

SOLUTION BRIEF

Intelliden Policy Based Compliance Management Total Network Compliance for Carrier Class Networks

Intelliden Policy Based Compliance Management (PBCM) is a comprehensive network compliance application, which defines and manages policies to continually validate device configurations and intelligently resolve non-compliant conditions. PBCM automates the complete network compliance lifecycle to define policies, validate devices against policies, resolve violations and report results in a continuous and closed-loop manner.

Unique PBCM Capabilities

- *First* application to fulfill the **total network compliance** needs — including regulatory, industry, security and operational — of network-driven organizations
- *First* application to support the **dynamic compliance** requirements of complex, multi-vendor, mission-critical network environments
- *First* application to provide **intelligent remediation** by translating network policies into actionable resolutions
- *First* application to create an **effective bridge between business and IT** to enable organization-wide network compliance

Network Compliance Drivers and Challenges

Despite the high costs of non-conformance, most communications service providers (CSPs) lack the ability to automatically and intelligently create and enforce network policies for their mission-critical networks. Effective implementation of comprehensive compliance policies in a dynamic, multi-vendor, complex network environment is a challenging task. It becomes even harder when CSPs need to support diverse service requirements and multiple personnel need to touch the devices often through manual processes, scripts or proprietary solutions. As a result, CSPs face several network compliance challenges, including:

- **Deliver Services Accurately and Rapidly** — CSPs need to enable rapid and accurate provisioning of ‘next gen’ services (e.g. IPTV, VOD, VoIP) over convergent networks and meet stringent service level agreements (SLAs) for their customers. However most lack rules and procedures, or “policies”

to ensure accurate network configuration and change management. Device misconfigurations can lead to downstream or cascading impact on other parts of the network. The net result is higher provisioning errors, breach of customer SLAs and unreliable quality of service.

- **Minimize Network Security Risks** — Security vulnerabilities and violations can be devastating for ‘trusted carrier networks’. According to some analysts, up to 80% of network security problems are directly related to faulty configurations. CSPs need to minimize security breaches so that sensitive customer information is not compromised.
- **Lower Operational Costs and Eliminate Service Outages** — Manual processes and script-based solutions are unreliable and cannot scale to meet the operational requirements of CSP networks. These are highly complex environments with tens of thousands of devices from

multiple vendors. They are also highly dynamic due to frequently changing customer and service demands. In order to minimize operational costs and eliminate service disruptions, network complexity must be tamed.

■ **Reduce Regulatory and Industry Compliance**

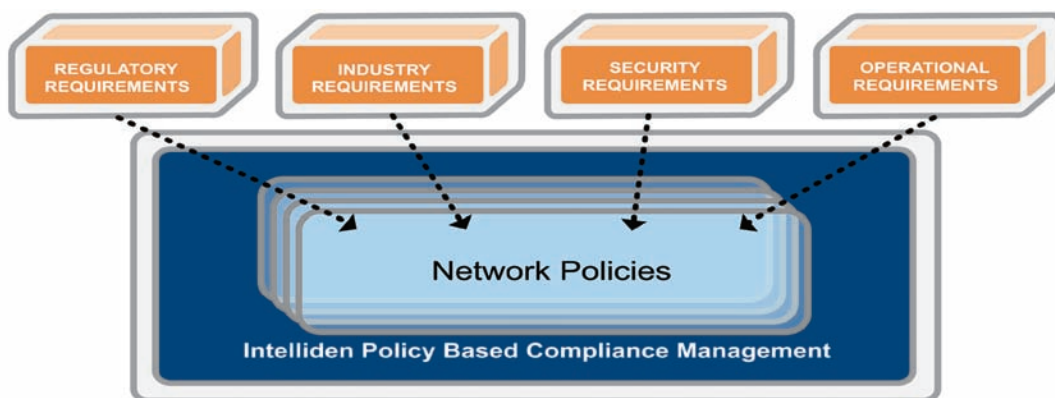
Overhead — CSPs also face a plethora of regulatory and industry compliance audits and costs. Some of these are due to legislative initiatives such as the Sarbanes-Oxley Act (SOX) in the United States and the European Union’s Safe Harbor regulations. Others result from industry mandates e.g. Payment Card Industry (PCI) Data Security Standard, which requires conformity by any network that supports credit or debit card transactions. According to analyst estimates, these are expected to represent an average of 15% of networking budgets from 2005 through 2009.

Traditional first-generation network compliance solutions are often ‘script based’ and narrowly focused on regulatory or security compliance. They ignore the need for holistic and comprehensive network compliance, which must support all business requirements as they pertain to networks. Traditional network compliance solutions also do not have the intelligence, flexibility or scalability to address complex requirements of carrier class networks. They take a ‘top down’ approach to compliance, where policies are put into practice throughout the network. However without a thorough ‘bottom-up’ analysis based on the real-time state of the network devices and the impact of changes to service delivery, it is virtually impossible to deliver effective network compliance in such environments.

Using its unparalleled networking expertise and deep understanding of network devices, Intelliden has developed a new generation compliance management application. PBCM embodies the flexibility and scalability required to maintain high network availability and flawless delivery of services. PBCM provides an effective way for IT and network staff to gain greater control of their network resources in a dynamic and complex environment. At the same time, PBCM enables timely access to critical network compliance information to business units across the broader organization.

Solution Highlights

- Fulfills the total network compliance requirements of network driven organizations including regulatory, industry, security and operational.
- Incorporates a closed-loop process to support the entire compliance lifecycle, from the implementation of compliance through policy correlation with network configuration, to the validation of compliance and detection of violations, monitoring and reporting.
- Enforces device specific and network wide compliance policies regardless of vendor, type, model or operating system (VTMOS).
- Supports an unlimited combination of network compliance policies and devices, from a few hundred to tens of thousands.



Total Network Compliance from Intelliden

Only Intelliden Policy-based Compliance Management can provide **Total Network Compliance** and meet all the compliance needs of today’s dynamic, complex and heterogeneous CSP networks, including regulatory, industry, security and operational requirements.

- Utilizes intelligent remediation to effectively resolve out-of-compliance conditions on network devices on ad-hoc, scheduled or automatic basis.
- Provides comprehensive reports for executives, compliance departments, security teams and business units, network engineering and operations

for audit purposes which show point-in-time as well as historical data and trends.

- Integrates with 3rd party business and operational applications, e.g. Business Intelligence, Governance, Risk and Compliance Management, Trouble Ticketing and Configuration and Change Management.

Closed-loop Compliance Management Process

Intelliden Policy Based Compliance Management takes network compliance to a new level, with advanced business logic that is sophisticated enough to support an unlimited combination of network compliance policy variables ... essential for large, complex service provider environments, which have extremely dynamic networks and strict requirements for high network availability and security.



Intelliden PBCM manages the entire compliance lifecycle within an on-going, closed-loop process that defines compliance policies, runs validations on the active network configuration, provides automated or user-driven resolution of compliance violations and provides compliance reports for audit and business purposes.

Compliance Without Limits — Define Policies

- Supports an unlimited number and combination of compliance policies

- Enables policies to capture all possible rules and standards
- Fosters re-use of existing policies through parameter management
- Incorporates a drag and drop, easy to use GUI for rapid policy creation
- Provides out-of-the-box policies, e.g. NSA Router Guidelines

“Always On” Compliance — Validate Devices against Policies

- Ensures continuous and accurate enforcement of policies using the Intelliden Policy Engine
- Validates against any device type
- Provides support for more than 1 million validations per hour
- Supports scheduled, ad-hoc and automatic validation

Intelligent Remediation — Resolve Compliance Violations

- Applies corrective actions automatically, or through user intervention
- Allows the corrective action based on type of violation, historical compliance status of the device and other user defined parameters
- Supports compliance exemptions and avoids unnecessary alarms

Audit Ready — Generate Compliance Reports for Audit Purposes

- Publishes a variety of standard and customizable reports for auditing and business purposes
- Dedicated reports for both business and technical audiences

Designed for Carrier Grade Networks

Intelliden Policy Based Compliance Management has been specifically designed for the compliance needs of carrier grade networks. It manages the inherent network complexity of such environments and helps to balance competing demands of

absolute compliance and guaranteed service delivery. It also provides support for dynamic compliance at multiple levels. Compliance policies for network operations need not be static and can be easily adapted as business needs evolve. Finally it provides an actionable solution for effective collaboration between those responsible for articulating compliance requirements (e.g. executives, lines of business and compliance and security officers) and those responsible for the implementation of those policies (e.g. network and IT professionals).

Integration with Existing Management Systems

Intelliden Policy Based Compliance Management is designed as an open architecture solution to facilitate integration with 3rd party business and operational applications, e.g. Business Intelligence, Governance, Risk and Compliance Management, Trouble Ticketing and Configuration and Change Management.

Platform and Architecture

PBCM is a packaged software application, which operates on a variety of platforms including Solaris and Linux. PBCM is built to operate on the Intelliden R-Series® platform, which

continuously maintains the real-time state of the network. It serves as an abstraction layer for the underlying network by translating the device configuration information into standardized device models. It also provides a single control plane for making any changes to the network devices in a consistent manner. PBCM uses a relational database to store application data, compliance definitions and historical policy validation information.

Service and Support

Intelliden Professional Services Organization offers a wide range of service offering programs to ensure customer success. These are delivered through a unique combination of people, processes, tools and partners, resulting in high levels of customer satisfaction.

For more information about Intelliden products and services, visit www.intelliden.com or contact your local account representative or info@intelliden.com.

Intelliden (www.intelliden.com) is a leading provider of Intelligent Networking Solutions that enable organizations to control, manage and scale their networks. With Intelliden solutions, network-driven organizations can deliver next generation services, ensure compliance and completely automate network change and configuration management. Intelliden's innovative and patented solution is the first example of truly "intelligent automation" of networking devices. It is the only solution that gives companies the real-time state of the network—the key to ensuring accuracy across increasingly dynamic networks. Intelliden has been proven in global telecom companies, financial services organizations, federal government agencies and other network-driven businesses.

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