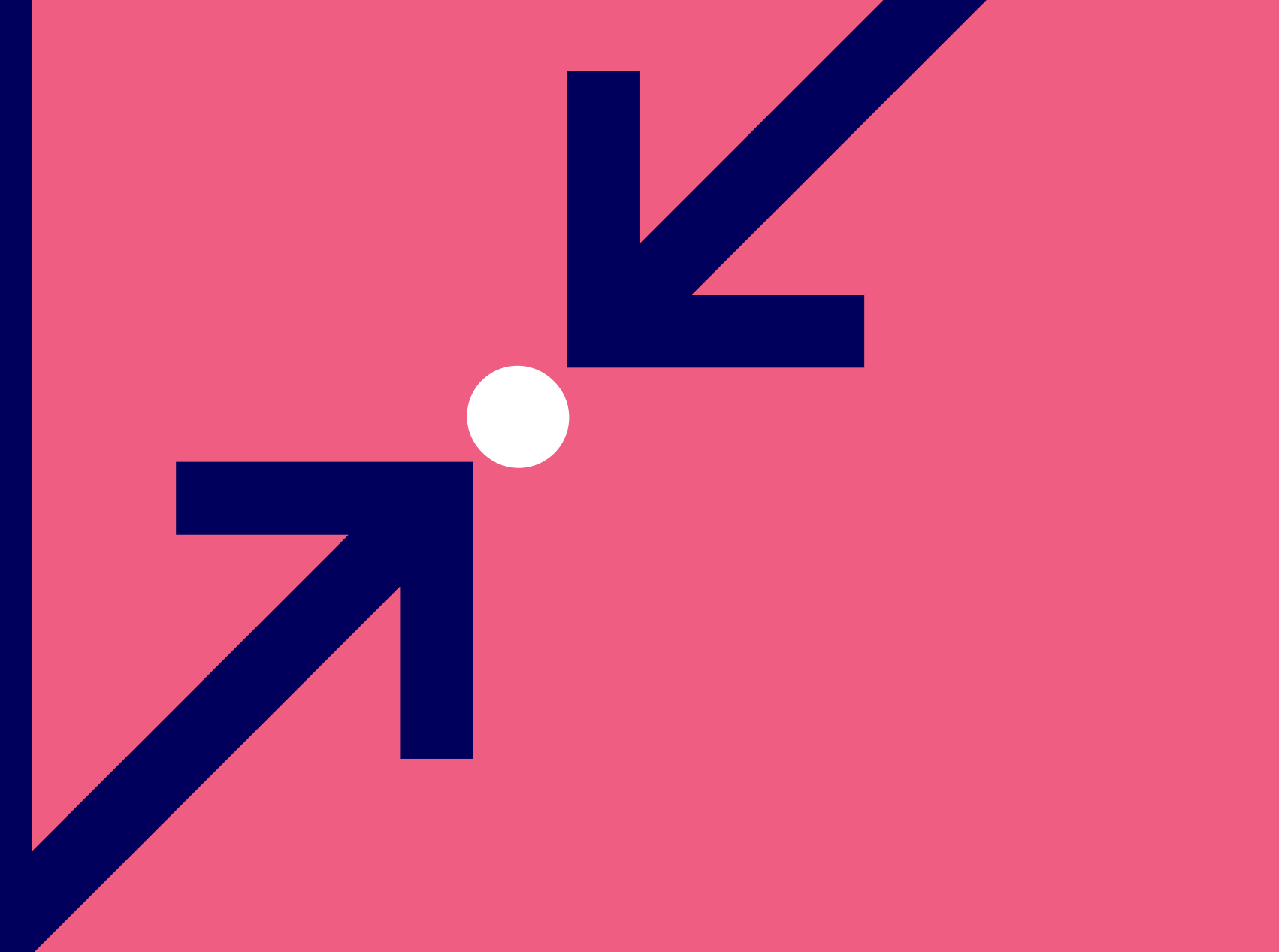
Atos AI-driven network managed by Juniper Mist

Create the reliable network of the future by removing human error and cost.

Organizations are looking for predictive AI and automated solutions providing one centralized console to manage all distributed access points and to spot issues before they occur, dramatically driving down call tickets and reducing downtime. They are looking for an overlay solution for their network to accelerate and reduce management costs – requiring minimal network management and low-skilled employees to install it.

Atos AI-driven network managed by Juniper Mist makes networking predictable, and reliable. Time-consuming manual IT tasks across the distributed network are replaced with AI-driven proactive automation and self-healing capabilities, lowering networking operational costs, and saving substantial time and money. Networking and location services can also be consumed in a scalable and cost-effective manner by selecting subscription services that are optimal for the environment without requiring extra hardware.

Atos and Juniper delivered a campus-wide network replacement for a German chemical company. Using Juniper MIST the roll-out was significantly simplified.
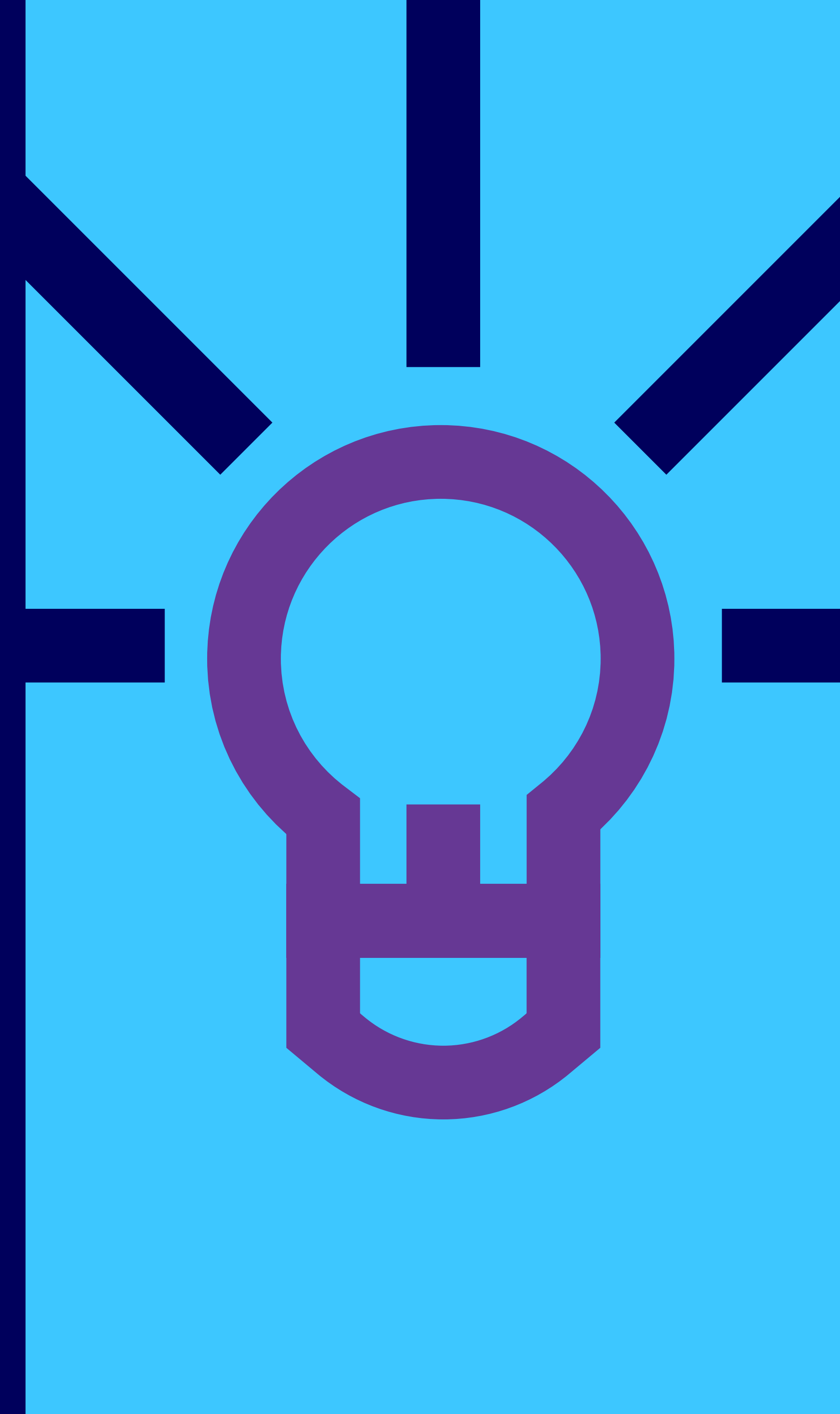
Atos AI-driven network managed by Juniper Mist

Create a high-performance network and guarantee exceptional user experience by fast resolution of network issues.

Today's customers and employees all expect seamless connectivity and user experience regardless of location. Downtime is no longer acceptable, and issues from demanding customers can create a significant and unpredictable workload for the IT help desk.

Atos AI-driven network managed by Juniper Mist makes networking predictable, reliable, and measurable with unprecedented visibility into the user experience. Data is ingested from numerous sources, including Juniper Mist Access Points, Switches, Session Smart Routers, and Firewalls for end-to-end insight into user experiences. These devices work with Mist AI to optimize user experiences from client to cloud, including automated event correlation, root cause identification, Self-Driving Network™ operations, network assurance, proactive anomaly detection, and more. These remove the burden for IT support teams and create exceptional user experience.
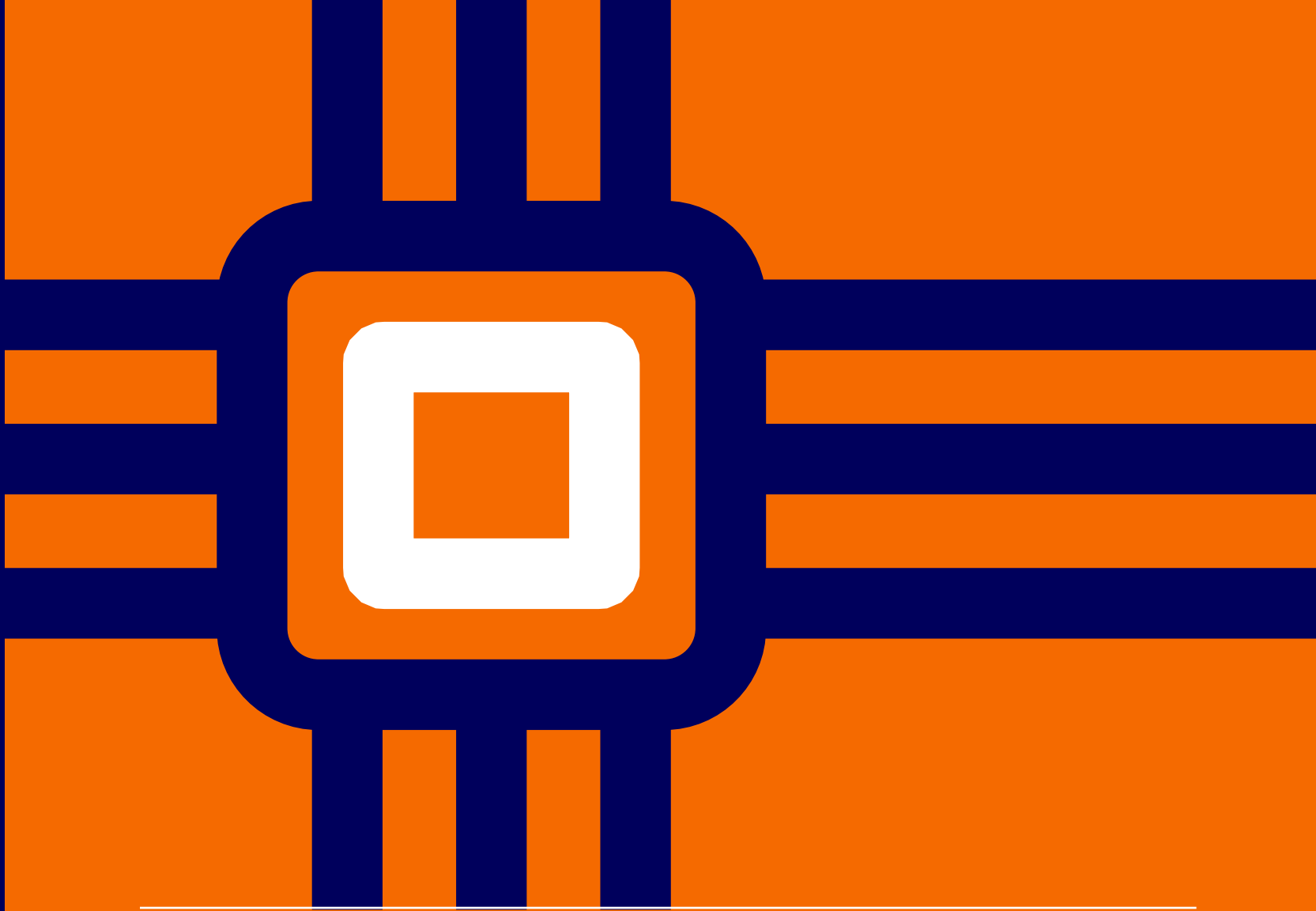
Atos AI-driven network managed by Juniper Mist

Build a robust and secure platform to drive transformation with the network of the future.

Businesses require networks that serve as platforms for digital innovation, enabling them to measure user experience, customer engagement, and seamlessly integrate location services. The network architecture should facilitate growth and agility while incorporating innovative functionalities like visibility and tracking to enhance user experience, such as solutions that track individuals or headless devices, including hotel room check-ins and event management.

Atos AI-driven network managed by Juniper Mist offers a flexible platform with a microservices cloud architecture. It enables seamless addition or removal of features, allowing businesses to easily adapt to changing requirements. With regular updates and bug fixes delivered without network disruption, organizations benefit from continuous improvements. The solution also eliminates the complexities and expenses associated with monolithic hardware by scaling services up or down as needed. Additionally, it delivers enterprise-grade Wi-Fi, Bluetooth® LE, and IoT capabilities, empowering businesses to enhance their wireless networks with personalized location services to unlock greater value.

The network is a critical enabler of transformational efforts, and enterprises are increasingly looking to advanced network management platforms that integrate AI capabilities to accelerate their Digital Experience (DX) strategies.

IDC 2022

Atos and Juniper, trusted to transform for over a decade.

Atos and Juniper offer future-proof solutions with a trusted partnership that spans over ten years. This collaboration is backed by dedicated teams and co-investment in validated designs, ensuring confidence in the solutions provided.

As leaders in Data Centre Fabric transformation, Atos and Juniper have been at the forefront of leveraging Juniper Apstra technology. Atos, as one of the earliest system integrators to adopt Apstra, has taken a lead role in its development. Furthermore, Atos stands out as one of the largest Apstra customers globally. This deep expertise, combined with Atos's recognition as a Leader in Gartner's Magic Quadrant for Data Center Outsourcing and Hybrid Infrastructure Managed Services Worldwide 2022, brings unique insights and a significant competitive advantage.

With over 1,800 Network Specialists across three Global Delivery Centers, Atos possesses extensive capabilities, further strengthened by being the top cybersecurity provider in Europe. These capabilities enable Atos to offer comprehensive integration services, bridging hybrid and private cloud environments and building the necessary underlay and data center fabric. This deep knowledge and experience are crucial in supporting transformation initiatives and successfully integrating complex solution use cases.

Contact us for more information

Find out more