



## **Basel II Compliance Starts with IPLOCKS Information Risk Management Platform**

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In June 2004 the Central bank governors and the heads of bank supervisory authorities in the Group of Ten (G10) countries endorsed the publication of the International Convergence of Capital Measurement and Capital Standards: Revised Framework commonly referred to as Basel II. Basel II has taken financial standards further by calling for defined banking processes aimed at strengthening internal control, risk management and assurance. Banks and other interested parties have welcomed the new concept and rationale of the three pillars (minimum capital requirements, supervisory review, and market discipline) approach on which the revised Framework is based.

The Basel II Framework defines the procedures for adopting more risk-sensitive minimum capital requirements for banking institutions. The new framework strengthens these risk-sensitive requirements by providing principles for banks to analyze the adequacy of their capital reserves and for supervisors to assure banks have adequate capital to support their risks. It also seeks to strengthen market discipline by enhancing transparency in financial reporting.

According to a report by *The Banker* in July 2004, the large European banks have begun moving into the implementation phases of compliance a lot faster than the banks in the United States. The implementation of Basel II Framework is having a direct impact on the IT organization. It requires that IT departments assure the data used to provide financial information used to comply with Basel II is accurate and ensure information risk management procedures are in place.

Basel II applies to Financial Service Providers (FSP) as well as third party IT financial service organizations who will have to formalize and adopt a process-driven approach to operational risk and information risk management. The minimization of operational risk, which comprises the management of risk to data, the extent an institution's exposure to failures associated with internal processes, systems, people and external events— appears across all three Pillars of the Accord.

The data captured to validate the information risks must be of significantly higher quality, with greater consistency, auditability, and transparency than before. These changes also demand greater access, sharing and analysis of information between a bank's finance and risk-management functions. There is a common understanding that to meet this need organizations will need the capability to analyze the - who, what, when and where - critical information used but also identify any changes in reporting and information systems needed to produce the required information. The roles of information security, internal and external auditors in validating information and operational risks have also been complicated with the introduction of Basel II.

To ease the pain of Basel II compliance, IPLocks Information Risk Management Platform:

- Assesses and monitors database integrity,
- Enhances security and availability,
- Identifies and alerts on potential problems in internal control processes,
- Generates reports and securely archives historical activities,

- Provides information for change control compliance, and
- Enables internal and independent auditors to intelligently assess and monitor internal controls on a full-time basis.

IPLocks Information Risk Management Platform is a non-intrusive, heterogeneous, external auditing system that helps mitigate information risk. It does this by assessing vulnerabilities and alerting your personnel to potential problems, monitoring and alerting on unusual database access behaviors, and identifying changes that may violate corporate policy. IPLocks Information Risk Management Platform facilitates Basel II compliance through:

- Timely identification of vulnerabilities due to inappropriate database configuration,
- Continuous monitoring of changes to database access privileges and roles,
- Alerts on schema changes, and
- Detection of corrupt or anomalous data and suspicious usage patterns.

### **IPLocks Information Risk Management Platform**

IPLocks Information Risk Management Platform provides an effective and efficient method of assessing the vulnerabilities of a company's database settings, privilege settings, schema vulnerabilities and data integrity and enables auditors to conduct on-the-spot assessments. IPLocks monitors databases, the primary repository for all information a business relies on, through over 100+ pre-defined and unlimited number of user defined rules. It retains audit trails that identify issues and supports investigative steps to facilitate the prevention of insider tampering. The audit trail evidence results in an accurate and unbiased assessment and identification of potential risks and compliance failures. IPLocks Information Risk Management Platform:

- Continuously monitors with minimal human interaction.
- Identifies abnormal transactions that fall outside of "best practices".
- Builds statistical models to identify unexpected user behavior.
- Monitors database privilege and access changes for users, user roles and database objects.
- Creates guard bands on business and audit rules to detect and flag suspicious or abnormal transactions.
- Provides diagnostic alert information for timely evaluation and correction.
- Improves executive confidence in their certification of the effectiveness of internal controls for the reporting period.

With respect to Basel II risk management and security, the following sections describe the related benefit of IPLocks Information Risk Management Platform:

### ***Information Risk Security***

IPLocks provides insight into the access patterns and use of your data to support policy development, identifying both appropriate and inappropriate access.

- Enables real-time definition of user specific policy-based rules to support monitoring of compliance with approved policies.
- Facilitates development of information security policies that are relevant to your business model and practices.

## **Assess Risk and Controls**

IPLocks provides effective methods of assessing database vulnerabilities related to database settings, privilege settings, schema vulnerabilities and data integrity.

- Periodically and continuously monitors the structural integrity of internal control infrastructure
- Identifies changes in access behavior that may signal a change in business processes or breakdowns in internal control

## **Monitor and Test Systems and Controls**

IPLocks monitors the structural database integrity of customer information systems and information through statistical algorithms, and automatically alerts on data anomalies that fall outside of expected behavior.

- Monitors the internal control infrastructure through access behavior patterning, and alerts in near real-time of changes in behavior that may reflect internal control changes
- Provides diagnostic information for potential errors and irregularities for evaluation and correction.
- Records and independently archives alerts and associated events to support timely investigation without the risk of insider tampering, providing a more accurate and unbiased event assessment.

## **Summary**

One over-riding, and sometimes unstated concern with all the laws is to protect the economy. Without confidence in financial products and financial service providers, the great pool of investment capital that keeps the world economy moving would dry up. If you cannot trust your bank to return your savings, would you keep money in a bank or under your mattress? If you were concerned that the insurance company would not be able to pay a claim, would you buy insurance? If you felt your stocks were only pretty pieces of paper – and your mutual fund investments just an entry on a monthly statement – would you keep your nest egg in financial instruments or instead hoard gold?

Compliance to Basel II should not be viewed as just a regulatory requirement, but as aligning IT infrastructure with the goals and objectives of the *economic structure of the business world*. Regardless of the type and level of complexity of the technology used, financial services management must ensure the adequacy and completeness of the data. Since the quality and reliability of the risk measurement system is largely dependent on the quality of the data, management must give particular attention to the risk of that data. Because almost all critical business information is maintained within databases, a savings of 30% - 80% of the regulatory capital requirements for technology (operational) risk can be achieved by attaining database and information confidentiality, integrity and availability.

## **About IPLocks**

IPLocks, Inc. protects business continuity, safeguards company brand reputation and eases the pain of corporate governance by securing critical information assets from negligent and malicious acts.

The IPLocks Information Risk Management Platform alerts management to information risks from security and business policy violations, attacks on data, compromised structural integrity and information theft, which other security solutions fail to detect.

IPLocks secures business critical data for financial services, telecommunications, media services, healthcare, public utilities and other industries. Founded in 2002, San Jose, California-based IPLocks is a privately held global corporation with customers throughout North America, Asia Pacific, South America and Europe. For additional information, visit [www.iplocks.com](http://www.iplocks.com).

### **Quote:**

“The new Framework represents an unparalleled opportunity for banks to improve their risk measurement and management systems,” commented Mr. Jaime Caruana, Chairman of the Basel Committee on Banking Supervision and Governor of the Bank of Spain.

“It builds on and consolidates the progress achieved by leading banking organizations and provides incentives for all banks to continue to strengthen their internal processes. By motivating banks to upgrade and improve their risk management systems, business models, capital strategies and disclosure standards, the Basel II Framework should improve their overall efficiency and resilience.”