



Data Privacy Composite Application by SAP and Cisco



Technical Brief

End-to-end Compliance: From the Application to the Network

The Data Privacy composite application by SAP and Cisco enables businesses to proactively enforce global and local data privacy policies throughout their extended enterprise—from business rules and applications to the IT infrastructure and networking. This solution brings together real-time communication and intelligent network services from Cisco and the SAP governance, risk, and compliance (GRC) platform. Jointly developed and supported by Cisco and SAP, this network-enabled solution helps your company to reduce liability, business disruption, and incidents of compromised data. You can manage risk more effectively while demonstrating continuous compliance.

Product Overview

The Data Privacy composite application combines compliance policies and controls in SAP GRC Process Control, network policies in Cisco® Application-Oriented Networking (AON) and collaboration services from Cisco Unified Communications (UC) to enable continuous compliance for data privacy. AON checks messages as they traverse the network and enforces SAP GRC Process Control policies established at the application layer.

The solution includes the following features:

- **Establishing controls.** SAP GRC Process Control models risks and regulatory compliance goals and policies, and establishes business rules for when and how issues are handled and reported. Process Control tracks issues from detection and remediation to resolution and reporting.
- **Real-time monitoring.** Cisco AON services implement controls and policies in the network layer, and provide ongoing monitoring and prevention of violations.
- **Location and presence.** Cisco Unified Communications services support location and presence to facilitate fine-grained issue resolution.
- **Collaboration for Decision Making.** Cisco Unified Communications enables real-time communication and collaboration to speed decision making and support rapid issue resolution.
- **Analytics.** Integrated heatmaps deliver global transparency and greater insight into incident hotspots. Reports speed audit preparation and demonstrate compliance.

The Solution: What it Does

The Data Privacy composite application lets you deploy, monitor, and enforce Data Privacy composite application by SAP and Cisco based on your specific data privacy policies.

This comprehensive solution lets you do more than address compliance issues as they occur. It breaks down the silos of compliance that businesses have built up around individual applications and regulations, allowing you to get a unified view. Through SAP GRC, it also provides incident reports and analytics that enable your business and IT staff to evaluate and build on your compliance policies and identify areas for improvement. The sophisticated reports and analytics also let you demonstrate continuous compliance during audits.

The composite application brings together business policy with real-time enforcement. The solution is highly flexible and extensible to support new requirements as your organization's needs change and evolve.

SAP GRC Process Control

The SAP GRC Process Control application is part of SAP solutions for GRC. The application lets you embed automated controls into your cross-enterprise business processes so you can eliminate resource-intensive manual control activities to address critical business risks with a rationalized set of automated controls. This helps you make sure that your organization meets compliance mandates in the most timely and cost-effective fashion while optimizing operational efficiency.

SAP GRC Process Control enables you to document your control environment. You can establish controls across multiple business processes for key risks using a combination of automated controls, manual controls testing, and self-assessments, and continuously monitor their effectiveness globally across the organization.

The Solution: How it Works

The Data Privacy composite application connects SAP GRC Process Control and Cisco AON to combine policy, incident reports, remediation plans and response collaboration.



Figure 1. First, appropriate process and organizational hierarchies are set up in SAP GRC Process Control.

Application Intelligence in the Network

The Cisco® Application-Oriented Networking (AON) platform consists of industry-leading hardware and software that facilitate application-fluent networks based on highly distributed, service-oriented, and legacy architectures. Cisco AON embeds application intelligence into the network to better meet the underlying needs of applications for multi-enterprise security, real-time visibility, event-driven messaging, optimized delivery and other core integration and deployment services.

Cisco AON natively understands the content and context of application messages. It can be deployed in-line or out-of-band and conducts operations on messages in-flight according to business-driven policies and rules. Cisco AON delivers this application intelligence to complement and extend Cisco integrated network services technologies.

The Data Privacy Composite Application utilizes AON for two key functions. First, AON provides the integration layer between the SAP GRC application and the Cisco network. Second, the Data Privacy composite application uses AON to capture and correlate events, such as potential data privacy violations. For more information on Cisco AON, please visit www.cisco.com/go/aon

Network policies and controls are then set up in AON to describe what “content” or data patterns AON should look for and in what “context,” such as email attachments.

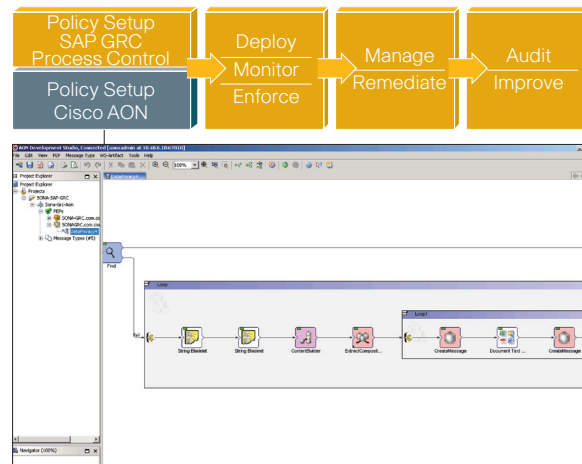


Figure 2. Next, Cisco AON is set up to capture and correlate events, such as potential data privacy breaches.

Once the policies are set up, you can deploy, monitor and enforce these policies and controls using specific rules. AON has two enforcement options. It can analyze which activities would be in violation of these policies and either “block” the data before a violation occurs or “allow but notify” on a particular transmission. Cisco infrastructure location awareness can also enforce policy based on location. If a policy states that data transmissions from or to a specific location should not be allowed, the location-aware Cisco infrastructure can enforce that policy.

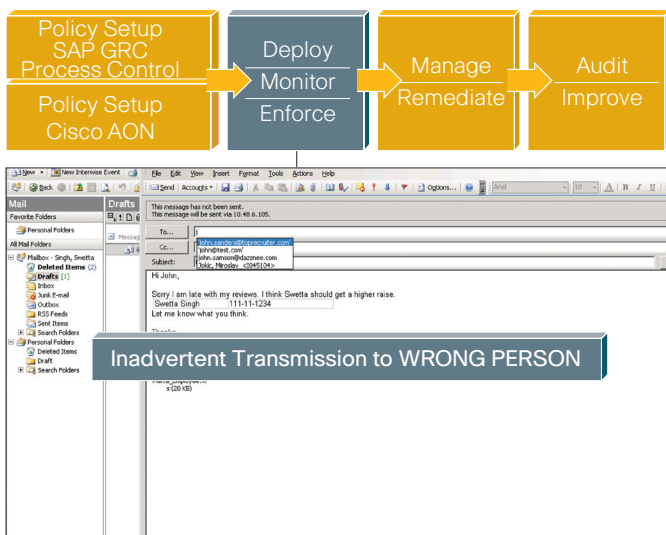


Figure 3. Third, a potential violation is detected.

If a potential violation is detected, AON uses the Data Privacy composite application to notify SAP GRC Process Control. SAP GRC Process Control aggregates the event and evaluates it against the policy, and the resulting workflow enables you to manage and remediate the issue. Notification via Cisco Unified Communications can be configured for multiple form factors including SAP GRC Process Control inbox, Cisco IP Phones and hand-held devices depending on the critical nature of the incident.



Figure 4. Fourth, you can collaboratively manage and remediate the issue.

Once the compliance manager receives notification, they can access the incident report in their SAP GRC Process Control inbox and evaluate the issue. Using Cisco Unified Communications, the manager can bring together a stakeholder team to collaborate via a Web conference, voice, or videoconference to discuss the issue in more depth. Since the solution is integrated with the rich Unified Communications and Collaboration services from Cisco, stakeholders can be connected via Cisco WebEx® for a collaborative decision-making session. Once a decision is made, a remediation plan is created in SAP GRC Process Control, and an owner is assigned who can execute the remediation plan and close the issue.

A rich set of analytics and reports enables you to audit, report and continuously evolve and improve your ability to enforce Data Privacy composite application by SAP and Cisco across your company. The SAP BI Heatmap allows you to look at incident hotspots, set thresholds, and perform other tasks, and provides a more holistic view of the enterprise. You can quickly see the areas of greatest risk, where the most incidents occur or even get detailed reports on the incidents.

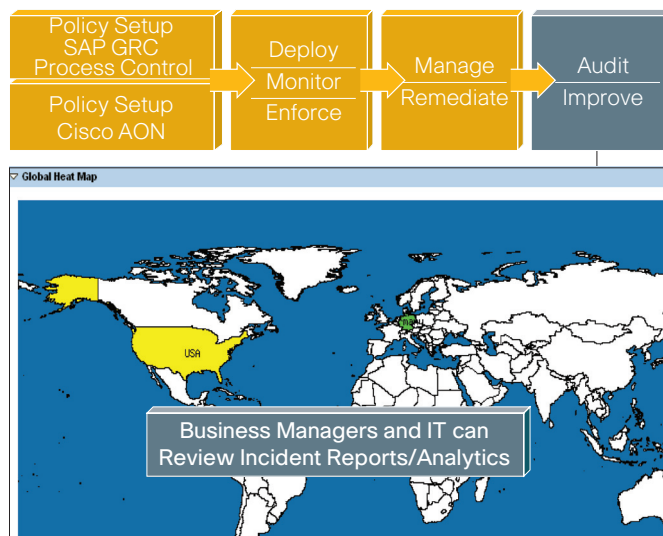


Figure 5. Finally, management can continuously audit and improve their compliance processes.

Architecture: Flexible and Scalable SOA

The Data Privacy composite application was designed to use your existing IT and application infrastructure, enabling you to rapidly achieve enforcement of data privacy across your extended enterprise. Based on Cisco network services and SAP's Enterprise SOA, this solution is designed for flexibility and scalability.

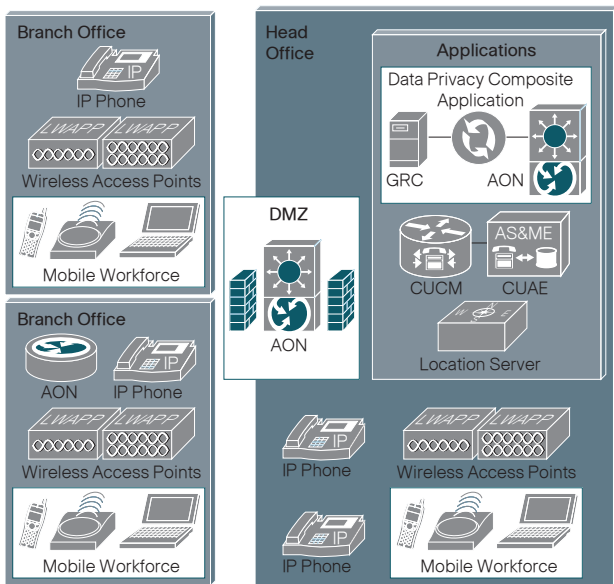


Figure 6. The Data Privacy composite application is based on Cisco network services and SAP's Enterprise SOA (Services-Oriented Architecture).

Features and Benefits

The Data Privacy composite application combines the powerful features of SAP GRC Process Control and Cisco AON and UC to enable the following:

- Set policy based on contents and context
 - Message-level rather than packet-level inspection
 - Message and attachments as well as file contents checked
 - Source and destination verified against compliance rules
 - Compliance policies set up at the application layer

- Intercept risk before it becomes an incident
 - Prevention of inadvertent disclosures
- Create, manage, and enforce local policies
 - Powerful incident management and reporting
 - Local incident response
 - Global reporting, audit preparation and heatmaps
- Respond quickly to and address data breaches
 - Automated incident notification
 - Integrated to email and VoIP
 - Interactive collaboration using Cisco WebEx or Cisco MeetingPlace®
 - Location-aware notification of local compliance resources

System Requirements

- SAP Process Control v2.5
- SAP NetWeaver 7.0
- SAP NetWeaver BI
- Cisco AON v3.0
- Cisco Unified Application Environment v2.3.0.1425 GA
- Cisco Unified Communications Manager CCM 4.2(3)



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