

Confidentiality, Integrity, and Availability The Security Foundation of Acumatica's Cloud ERP

In the midst of migrating your organization's most important applications and data processing capabilities to the cloud?

Maybe it's time your ERP functions made the jump.

The Acumatica Cloud Enterprise Resource Planning (ERP) application is based on the latest Software as a Service (SaaS) architecture, ensuring the highest level of security, availability, and performance. Hosted primarily on Amazon Web Services (AWS) and Microsoft Azure (Azure), it can be accessed from any device connected to the Internet. Acumatica's cloud technology is also built to scale, allowing its SaaS resource levels to grow with your organization's needs.

Recognizing that migrating critical enterprise functions to the cloud carries significant risks for any organization, Acumatica's Cloud ERP solution is based on core information security principles: confidentiality, integrity, and availability. Acumatica's information security program, integrated into the core of our business, continuously identifies information security and operational risks, evaluates those risks, and develops remediation strategies. By maintaining a control environment that is both strong enough and flexible enough to execute remediation strategies when needed, Acumatica protects your key ERP functions and data while ensuring that any new threats or risks are promptly identified and managed.

Acumatica's information security program synthesizes people, processes, and technology. This promotes both the development and operational maintenance of the Cloud ERP solution as well as the ongoing management of customer production environments and data. Acumatica works to continuously improve this focus through:

- Identifying and mitigating information security and operational risks
- Maintaining detailed information security and operational policies and procedures
- Implementing security classifications for customer data to ensure that the necessary controls are in place to keep data safe
- Assessing information security risk and applying best-practice risk remediation strategies in order to mitigate potential risks before they become a threat to a client
- Independently auditing and certifying the security and operations of our control environment
- Conducting regular and up-to-date information security awareness trainings to ensure employees are aware of the latest threats and risks to data security

Our Commitment to Your Organization

When it comes to information security, the implementation details matter. Acumatica is committed to the protection and availability of your data and ERP functions. Combining a world-class application with the industry standard for hosting environments (AWS and Azure) means that Acumatica's Cloud ERP

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solution puts both the confidentiality and integrity of your data and the availability of your applications front and center.

Confidentiality

Acumatica isolates each client's data into a unique database using a multi-tenant approach to SaaS, creating better data security and preserving data confidentiality

User account management is governed by Acumatica's Access Management Policy

Segregation of duties means that only users with the highest need have access to data and environments and that critical functions have been separated appropriately

Customers are given unique access credentials to their Cloud ERP application. Each organization can:

- Configure user ID and password complexity requirements as needed
- Implement role-based access control within the Acumatica ERP solution
- Limit logins to a specific Internet Protocol (IP) address
- Create one-time passwords
- Encrypt sensitive database information

A distinct Acumatica URL using Secure Sockets Layer (SSL) encryption is issued to each client ensuring secure connections to Cloud ERP.

Data is never stored on the user's computer; all data remains on Acumatica servers. As users complete forms, only small bits of data are transferred to the web browser; once forms are completed, no data remains in the browser

Each customer environment is segmented by a firewall

Integrity

The Acumatica IT support team is available 24x7 to respond to malware alerts and handle security incidents as they arise

Acumatica's intrusion detection system (IDS) alerts Acumatica's team to any security breach that might compromise the confidentiality, integrity, or availability of your data

Acumatica web servers are protected against Distributed Denial of Service (DDoS) attacks by AWS Shield service, which defends against the most common, frequently offering network and transport layer attacks with real time automatic mitigations

Critical ERP functions and data are centrally monitored and audited and can be configured based on customer specifications to meet detailed requirements

The production environment is monitored using Symantec and TrendMicro to prevent, detect, and remove malicious viruses such as Trojans, worms, spyware, browser hijackers, and many others

Access to program source code (as well as designs, specifications, verification plans, and validation plans) is strictly controlled in order to prevent unauthorized functionality unintentional changes from being introduced into the environment

Security patches are kept up-to-date through regular identification, assessment, and application

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of new patches

Acumatica Web Server Hardening policy is applied to all web servers to create an additional layer of protection against known vulnerabilities and attacks

Unnecessary or outdated services and protocols are regularly disabled, removed, or reconfigured

Acumatica maintains separate development, test, and production environments to reduce the risk of accidental changes or unauthorized access to production software or business and customer data

All systems and upgrades go through an acceptance process before deployment

Operating system configurations follow strict internal processes and are tested prior to deployment

Secure coding practices are used during the Software Development Lifecycle (SDLC) and system update processes

An annual risk assessment and penetration test is performed on each individual system, network device, firewall, and application

Availability

Acumatica's customers can count on 24x7x365 availability with historical uptime performance consistently near 100% and well above industry standards

Hosting providers, AWS and Azure, assure 24x7x365 technology availability and global support

Network performance and system processing are constantly monitored, and all incidents are subject to a rigorous internal resolution process to ensure your organization never loses access to your information

- Logging software collects data from system infrastructure components and endpoints, monitoring system performance, potential security threats and vulnerabilities, resource utilization, and unusual system activity or service requests
- Systems are configured to log key security events including authentication events and file access
- Health and capacity metrics are monitored and reviewed on an ongoing basis so that your systems and processes never experience lags or downtimes.

Backup and recovery processes mean that customer data, essential business information, and critical systems can be recovered in the event of a critical failure or natural disaster. Acumatica's processes include:

- Multi-level, nightly, encrypted backups of each customer environment
- Backups are replicated offsite on a daily basis to various global locations
- Monthly data restoration is performed for testing purposes
- A Business Continuity Plan (BCP) is in place and regularly tested

Each database transaction is written to a Transaction Log with each Transaction Log being exported offsite every 15 minutes ensuring that, at any point, Acumatica can restore a customer

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database with a maximum data loss of 15 minutes

Using Acumatica's snapshot capabilities, customers can export all data from the database and import it to another Acumatica instance elsewhere, keep offline backups of their own data, or setup their own test environments without needing direct access to their Acumatica database server.

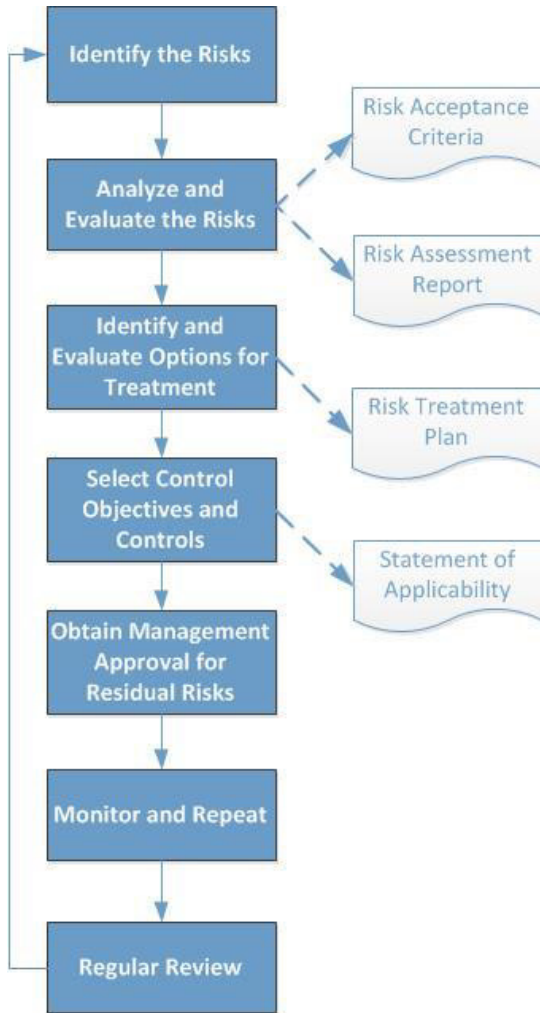
Acumatica has an established incident response plan for security breaches, fraud, faults, and other disruptions to business processes, contractual agreements, or data privacy. Any security incidents that are detected are resolved using Acumatica's Information Security Policy. The Incident Response Team (IRT) handles incidents quickly and expediently to reduce the impact to your organization.

Risk Management

Acumatica recognizes that risk management is critical to protecting your organization and, as such, has an information security risk assessment and treatment (ISRA) process. The ISRA process ensures that potential impacts do not become real and, if they do, contingencies are in place to deal with them appropriately. Acumatica also follows the industry standard, ISO/IEC 27001, when identifying risks to the confidentiality, availability, and integrity of information and assets.

The ISRA process is shown in the diagram below:

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Secure Infrastructure

When evaluating your cloud computing options, it is important to consider the entire service stack of the cloud provider. Many different organizations may be involved in providing infrastructure and application services, increasing your organization's risk. A disruption at any layer of the cloud/application stack could compromise the confidentiality, integrity, or availability of your data.

Acumatica starts with the most reliable hardware infrastructure in the industry to supply the virtual fabric for its customer environments. Amazon and Microsoft have many years of experience in designing, constructing, and operating large-scale data centers. This experience has been applied to their state-of-the-art cloud-based hosting platforms and infrastructure: AWS and Azure are built for scalability and extreme reliability through their innovative architectural and engineering approaches.

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Acumatica's Cloud ERP solution provides a SaaS stack that is supported by strong operational and security policies, procedures, and controls as a direct result of their technology partnerships. By leveraging the cloud infrastructure of Amazon and Microsoft, Acumatica's clients benefit from a tightly controlled and secure environment grounded in the physical hardware and data centers that set the industry standard for operational and security process excellence. Some of the operational and security process benefits are that:

- Amazon and Microsoft data centers both receive SSAE16/ISAE 3402 Attestations and are ISO 27001 Certified. Their data centers are located in non-descript buildings that are physically constructed, managed, and monitored 24-hours a day for unauthorized access and environmental threats. Data centers are surrounded by a fence with access restricted through badge controlled gates.
- Both organizations restrict access to audit logs to authorized personnel based on job responsibilities. Event logs are archived on secure infrastructure and are retained.
- The cloud fabric agent hosts are Host OS and Native OS. These hardened operating system images run on computing and storage nodes, which has the benefit of reducing the surface area exposed by APIs or unused components. These reduced-footprint operating systems include only those components necessary to the environment, which both improves performance and minimizes the potential attack surface.
- Amazon and Microsoft both regularly scan for vulnerabilities on their hosts. Vulnerability scanning is performed on server operating systems, databases, and network devices with the appropriate vulnerability scanning tools.
- Amazon and Microsoft have developed robust incident management frameworks to detect, escalate, and respond to incidents. Incident management teams perform 24x7 monitoring, including documentation, classification, escalation, and coordination. Events, thresholds, and metrics have been defined and configured to detect incidents and alert the appropriate teams.

Acumatica's Cloud ERP solution and its technology partners Amazon and Microsoft provide a SaaS stack that is supported by strong operational and security policies, procedures, and controls with the objective keeping your data safe, secure, and available.

Acumatica Cloud ERP Framework for Quality and Compliance

The Acumatica Cloud ERP platform provides a modern framework and applications to develop systems and processes for industry and government regulation compliance. Features natively support quality requirements, including documentation, training, accuracy, reporting, security, and process control. In addition, complex regulations are managed with embedded features, connected applications, and no-code or low-code modifications.



Acumatica Cloud ERP Applications and Resources

Accuracy	Process Control	Training
<ul style="list-style-type: none"> Embedded Barcode Scanning Mobile Data Collection Decimal Precision and Resolution eWorkplace Apps QMS AQL / Sampling 	<ul style="list-style-type: none"> GAAP and IFRS Compliant Accounting Extensions for Skills and Certifications Rules-Based Product Configurator Engineering Changes with PLM eWorkplace Apps QMS NC and CAPA 	<ul style="list-style-type: none"> Embedded CRM for Task Management Acumatica Open University Connected Human Capital Management

Acumatica Cloud ERP Platform

Documentation	Security	Reporting
<ul style="list-style-type: none"> Wikis for Instructions and Quality Manuals Embedded Document Management Acumatica Visual Workflow Engine Configurable Online Help 	<ul style="list-style-type: none"> Multiple Security Levels with Security Roles Native Cybersecurity Features Data Security for PCI, GDPR, SOC, more Security Audit Logs 	<ul style="list-style-type: none"> Dashboards, Inquiries, Reporting, and BI Business Events for Notifications and Alerts Improved Data Accuracy through AI with ML Connected, Real-Time Data

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General Quality and Compliance Regulations

There are six types of quality and compliance regulations facing distributors and manufacturers. Acumatica Cloud ERP software provides a framework to develop procedures to improve quality for general business and financial, information technology, labor, government, industry, and trading partner compliance regulations and initiatives.



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Specialized Government Agency Quality and Compliance Regulations by Industry

Government regulations cross every industry segment with environmental and product safety restrictions. The most heavily regulated industries include aerospace and defense, electronics and electrical, and process industries such as food, beverage, chemicals, and pharmaceuticals. Modern applications like Acumatica provide an adaptable platform to tailor system workflows, secure data, and connect disparate applications for ever-changing quality and compliance regulations.

4 It US DoD International Traffic in Arms Regulations ITAR		aerospace and defense		5 Cp US FDA Corrective and Preventative Action CAPA	6 Sd OSHA Occupational Safety and Health Administration Safety Data Sheets SDS	7 Ts US EPA Toxic Substances Control Act TSCA	8 Ne US EPA National Emission Standards for Hazardous Air Pollutants NESHAP	1 Rh EU RoHS 2002/95/EC Restriction of the Use of Hazardous Substances in Electrical and Electronic Equipment
				2 We EU Directive 2012/19/EU, WEEE Waste Electrical and Electronic Equipment		3 Es EnergyStar program managed by the US Environmental Protection Agency and Department of Energy		
10 Dc DoD Defense Contract Audit Agency DCAA	11 Ls DoD Logistic Support Analysis LSA	12 Fi US EPA Federal Insecticide, Fungicide, and Rodenticide Act FIFRA	13 Sa US EPA Superfund Amendments and Reauthorization Act SARA	14 Vo US EPA Volatile Organic Compound VOC Emissions	15 Cg US FDA Current Good Manufacturing Practice cGMP	16 Ca US FDA Certificate of Analysis (CoA)	9 Fm Institute of Printed Circuits IPC-1752A or IPC 1754 Full Material Disclosure (FMD)	17 Cf FDA 21 CFR Parts 800-1299 for medical devices, food, and pharmaceuticals
18 Mm DCAA Material Management and Accounting System MMAS	19 Df US DoD Defense Federal Acquisition Regulation Supplement DFARS	20 Ha US FDA and Department of Agriculture Hazard Analysis and Critical Control Points HACCP	21 Tr OSHA Occupational Safety and Health Administration Total Recordable Incident Rate	22 Ce US EPA Comprehensive Environmental Response, Compensation, and Liability Act CERCLA	23 Rk US EPA Emergency Planning and Community Right-to-Know EPCRA	24 Ca California Air Resources Board Emissions CARB	general compliance	
25 Tn US DoD Truth in Negotiations Act TINA	26 Nl US FDA Nutrition Labeling and Education Act NLEA	27 Fa US FDA Food Allergen Labeling and Consumer Protection Act FALCPA	28 Pd US FDA Prescription Drug Marketing Act (Pedigree) PDMA	29 Fd US FDA Food Safety Modernization Act FSMA	30 Eu Euro6 European Union Emissions Standards	31 Cn US Consumer Product Safety Improvement Act CPSIA	32 Ff US Consumer Product Safety Commission FFA Flammable Fabrics Act	
				process industries Food, Chemicals, Life Science		33 Co Country of Origin or Country of Origin Labeling (COOL)	34 Ev US EPA National Environmental Policy Act NEPA	35 Cc General Certificate of Conformity

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“We’ve incorporated our entire quality management system within the wikis inside our ERP system. This includes standard operating procedures, work instructions, forms, and all other quality system documents. In fact, just the other day, we received our recertification. The auditor walked in, I handed him a piece of paper with his user name and password into Acumatica, he logged in and had immediate access to all the quality management system documentation.”

EHREN DIMITRY, PRESIDENT AND CEO, PANOVA

[learn more](#)

“Without the Acumatica suite, we would certainly not have gotten ISO-certified... We framed our entire quality management framework around Acumatica, from document management to update processes.”

NATHANIAL FAIRWEATHER, MANAGING DIRECTOR, TRIODE

[learn more](#)

ABOUT ACUMATICA

Acumatica Cloud ERP provides the best business management solution for digitally resilient companies. Built for mobile and telework scenarios and easily integrated with the collaboration tools of your choice, Acumatica delivers flexibility, efficiency, and continuity of operations to growing small and midmarket organizations.

Business Resilience. Delivered.

Learn more about how Acumatica can work in your business by visiting us online at acumatica.com.

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