

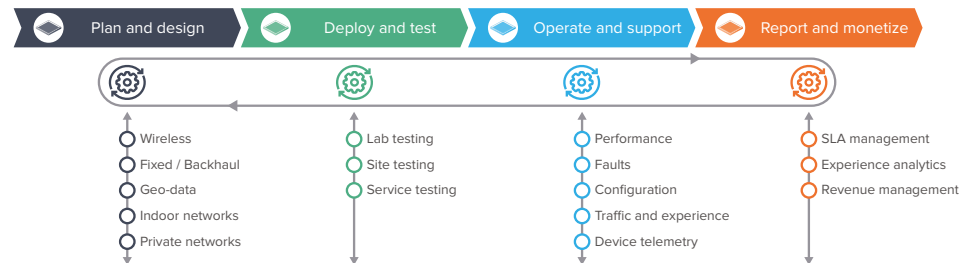
Network Lifecycle Automation

Join the Automation Generation

Accelerate monetization while reducing costs,
without compromising on quality



Take profitable, reliable services to market first by automating every step of the way



Automation has been a target for network operators for many years now, and the growing complexity and fluidity of networks - as the industry adopts ever-increasing levels of virtualization - only increases the urgency of this. From optimizing network RoI, to accelerating network and service roll-outs, and monetizing advanced new revenue streams, automation today is critical to business success.

Today, advancements in key technologies – such as ML/AI; open and cloud-native architectures; and a maturing landscape of orchestration frameworks and capabilities – has finally brought the potential for a step-change in automation for the full network lifecycle, from planning to monetization. But network operators around the world continue to face ever-increasing OPEX bills; bringing together a fragmented vendor landscape, disparate architectures and legacy technologies is proving costly and time-consuming. A new approach is needed.

Network Lifecycle Automation: an end-to-end approach, from investment to monetization

Infovista is the world's first independent software vendor providing a carrier-grade, cloud-native Network Lifecycle Automation platform designed for the 5G era. Our end-to-end solutions enable not only different teams within operations, but all of your departments – across planning, deployment, operations and monetization – to work with a single, interoperable platform of applications that we call the Network Lifecycle Automation (NLA) portfolio.

NLA unlocks the full potential of 5G by dissolving traditional system silos, and augmenting processes across the lifecycle with insights, intelligence and automation so you can: accelerate network roll-outs while targeting investments for maximum returns; establish and protect new enterprise revenue streams; prioritize operations to optimize customer experience; and introduce automated decision-making to optimize costs without sacrificing performance.

Apply your insights and capabilities across phases without being constrained by functional silos

Infovista's Network Lifecycle Automation portfolio is a cloud-native framework of applications that function together to enable business automation levels that would not be possible with separate system silos. It supports use cases that feature one or more of four distinct categories of automation spanning multiple lifecycle phases:

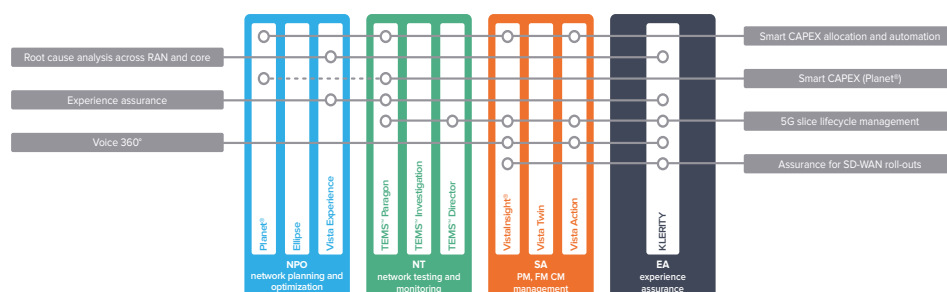
- **Data management automation:** Enriching the intelligence and insight driving a given process by automating the flow of data across lifecycle phases, data sources and network domains
- **Analysis automation:** Optimizing network performance under constantly changing environmental conditions, with continuously improving ML/AI-driven open- or closed-loop orchestration
- **Workflow automation:** Delivering faster business processes by replacing an increasing subset of manual activities with automated workflows
- **Decision automation:** Optimizing business outcomes such as SLA adherence and QoE, through closed-loop automation of decisions that involve complex scenarios, trade-offs and prioritizations

“... this expansion is based on the technical strength of the solution and Infovista's long-term vision towards a full network lifecycle automation solution, which we strongly support.”

Essa Haider | Ooredoo,
Director Network
Planning and Design



Network Lifecycle Automation: more automation through multi-phase 'traversal' use cases



Tier 1 CSPs today are looking for ways to augment and enrich planning, testing, operations and monetization processes by sharing insights and data between phases in an automated way. For example:

- **Smart CAPEX investment:** Introducing service performance and customer behavior insights from live operations to planning, prioritizing densification and expansion to maximize high-value customer experience and revenue
- **5G slice lifecycle management:** Continually optimizing resource allocations for network slices to deliver optimal SLA and QoE at the lowest possible resource cost
- **Cross-domain root-cause analysis:** Reducing fault severity and impact by automating detection and resolution of cross-domain root-causes
- **Customer experience assurance:** Proactively optimizing customer experience by identifying the network and environmental conditions that impact on perceived service quality, prioritizing actions to prevent negative customer impact
- **Voice 360°:** Monitoring and optimizing for specific services, such as voice over IP, by tracking trends in service KPIs such as Mean Opinion Score (MOS) and orchestrating the network to maintain expected quality.

Simplify and accelerate your automation journey with a step-by-step path that pays for itself

Our Network Lifecycle Automation portfolio is deployable in stages, with each offering ever-greater automation levels, providing cost savings and monetization opportunities such that your solution investment pays for itself at each step.

We build a tailored business case in partnership with you

We work with our customers to build a business case for each step in your automation journey, always taking your unique business context and challenges into account.

“These cloud-native assurance and analytics solutions should round out Infovista’s existing portfolio of solutions that span the network lifecycle.”

James Crawshaw | Omdia,
Principal Analyst



Gain a holistic view of your network and services

Establish the building blocks for a 360° view of your network by integrating your data sources across network elements, network traffic, user devices, applications and services, geo-spatial intelligence and network configuration data, for actionable intelligence.



Introduce precise automation workflows

Improve speed, accuracy and efficiency of operations by automating repetitive manual tasks within network lifecycle phases for inter-phase (traversal) automation.



Automate network lifecycle and operational processes

Deliver a step-change in automation levels, optimizing costs for customer experience and SLA performance.



Optimize RoI by targeting network investments for business performance, including high-value customer QoE and enterprise SLAs.

Handle complex programmable networks



Optimize efficiency and performance for complex networks with automated, continuous optimization of network configurations for predicted workloads, prioritizing your activities to deliver **optimum reliability and performance** to the most valuable revenue streams.



Run 5G services and slices at scale

Combine network, experience and application performance data with orchestrator integration across all lifecycle stages, for lifecycle automation that optimizes costs without sacrificing reliability or performance.

Our cloud-native portfolio evolves with your business

Innovate and evolve at pace. Our Network Lifecycle Automation portfolio of products and solutions is built on a cloud-native platform, supporting a modern DevOps approach to innovation, and localization of solutions and use cases in your unique business context.

Optimize your system TCO. However complex your network and services become, and however rapidly the demands on your network increase, our Network Lifecycle Automation portfolio can scale up and out seamlessly. With fully containerized architecture, it can be deployed across any cloud surface, from public, to private, to hybrid, to bare metal, or any combination. You only use the computer and storage resources that you need at any given point in time.



Planning

Infovista Planet, Ellipse and GeoData: the global-leading portfolio in planning solutions, with many of the world's largest CSPs among a growing list of hundreds of customers, and counting.



Testing and deployment

Infovista TEMS™ suite of products and solutions, the global leading portfolio for testing and deployment of the world's most complex and advanced networks today.



Operations

The Vista, KLERITY and 5View suite of service and experience assurance products and solutions, providing actionable insights across network, service, application, subscriber and traffic.



Monetization

The KLERITY™ customer experience assurance platform, providing the visibility into perceived experience required to monetize advanced new connectivity services.

Introduce customer intelligence into every phase of the network lifecycle

The introduction of KLERITY™ to the Infovista portfolio enables the enrichment of its solutions with customer experience insights, enhancing your business performance not just in assurance but across the entire network lifecycle.



Customer-driven planning

Maintaining profitability in the face of 5G investment requires a shift in focus from coverage to monetization and RoI. Rich, accurate insights into how networks influence customer behaviour and spend enable a data-driven investment approach based on projected revenue. NLA enables your planning teams to:

- Optimize infrastructure investments to deliver the optimum customer experience at the lowest cost
- Prioritize roll-outs to deliver the highest RoI in the shortest time by targeting coverage and performance in areas with the highest revenue potential
- Accelerate 5G roll-outs with ML/AI-driven analytics automation for accurate modelling of signal propagation with highly accurate 3D geospatial data
- Maintain reliable customer experience in non-cyclical network load scenarios, by automating the discovery of relationships (correlation rules) between network and service performance and customer experience

Customer-driven deployment

Programmable networks are changing the remit of testing and deployment from an as-needed 'pre-production' step in a multi-year lifecycle to a critical part in continuous activity. Understanding and predicting customer behaviour and the network factors involved enables:

- More reliable network performance with lower costs, by automating the triggering of network changes in response to predicted customer experience issues
- More accurate prediction of customer experience, by combining active testing, network traffic and resource performance insights, for better targeted deployments
- Better benchmarking across equipment providers by comparisons based on customer experience, not only equipment performance and running costs

Customer-driven operations

In the context of programmable networks, understanding how network performance and events, workload, application and service quality contribute to customer experience is a continuous process. NLA brings these traditional data silos together with automation tools into one platform for real-time actionable 360° customer intelligence, enabling your operations teams to:

- Optimize customer experience by resolving issues with the highest customer impact first, with customer experience and network performance correlation
- Monetize high-margin SLA-based services with pre-emptive, automated troubleshooting for anticipated SLA breaches
- Scale out and maximise revenues from diverse 5G-enabled differentiated services across verticals by orchestrating multiple network slices optimized for combined SLA performance

Customer-driven monetization

Operators' revenues are increasingly directly linked to network and service performance across multiple participants. This presents a challenge: providing transparency across the value chain at scale while controlling costs. NLA automates analysis, calculation and reporting for multi-party settlements, enabling:

- Automated SLA and QoE reporting, with billing and charging integration for highly efficient cross-party settlements at scale



Number of network changes per day in a 5G network



Proportion of operators planning to automate deployment of 4G / 5G networks



Proportion of operators struggling with current network management tools



Proportion of operators expecting cost, revenue, performance and agility benefits from automation

Improve RoI, accelerate roll-outs, reduce costs and enhance performance with Network Lifecycle Automation



Improve RoI by targeting your network investments to deliver business results, by delivering high-value customers the reliability they expect, and unlocking lucrative new revenue streams in areas with large enterprise opportunities.



Accelerate roll-outs by automating complex planning tasks with ML/AI, even for the most complex 5G standalone and programmable networks, without sacrificing reliability, cost-efficiency and performance.



Reduce costs both for management systems and network infrastructure, with lifecycle automation solutions that optimize resource allocation across your services for optimum resource utilization.







Enhance performance by prioritizing your activities to deliver the biggest impact, and automating decision-making processes to optimize network performance in real-time.

Discover our Network Lifecycle Automation product portfolio for every phase you work in

We build a tailored business case in partnership with you

Discover how some of the world's leading network operators use our solutions to optimize CAPEX while accelerating roll-outs, verify 5G sites 5x faster, eliminate up to 70% of manual processes, automate SLA management processes, execute precision network densification and expansion optimized for business results, and leverage AI/ML technologies to achieve ever-increasing levels of automation sophistication and performance.



 Plan and design	 Deploy and test	 Operate and support	 Report and monetize
<p>Discover how our leading planning suite – Planet®, Ellipse, Geodata and Vista Experience – provide the industry's most comprehensive portfolio of design, optimization and analytics tools for RAN to accelerate your wireless project and have a real impact on network experience for your users.</p> <p>Leverage decades of expertise in radio network modelling and optimization, to plan and deliver the best subscriber experience, capacity and coverage at the lowest cost.</p>	<p>Discover how our TEMS™ Network Testing Portfolio allows you to optimize mobile network quality and application performance by measuring end-user experience.</p> <p>TEMS™ delivers the ability to walk test, drive test and dynamically analyze service performance under real-life conditions – indoors and outdoors, and around the clock.</p> <p>TEMS™ enables the measurement and tracking of connectivity, providing visibility into factors affecting application performance.</p>	<p>Discover how our Vista, 5View™ and KLERITY™ portfolio of operations products and solutions provides 360° actionable intelligence into your network, services, applications, traffic, subscribers and devices.</p> <p>Discover and unlock new revenue opportunities by correlating customer experience and behavior with network performance, even for complex programmable 5G networks.</p>	<p>Discover how deep, actionable intelligence into customer behaviour, preferences and utilization can enable you to optimize your network lifecycle for customer experience, and ultimately revenue.</p> <p>KLERITY™ is built on a cloud-native platform that enables the co-creation of use cases to support advanced monetization scenarios, such as OTT video experience assurance and voice over new radio (VoNR) quality monitoring.</p>



About Infovista

Infovista, the global leader in network lifecycle automation, powers complex intelligent networks to ensure they deliver brilliant user experience, maximizing productivity and efficiency, securely. At the core of the company's approach are automation and analytics, enabling Infovista software solutions to span the entire network lifecycle. From managing service legacy networks to optimizing 5G deployments, from providing applications visibility to securing and controlling the extended edge, Infovista helps Communications Service Providers and Enterprises to fully unlock their digital business potential. More than 1,700 customers, including 350 Mobile Network Operators, around the world rely on Infovista.