



SAP® SOLUTIONS FOR GOVERNANCE, RISK, AND COMPLIANCE

SOLUTION OVERVIEW

A UNIFIED APPROACH TO GOVERNANCE, RISK, AND COMPLIANCE



“General Mills uses SAP as the global platform for integrated transaction processing and segregation of duties in ensuring Sarbanes-Oxley compliance in the area of information systems. Software and business processes that streamline and advance a company’s risk management and compliance capabilities are an important aspect of corporate governance. SAP tools that deliver an integrated solution across the enterprise are an important and welcome new advance in this important area.”

Michael Carr, Director of Information Systems, General Mills Inc.

SAP® solutions for governance, risk, and compliance (SAP solutions for GRC) promote business viability by unifying corporate strategy, control initiatives, opportunity discovery, and loss mitigation across the extended enterprise. A unified approach to GRC overcomes the challenges of driving corporate strategy development, regulatory compliance, and risk management across disconnected systems, regions, and functions, creating increased business performance and competitive advantage. By managing GRC across the extended enterprise, you can evaluate processes and strategies within the company and extend them to partners, suppliers, and customers, truly representing the reach of the enterprise. The SAP GRC technology foundation enables GRC processes across SAP and non-SAP systems and works with SAP partner content, technology, and applications to provide an effective, unparalleled GRC solution.

Only SAP solutions for GRC automate end-to-end GRC processes, including corporate governance and oversight, risk management, and compliance management and reporting. SAP solutions for GRC include the following components:

- The SAP GRC technology foundation delivers core business and technical functionality to fully automate end-to-end GRC processes across the extended enterprise, including GRC partner solutions and disparate applications, to reduce business and technical complexity and costs.
- The SAP GRC Corporate Sustainability Management application promotes the profile and brand of the enterprise by analyzing and disclosing corporate initiatives to improve global economic, social, and environmental conditions.
- The SAP GRC Repository application delivers GRC content based on both internal corporate policies and best practices from the partner ecosystem to address GRC initiatives across the extended enterprise.
- The SAP GRC Risk Management application balances business opportunities with financial, legal, and operational exposure to minimize the market penalties from high-impact events.
- The SAP GRC Access Control application identifies and prevents access and authorization risks in cross-enterprise IT systems to prevent fraud and reduce the cost of continuous compliance and control.
- The SAP GRC Process Control application optimizes business operations and ensures compliance by centrally monitoring key controls for business processes and cross-enterprise IT systems.
- The SAP GRC Global Trade Services application embeds regulatory and corporate policies into trade processes to automate compliance and cut costs.
- Applications for environmental compliance align business processes with environmental, occupational safety, and product safety regulations and corporate policies to ensure proactive compliance.

The unified SAP solutions for GRC act as a strategic business weapon to protect brand and reputation, master uncertainty, optimize opportunity, and free resources for innovation and growth.

BUSINESS FRAGMENTATION HINDERS INNOVATION AND GROWTH

GRC has become a top boardroom priority for a number of reasons – the recent rash of corporate mismanagement scandals, increased emphasis on business process transparency and accountability,



growing concern about data privacy protection and infrastructure security, and the difficulties involved in responding to unexpected interruptions in business. Companies face stiff penalties for noncompliance or the impact of unmitigated risks, not to mention the

damage incurred to brand image and market position. Equally important, it is becoming clearer to management that even small operational weaknesses can hurt corporate performance – from an unexpected supplier inventory shortage that impacts revenue to a product that doesn't comply with environmental standards.

Managing governance, risk, and compliance is becoming increasingly difficult because most companies have fragmented and manual GRC processes that produce an abundance of data that obscures the true risk. Disconnected workflows and little or no integration between GRC processes and technology result in delayed alerts and actions. Fragmented processes exacerbate the already difficult task of managing GRC activities across an extended enterprise, when companies really need sophisticated business processes and organizational structures. Together, these challenges translate into onerous and inefficient monitoring and reporting requirements that make GRC a costly obligation.

Implementing multiple, disconnected applications for selected processes, departments, and systems does not solve the problem. In fact, such an approach only adds to fragmented and incomplete GRC management and reporting. By following a unified approach to GRC with an integrated suite of applications, companies can:

- Predict and prevent risks
- Increase business performance
- Drive increased competitive advantage

A Definition of Governance, Risk, and Compliance

- **Governance manages the strategic directives a company wants to follow.**
- **Risk management assesses the areas of exposure and potential impacts.**
- **Compliance is the tactical action to mitigate risk.**

SAP Snaps Up Virsa Systems to Enhance Compliance Story,
AMR Research, April 3, 2006

. . . DEMAND INNOVATIVE SOLUTIONS



SAP: TURNING GRC INTO COMPETITIVE ADVANTAGE

SAP solutions for GRC form the industry’s most comprehensive, integrated portfolio of applications that promote business viability by unifying corporate strategy, control initiatives, opportunity discovery, and loss mitigation across the extended enterprise. These solutions give you the visibility you need to stop simply reacting to business risks and events by moving to proactive business predictability and performance.

SAP delivers world-class, integrated applications that leverage a common software platform and a central GRC content repository. When deployed together, these applications form a unified solution for GRC. And because all the applications are integrated, they can break down barriers to efficiency across different regulations and mandates. (See Figure 1.) These applications reach into existing SAP and non-SAP

software to embed compliance functions across the enterprise and beyond, giving you the real-time visibility you need to ensure effective business operations and maximize competitive advantage.

Centralized Repository

The SAP GRC Repository application centrally documents and stores all governance, risk, and compliance information for both horizontal and industry-specific needs. The repository centrally manages compliance frameworks, policies, processes, risk and control libraries, test plans, remediation cases, and evidence.

The repository gives a complete, enterprise-wide view of all GRC activities, so you can analyze risk, make informed decisions, and implement the most effective controls to satisfy multiple control initiatives and regulatory mandates. The application links risks and controls to multiple security and control frameworks – such as the Committee of Sponsoring Organizations (COSO) and Control Objectives for Information and Related Technologies (COBIT) – and to financial reporting mandates and health and safety regulations. By providing a central repository that is both reusable and flexible, SAP solutions for GRC also minimize redundant efforts so you can optimize effectiveness and combat complexity over the long run. The solutions expose opportunities to improve efficiency, optimize risk and return portfolios, and ultimately, increase business predictability and shareholder value.

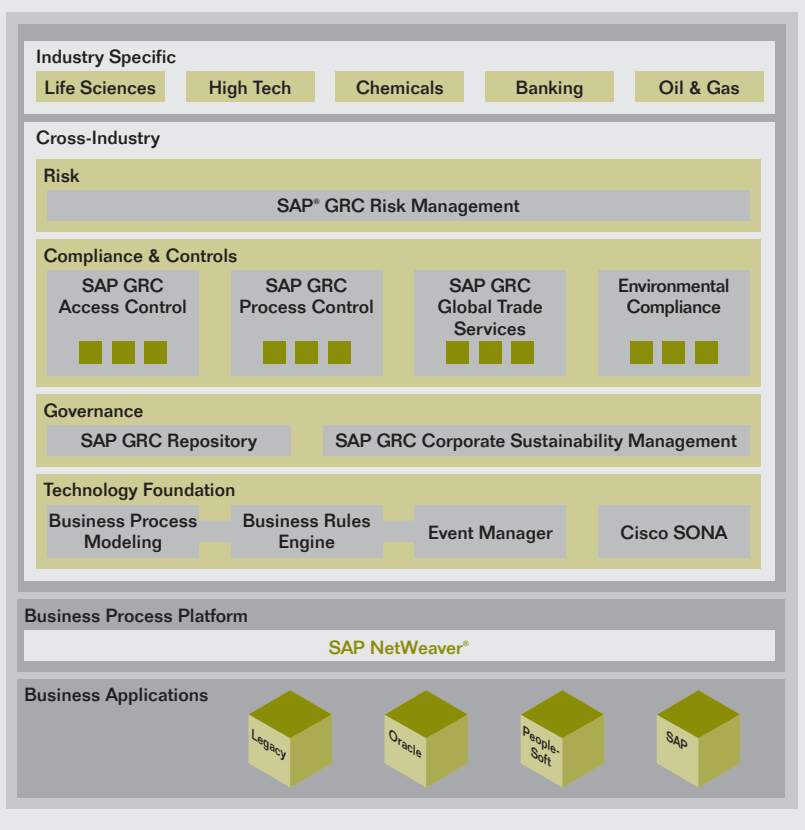


Figure 1: SAP Solutions for Governance, Risk, and Compliance

Corporate Sustainability Management

Companies today are required to track and report social, economic, and environmental program information to suppliers, investors, customers, and global regulatory agencies to demonstrate they are responsible corporate citizens. The SAP GRC Corporate Sustainability Management application enables sustainability reporting – the practice of measuring, disclosing, and being accountable for organizational performance while working toward the goal of sustainable development. Although internationally accepted guidelines identify which metrics to report, traditional sustainability reporting has still been costly and time-consuming. Processes are manual. Collaboration is difficult. Auditing or repeating the exercise is impossible. SAP GRC Corporate Sustainability Management reduces the effort and time required to perform sustainability reporting and increases the credibility and auditability of reported programs.

SAP GRC Corporate Sustainability Management provides the flexibility to define key performance indicators (KPIs) according to stakeholder requirements, quickly access up-to-date information, gather and evaluate relevant data, generate reports, and easily incorporate changes. This enables fast, effective collaborative analysis of the “triple bottom line” – economic, social, and environmental

“A conservative estimate is that organizations are missing out on billions of dollars in potential savings annually through inefficient risk management practices.”

Aberdeen Group, 2006

initiatives – to improve your brand and ensure the sustainable value of your business and your long-term success. Because these reports support transparency about a corporation’s economic, environmental, and social impact, they form a fundamental component in investment decisions and effective market and stakeholder relations, and they reduce operational risk while improving business relations.

Enterprise Risk Management

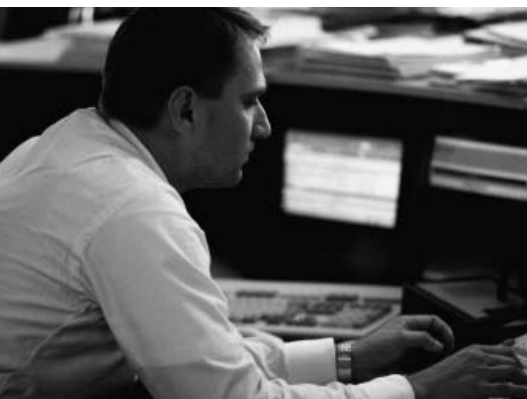
You know that proper risk management improves decision making and creates value. But companies often tackle risk reactively within departmental silos and overlook critical interactions between risks. And because risk management is often regarded as a theoretical exercise with no practical methodology, frontline managers aren’t equipped to properly analyze risk-reward trade-offs and carry out appropriate responses that are backed by quantitative metrics.

The SAP GRC Risk Management application addresses these issues by enabling you to implement proactive, collaborative processes to balance opportunities with financial, legal, and operational risks at all levels of the enterprise. The software provides a best-practice framework for enterprise risk identification, collaborative risk analysis, predefined risk responses, and continuous risk monitoring and reporting so that you can effectively anticipate and respond to changing business conditions. Key risk indicators enable you to monitor the overall risk portfolio and to alert management immediately when high-impact and high-probability risks exceed company-specific thresholds. Managers can analyze risks in terms of severity and likelihood of impact, and they can monitor GRC activities and time frames at the most granular level – information that is automatically aggregated to create higher-level views and risk networks.

All risk-related activities are monitored through executive-level dashboards and reports that deliver visibility into key risk metrics and policy compliance.

Business Process Control

The SAP GRC Process Control application applies a risk-based approach to setting up the control environment and identifying the most effective and efficient controls needed to improve business operations and to achieve compliance. The application integrates directly with control documentation in SAP GRC Repository so you can centralize control management and eliminate the need to integrate separate



tools for documentation, testing, remediation, and control monitoring. The software implements controls for key risks with a combination of automated controls monitoring, manual control tests, and self-assessments. This powerful combination works together to establish controls that promote the desired employee behavior and optimize business processes, as well as ensure that your organization meets compliance mandates on time and in a cost-effective manner.

GRC Process Control delivers predefined key control libraries that automatically monitor virtually unlimited critical system configurations, business transactions, and IT controls across multiple SAP and non-SAP applications. It increases efficiencies with automated control tests for multiple combinations of criteria, automatic routing of manual control tests to testers with appropriate procedures, and user-defined surveys for self-assessments of entity-level controls and management sign-off.

GRC Process Control pinpoints risks of control violations through an easy-to-use dashboard, including a global heat map, making it easy for executives and auditors to prioritize corrective action and to avoid the development of material weaknesses in the control environment. The software automatically creates remediation cases for each control exception, immediately alerting control owners and managers so that they can quickly take action to address risk.

Authorized Access Control

Proper segregation of duties (SOD) and access control over sensitive transactions is one of the most effective safeguards against fraud and a prerequisite for sound corporate oversight. It is also one of the most difficult controls to deploy and sustain effectively given the thousands of users, roles, and processes that all require access and authorization evaluation, testing, and remediation. The immense task of managing proper user and role access can only be accomplished when business process owners (who can deter-

mine appropriate access in business terms) and IT experts (who can define the underlying technical objects that make up business functions) work together. The problem is that communication between the two groups is typically disjointed and unsuccessful because there is no bridge linking business language with IT capabilities. Furthermore, organizations with cross-system requirements and multiple instances of enterprise resource planning (ERP) software from different vendors require a cross-enterprise solution to effectively resolve segregation of duties.

The SAP GRC Access Control application, which monitors, tests, and enforces access and authorization controls across the extended enterprise, closes this gap. SAP GRC Access Control enables all corporate compliance stakeholders—including business managers, auditors, and IT security managers—to collaboratively manage proper SOD enforcement. This helps to identify and remediate potential risks like conflicting authorizations within a single user's access profile. Most important, it also helps to identify actual risks, such as business functions that are executed in conflict with SOD mandates.

Designed to help you comply with financial reporting and data privacy regulatory mandates, the software enables you to rapidly identify and remove access and authorization risk from IT systems and to embed preventive controls into business processes to stop future SOD violations from occurring. The result is a dramatic reduction in the time, risk, and cost associated with compliance.



“Globalization is not an emerging trend; it’s a business reality. What’s changed is the increased level of complexity and risk associated with moving goods across borders, especially after the 9/11 terrorist attacks. Technology is the key enabler of any global trade management strategy, and companies must take a broader perspective and view their entire enterprise software platform as a global trade management solution.”

Adrian Gonzalez, Director, Logistics Executive Council, ARC Advisory Group

Global Trade Services

SAP GRC Global Trade Services enables you to automate and streamline complex import and export processes by embedding the regulatory and corporate compliance into core logistics processes. By centrally managing these processes, the software ensures compliance with all trade regulations, expedites customs clearance, and mitigates financial risks for global transactions, while presenting opportunities to take full advantage of international trade agreements.

With SAP GRC Global Trade Services, you can manage and standardize trade compliance processes throughout your organization. The software automatically screens trading partners against official sanctioned party lists, checks for embargo restrictions, and manages export and import licenses. The software expedites customs processes by facilitating interactions between your enterprise and customs agencies, driving the movement of goods and information across inter-

national borders efficiently. The software streamlines export refund processing by automating restitution management activities. It also provides the information needed to take advantage of preferential trade agreements, such as the North American Free Trade Agreement (NAFTA) and those of the European Union.

SAP GRC Global Trade Services meets all of your global trade requirements — no matter where you do business.

CONTINUOUSLY IMPROVE CONTROLS

Environment, Health, and Safety Compliance

Environmental compliance applications align enterprise business processes with environmental, occupational safety, and product safety regulations and corporate policies to ensure compliance is proactively managed. Complex regulations like Restriction of Hazardous Substances (RoHS), the Health and Safety at Work Act, as well as the management of greenhouse gas emissions and emissions trading become much more manageable with the environmental compliance applications.

Environment, Health, and Safety

The SAP Environment, Health & Safety (SAP EH&S) application streamlines all activities necessary to implement EH&S processes safely, effectively, and in accordance with laws and regulations.

SAP EH&S makes it easy to manage product safety and chemical safety specifications, hazardous substance inventories, and dangerous goods for safe handling, tracking, document management, and risk calculation. You can also create hazardous waste permits and ensure that authorized waste quantities are not exceeded by selecting suitable disposal firms and by allocating disposal costs among internal departments. SAP EH&S also supports the full range of industrial hygiene and safety processes, centrally managing core tasks, such as risk assessments, exposure logs, incident management, exposure profiles, and safety management of specific work areas.

Emissions Management

The SAP xApp™ Emissions Management (SAP xEM) composite application, jointly developed by SAP and its environmental expertise partner TechniData, ensures the license to operate and improves manufacturing productivity by aligning business processes with global environmental regulations. It also allows you to reap the financial benefits of the emissions trading markets because it determines and documents emission credits and communicates



emissions permits with emission trading platforms. SAP xEM tracks, analyzes, and records emission data. Integration with plant and equipment maintenance systems supports equipment calibration and maintenance tasks; sophisticated tools calculate emissions (such as greenhouse gases) that can't be measured directly. When a reference value exceeds normal plant values for operations, the software automatically fires off notifications to determine the impact and trigger the necessary changes to correct operations. The extensive reporting fulfills legal documentation and regulatory reporting requirements.

Product Compliance

TechniData Compliance for Products (TechniData CFP) is a solution for environmental product compliance that was developed on the SAP NetWeaver® platform by TechniData. The software collects, organizes, analyzes, and evaluates data about various products, factories, suppliers, countries, and customers – information needed to provide proof of compliance with environmental directives that regulate the development, manufacture, distribution, disposal, or recycling of products. The software documents product content and regulatory or sector-specific substances lists, integrates compliance checks and analyses with central business processes, and automates communications with customers and suppliers. For example, when a product is being checked for compliance with the RoHS directive, TechniData CFP verifies that all the necessary information, such as the lead content of a supplied part, is in place. If this data has not been provided, the software automatically requests the supplier's manufacturing department to disclose the exact lead weight percentage of the product and notifies the user when the supplier has provided the data.

Partnering for Success

Recognizing the importance of external collaboration for innovation, SAP is committed to establishing a robust GRC ecosystem that includes recognized domain experts and thought leaders in diverse fields, including audit, management, and risk consultancies; software and tech-

nology partners; and information and content partners. Key software and technology partners integrate applications through the SAP NetWeaver platform to provide much needed transparency over the extended GRC ecosystem. Extending SAP solutions for GRC, the GRC technology foundation ensures

end-to-end governance, risk, and compliance processes across the extended enterprise. In addition, professional services partners support the GRC ecosystem by delivering deep intellectual capital and by bringing decades of proven best-practice content and methodologies.



“SAP GRC Access Control not only helps ensure good governance and compliance, it also reduces the effort involved so that our people can focus more on the business.”

Ben Christensen, Service Delivery Manager, Xerox Europe

SIGNIFICANT RETURN ON INVESTMENT

By embarking on an integrated strategy and employing a comprehensive GRC solution, you can proactively achieve significant returns on your investment.



Consider the following:

- SAP customers who have used the access controls applications have reported a 25% savings in audit costs, a 28% reduction in the cost of managing user authorization risk, and a 32% savings in time spent on managing user authorization risk.
- Typical user and role approval processes are reduced from two weeks to two days.
- SAP customers have automated nearly 100% of their export processes, enabling them to reduce headcount and redeploy employees on more strategic activities.
- SAP customers can ensure that they do not deal with sanctioned parties in millions of trade compliance screenings per month.

Here are some of the ways that your business can benefit from SAP solutions for GRC.

Increase business performance by:

- Integrating GRC applications to simplify GRC tasks and reduce the total cost of ownership (TCO)
- Shifting from manual, resource-intensive control activities to embedded and automated control processes
- Rationalizing and reusing corporate control and risk responses to reduce effort and increase productivity
- Instituting management by exception with actionable dashboards and KPIs, threshold-based alerts, and automated escalation procedures

Predict and prevent risk by:

- Identifying and resolving potential points of failure by continuously monitoring control activities across the enterprise
- Preventing issues and weaknesses using mandatory risk analysis for critical processes
- Ensuring compliance with global import and export regulations
- Improving transparency with threshold-based global dashboards that aggregate financial exposure to control deficiency risks
- Preventing brand erosion from environmental, health, and safety catastrophes by automatically classifying and tracking hazardous substances

Drive increased competitive advantage by:

- Analyzing risk exposure and trends to optimize the risk-return portfolio
- Optimizing capital allocation based on insight into enterprise risk position
- Implementing effective controls to promote desired behavior and improve the results of business processes
- Identifying and exploiting opportunities in international trade preference agreements
- Managing and disclosing economic, social, and environmental initiatives to stakeholders

. . . AND INCREASE COMPETITIVE ADVANTAGE



SAP® solutions for GRC are delivered by SAP's experienced and knowledgeable professional services team who can help you realize the full value of your investment. Leveraging SAP experts, methodologies, tools, and certified partners, our professional services teams can accelerate implementations, meet deadlines, transfer knowledge, and enable long-term success, no matter how large or how complex the project. Equally important, you are assured that no factors are overlooked that might jeopardize the achievement of your goals. And once your solution is in place, our comprehensive, customized training programs make it easy to ramp up employees and ensure successful adoption across your enterprise.

GOVERN. ASSESS. RESPOND. MONITOR. OPTIMIZE

Activity	Benefits
Governance and sustainability	<ul style="list-style-type: none">▪ Enable strong alignment between strategic objectives, risk management, and compliance activities to create stakeholder value▪ Minimize fragmentation of GRC information▪ Reduce redundant efforts and resources spent on multiple GRC requirements▪ Provide a foundation for risk-return portfolio optimization, business performance optimization, business control, transparency, and predictability▪ Reduce the effort and time required to perform sustainability reporting▪ Create internal benchmarks based on an effective, collaborative analysis of economic, social, and environmental considerations to improve business performance and market perception
Risk management	<ul style="list-style-type: none">▪ Improve management's ability to achieve strategic objectives by monitoring operational data to automatically identify risks▪ Understand the key risks the organization faces to ensure that a comprehensive strategy is in place to manage risks in the best possible manner▪ Gain new insights for decision making and capital allocation across various risk classes (for example, insurance, operational, external, and financial)▪ Reduce the probability of default, credit downgrade, or serious financial loss
Business process control	<ul style="list-style-type: none">▪ Ensure compliance with corporate governance and regulations by using one system with integrated control documentation and control design▪ Gain insight by applying a risk-based approach to control management and prioritize responses to the control violations with the greatest impact▪ Strengthen management's confidence that business controls are well designed and operating effectively▪ Save money and effort by automating control testing and accelerate time to resolution with remediation case management▪ Reduce cost and increase assurance by shifting from point-in-time testing to continuous monitoring of controls
Access and authorization control	<ul style="list-style-type: none">▪ Enable all corporate compliance stakeholders to collaboratively manage the enforcement of proper segregation of duties▪ Detect and resolve violations of segregation of duties and user authorization control by removing access or mitigating situations in which duties cannot be segregated▪ Jump-start compliance setup with a comprehensive, out-of-the-box library of best practices and rules for the segregation of duties▪ Ensure efficient and compliant provisioning of user access throughout the employee life cycle▪ Provide users with privileged, but controlled access to quickly address emergency requirements▪ Address access and authorization issues at their inception using enterprise role management
Global trade services	<ul style="list-style-type: none">▪ Ensure vigilant trade compliance and help facilitate tighter national security▪ Streamline electronic communications with customs authorities▪ Mitigate the financial risk of global trade through automated handling of payment guarantees▪ Maximize opportunities offered by trade preference agreements▪ Enhance process efficiency through tight integration into inbound and outbound processes
Environment, health, and safety management	<ul style="list-style-type: none">▪ Deploy global EH&S processes while adapting them to practices in individual circumstances and geographies▪ Ensure the safe handling and tracking of hazardous substances, dangerous goods, and waste products▪ Deliver full-scale health management to provide for employee health and well-being▪ Ensure the compliance of individual products with RoHS and End of Life Vehicle (ELV) regulations▪ Improve manufacturing productivity by aligning business processes with the fulfillment of environmental regulations for emissions management

A SOLID FOUNDATION FOR GRC



SAP solutions for GRC are the right choice for your business. Our customers – including the manufacturers of some of the world's best-known brands – represent a variety industries and are reaping the benefits of a unified GRC solution. To find out more, visit www.sap.com/grc.



THE BEST-RUN BUSINESSES RUN SAP™

