GCC Cloud Computing





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Elegant eHealth solutions for every hospital





GCC

GCC is a fully integrated suite of clinical software modules designed specifically for the acute care environment. Our range includes modules that automatically capture patient data in the preoperative, intraoperative and postoperative phases, and record the management of surgical procedures and acute pain.

Our modules automatically chart anaesthesia data directly from patient monitors. Our Getz Touch devices installed in operating theatres and recovery bays enable clinicians to annotate this data and chart drugs and fluids.

Each patient's medical history is collated into a consolidated record that is accessible from any secure portal. We integrate with patient administration systems and other clinical information systems so patient data can be accessed wherever it's needed.

Our enterprise-level subscription offering is scalable so it grows as your hospital grows. The architecture of our modules complies with HL7 standards, ensuring seamless interfacing with hospital systems and all models of patient monitoring equipment.

GCC modules are built and delivered as an end-to-end cloud computing service. Cloud computing is quickly becoming the preferred choice for business-critical application storage for businesses and organisations everywhere.

'With a cloud solution, authorised clinicians can access patient records anywhere in our hospitals and even from remote *locations. The availability* of clinical information greatly enhances communication and decision-making.'

Advantages of cloud computing

The advantages of our cloud computing subscription model include:

- **Greater flexibility** clinicians and hospital staff can access and update patient information from any location via secure logins
- **Disaster protection** hospital information is safely stored in secure HIPAA-compliant data centres by organisations and teams dedicated to providing these services
- **Data protection** skilled cloud computing vendors ensure that the latest technologies and best practice methods are used for the protection and security of clinical data

- **Response time** better response time in many cases when compared to standard on-premise servers and hardware
- Automated updates software updates and upgrades are implemented without interruption to operations and are included in subscription costs
- Scalability unlimited capacity for data storage and computing power so solutions can scale with your business requirements

GCC modules are used in hospitals 50+ and medical centres on four continents





Cloud computing reduces costs

On-premise software implementation solutions usually result in ongoing and hidden costs for hospitals. These solutions are labour and hardware intensive and create additional hospital burdens rather than producing efficiencies.¹

1 The Cost of On Premise Applications Versus Cloud, Tim Hughes, Forbes Top 100 Social Sellers

Getz Clinical's modules are designed Typically, an on-premise solution is 250% more expensive than a cloud to be highly configurable so they can computing solution.² meet the specific administrative and clinical needs of most hospitals.

Traditional cloud computing solutions reduce ongoing client costs and overall expenditure, but cost escalations can occur when hospitals require these systems to be customised to suit their needs.

2 The Value of Cloud Computing, David Linthicum, Technology Innovation Management Review, April 2010

Overall costs



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Customisation costs are eliminated. resulting in additional savings compared with traditional cloud computing offerings.

'The system automates and integrates pre- and postoperative information, automatically capturing monitoring output. This has resulted in a readable, reliable, retrievable, real-time record. Therefore, remote help can be provided with the benefit of all the information available.'

> Wendy Sutcliffe, Electronic Health Information System Project Manager, Albury Wodonga Health, CeBIT eHealth Conference, **Convention & Exhibition Centre, Sydney, 1 June 2011**

Ongoing costs

On premise solution model

Ongoing costs

- Fixes, patches and upgrades
- Downtime
- Performance tuning
- Rewriting customisations
- Rewriting integrations
- Upgrades to dependent applications
- Ongoing IT department maintenance and upgrades to hardware
- Maintenance and upgrades to network, security and databases

GCC model

Ongoing costs

• Subscription fee

GCC costs less than an on-premise solution

70%







Cloud computing ensures data security

Our cloud service provider is <u>Amazon</u> Web Services, , whose cloud clients include the US Centres for Disease Control and Prevention (CDC), the global pharmaceutical and consumer healthcare products corporation Pfizer, Health Direct Australia and the Central Intelligence Agency (CIA).

The highly sensitive nature of clinical data has driven architectural decisions at every point of the design and development of our modules and the GCC. Security and privacy controls are architected into every component.

Data security and recovery measures at Amazon Web Services include:

• **Private data** – client data is maintained in separate data stores in isolated virtual private clouds, providing a wall between each client's data and a single point of access for encryption and access control

- Fault tolerance data is replicated between separate data centres on different power grids and flood plains, ensuring uninterrupted access in the event of data centre outage
- Automated data management – backups are made daily and maintained in geo-redundant storage with 99.99999999% reliability of recovery
- **Data encryption** data is 256-bit SSL encrypted in flight and at rest within the database, and is configured to be accessible only on certified devices
- **Encryption keys** to protect client data from security breaches data is encrypted with keys that are not stored inside a public cloud provider
- **Device security** clinical devices that are stolen or lost can be disabled remotely

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Physical security at cloud computing data centres includes security fencing, security guards, biometric scans, electronic passes and PIN codes.

Amazon Web Services offers cloud computing data facilities in Australia, Singapore, China, Japan, Germany, Ireland, Brazil, South

Korea, India and the United States of America, and are able to service hospitals anywhere in the world.

Getz Clinical is an Amazon Web Services Partner Network (APN) Technology Partner.



99.999999999% reliability of recovery from geo-redundant data storage





Cloud computing allows focus on core business activities

The GCC offering is based on the principles of Software as a Service, which is a layered model of infrastructure and services.

By moving non-core functions to other parties and outsourcing computing, storage and networking, hospitals can concentrate on their core business.

Costs and risk are reduced, security, privacy and data lifecycle management are maintained, and agility is improved.

Software updates and upgrades are automated and implemented without interruption to operations. Data storage and computing power is unlimited so GCC can scale with your business requirements. Hospital information is safely stored in secure Health Insurance Portability and Accountability Act (HIPAA)-compliant data centres ensuring disaster protection.

The interfaces between the various elements of the GCC and a hospital's clinical information systems are provided in the included graphic.

Getz Clinical Connect is our HL7 distributor that synchronises module-generated data with a hospital's various clinical information systems.

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Getz Clinical

Getz Clinical is a world leader in perioperative information management systems.

Our solutions, implemented through our GCC suite of software modules, have been deployed in over 50 hospitals and medical centres across Asia, Europe, Africa, Australia and the Pacific.

Major customers include Singapore General Hospital, the University Hospitals of Leicester Trust in the United Kingdom and the Chris Hani Baragwanath Hospital in South Africa. In Australia our solutions are used by the Royal Adelaide Hospital, Lyell McEwin Hospital and Queensland Health.

The Queensland Health project, covering 44 hospitals, remains the largest hospital network of its kind in the world.

Getz Clinical has sales and support teams operating out of seven offices in Australia, Singapore, the United Kingdom and the Philippines.

Our team of highly skilled personnel with extensive experience in providing eHealth solutions includes developers, integration specialists, project managers, clinical experts, business analysts, service delivery managers, sales managers and account managers.

Our head office is in Singapore and our development centre is located in Adelaide in South Australia.

Getz Clinical is a subsidiary of the Getz Group of companies. The Getz Group, founded in 1852, is a strategic investment business. Our products and services are delivered by 12,000 employees in 50 countries, with an annual turnover exceeding US\$1.27 billion.

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