# Ribbon Acumen – Intelligent Automation Platform

For everything you've ever done… and anything you'll ever do…

**Slash OPEX, accelerate service velocity, and rejuvenate revenues with an AI-based, cloud-native, network automation platform. Ribbon Acumen provides comprehensive operational insights, delivers advanced intelligence, and optimizes implementations.**

Service providers are under intense pressure to reduce costs while improving business agility. New cloud-native networking solutions are a compelling way to lower expenses and accelerate service velocity, but it can take years to transition to a cloud-based architecture. And certain network components like optical networking equipment simply cannot be virtualized. In reality, for the foreseeable future most service providers will rely on some combination of network technologies including hardware-based networking equipment, virtualized software elements, and legacy gear.

So how do you bring cloud agility and simplicity to your existing network infrastructure? How do you take advantage of modern CI/CD tools and DevOps practices? How do you unify and automate operations across hybrid networks with different network elements, administrative interfaces, and APIs? How do you eliminate the inherent security gaps and blind spots that come with a siloed environment? How do you monitor and troubleshoot network functions and services running in the cloud, where you don't have the physical access or admin privileges necessary to resolve certain issues? How do you accelerate services innovation and create new revenue streams?

The answer to all of these questions is an intelligent network automation platform.

## Introducing Ribbon Acumen

***Simplifying, Modernizing, and Automating Network Infrastructure***
Ribbon Acumen is an intelligent automation platform, specifically designed to help you reduce OPEX, accelerate service velocity, and grow revenues. The cloud-native platform helps streamline and optimize operations across an entire network—from layer 0 to layer 7 of the OSI model—for both voice and data. It supports Ribbon networking components, as well as 3rd party elements, with single pane-of-glass management and uniform administration.

Acumen includes pre-built applications, and low code/no code app development tools that let you create or customize applications with little or no coding. Acumen's advanced AI/ML engine can be part of that customization; you can invoke it to analyze, correlate, and act upon data to automatically optimize network performance, mitigate threats, resolve issues, etc.

### Key Business Benefits

- Simplify operations, reduce expenses, and improve business performance
- Accelerate time-to-market and increase competitive differentiation
- Improve security posture and mitigate risk
- Boost customer satisfaction, trust, and retention
- Protect and extend previous investments

Solution Brief

## The Solution: Ribbon Acumen
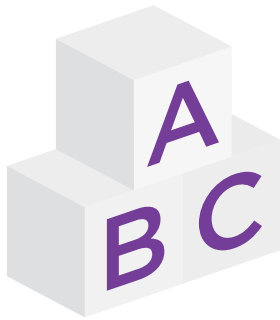
The comprehensive Ribbon platform includes:

- Acumen **A**pps – out-of-the-box applications that provide rich observability, analytics, artificial intelligence, automation, orchestration, network management, and security functionality.

- Acumen **B**uilder – low-code/no-code development tools and frameworks that make it easy to extend out-of-the-box applications or create your own apps.

- Acumen **C**ontainer Environment – an optional, complete, self-contained Kubernetes environment that lets you take full advantage of cloud-native services and DevOps practices, even if you don't have a cloud-native environment in place today.

Whether your network is composed of hardware-based elements, virtualized software components, cloud -native elements, or some combination of networking solutions, you can extract value from Acumen. Acumen is integrated with multiple Ribbon platforms and solutions, including older generations of Ribbon hardware and software. The state-of-the-art platform is flexible and extensible, and designed to support whatever comes next, whether it is a new Ribbon offering or a third-party solution.

Ribbon recognizes that many service providers may have an organization-wide automation strategy. That's why Acumen is designed to be open at every stage, allowing you to leverage existing data, service, and automation investments. You can use Acumen to extract insights from Ribbon elements and forward them to third-party automation platforms to orchestrate processes. Or you can use third-party automation tools to feed Acumen applications or workflows. Pieces of data or workflows from one solution can be combined and intelligently correlated with another to drive a new workflow. The approach eliminates the need for costly and time-consuming systems integration projects to incorporate Ribbon elements into an organization-wide automation solution.

| OPEX ∨ | Revenue ∧ | Service Velocity ∧ | Security ++ |

### Why Acumen Container Environment?

Businesses in just about every industry are adopting cloud-native applications agile development and deployment practices to accelerate the pace of innovation and reduce cost and complexity. But transitioning to a cloud-native approach—identifying the right orchestration tools and container platforms, setting up infrastructure—takes time, resources, and budget.

Acumen Container Environment streamlines the transition to a modern, cloud-native approach.  The complete, self-contained, containerized environment provides everything you need to run cloud-native applications, even if you don't have a cloud-native environment in place today. With Acumen Container Environment, you can deploy cloud-native applications in physical, virtualized, or containerized environments in private or public clouds, using modern CI/CD tools and DevOps practices. And down the road, if you decide to roll out your own Kubernetes environment, you can easily transition Acumen apps without rewriting code.

## A Modern, AI-Based, Network Automation Platform

Ribbon Acumen provides comprehensive insights, delivers advanced intelligence, and accelerates implementation, helping you reduce OPEX and CAPEX, accelerate service velocity, and increase revenues.

### Insights

Acumen lets you efficiently monitor and track end-to-end network utilization, performance, and security events and statistics, helping you optimize costs, boost service quality and network availability, as well as mitigate risk. The platform improves **observability**, providing deep, unified visibility across networks, equipment, and applications.

With Acumen, you can transform raw data into meaningful and actionable information. The platform supports an extensive collection of **analytics** capabilities, including:

- Descriptive analytics that let you easily identify key business patterns and customer trends.

- Predictive analytics to help you proactively detect and resolve issues before they impact customers and affect your business.

- Prescriptive analytics so you can make well informed, data-driven business and network engineering decisions.
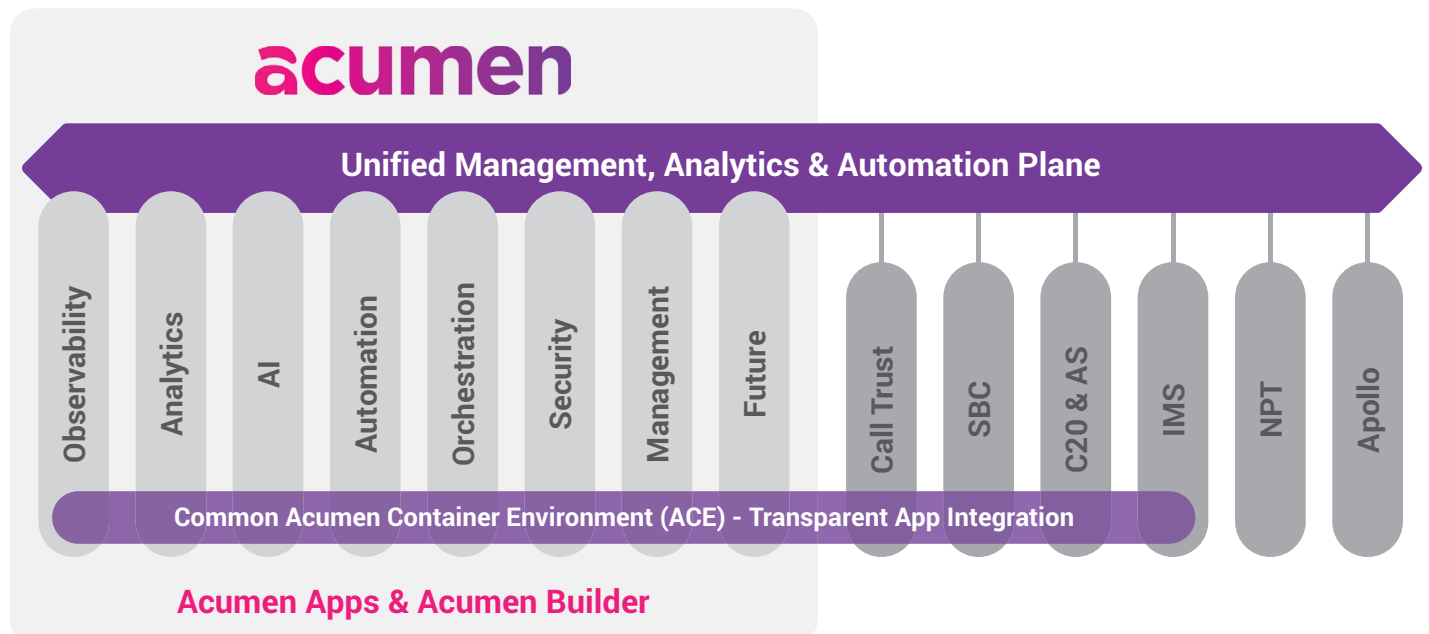
### Key Functional Capabilities

- Unified observability across networks, equipment, and applications
- Descriptive, predictive, and prescriptive analytics
- Built-in, advanced AI/ML engine
- Automated provisioning, lifecycle management, and network operations
- Holistic security with intelligent remediation

### Intelligence

Integral **AI and ML** technology helps you streamline and optimize network planning, support, and traffic engineering functions and processes. The platform ingests, correlates, and analyzes disparate data from diverse sources, at scale, helping you intelligently detect anomalies, isolate issues, identify probable causes, forecast capacity requirements, and optimize network designs.

Advanced **automation** functionality helps you speed up network and security operations by eliminating manually intensive, time-consuming, and error-prone processes. You can automate responses, workflows, and actions to effortlessly resolve issues and efficiently remediate threats in real-time.

## acumen

**Unified Management, Analytics & Automation Plane**

| Observability | Analytics | AI | Automation | Orchestration | Security | Management | Future | Call Trust | SBC | C20 & AS | IMS | NPT | Apollo |

**Common Acumen Container Environment (ACE) - Transparent App Integration**

**Acumen Apps & Acumen Builder**

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**Implementation**

Acumen's **orchestration** capabilities let you automate routine provisioning, application lifecycle management, and policy management functions and take full advantage of all the benefits of software-defined networking and programmable infrastructure. The platform lets you deliver customized, high-value services—quickly and efficiently—helping you increase business agility and accelerate revenues.

Acumen enables **holistic security**, providing real-time, automated protection across networks, devices, and applications. The integral AI/ML engine helps overcome security gaps and blind spots by holistically analyzing and correlating threat intelligence data from across your network. Acumen can correlate massive datasets, beyond what even a team of experts can analyze. It can respond to threats in one domain by acting in another, potentially reconfiguring or restricting network access or disabling a compromised component to protect other elements. Acumen lets you identify and mitigate attacks before an adversary can inflict serious damage, avoiding service disruptions, and improving customer experience.

Acumen automates routine **network management**, troubleshooting, and repair functions improving service quality, reliability, and customer satisfaction, while freeing up network operations teams to focus on more strategic activities. The platform proactively identifies and resolves performance bottlenecks, intelligently detects and remedies potential issues, and automatically optimizes network resource utilization and costs.

**Next Steps**

Looking to simplify, modernize, and automate your network infrastructure? Acumen can help you reduce operations expense and complexity, streamline the introduction of cloud services and practices, and accelerate the pace of innovation. To learn how Acumen can help your company slash OPEX, increase service velocity, and restore revenue growth, contact Ribbon today.

**Contact Us**  Contact us to learn more about Ribbon solutions.

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