

Genero Cloud Service Overview

Genero Cloud

Genero[®] Cloud provides a fully managed, secure, highly available platform for delivering Genero based Software-as-a-Service (SaaS) solutions to a global customer base. The platform includes a comprehensive range of proactively managed services, covering customer onboarding, security, service availability, service upgrades, and support for operating system, database, and application production operations. Genero Cloud allows you to deliver modern, reliable SaaS offerings by continuing to do what you already do: building industry leading applications with Genero. Everything else is managed by Genero Cloud.

Genero Cloud consists of two main components: the *Genero Cloud Platform* – the hardware and software required to run your Genero application, and *Genero Cloud Managed Services* – the proactive activities which ensure the platform and your SaaS offering are secure, optimally configured and always available.

The Genero Cloud Platform

The Genero Cloud Platform includes all the hardware and software you need to deploy and run your Genero SaaS offering, including software upgrades during the period of your subscription. The Genero Cloud Platform includes:

- ✓ *Virtual Machines*: CentOS[®] based virtual machines, configured with required resources to support your subscription users' business critical use of your SaaS offering.
- ✓ *Networking*: Firewall protected private networking, accessible via public IPv4 addresses, secured by Genero Cloud SSL certificates.
- ✓ *Storage and Backup*: NAS storage with automated encrypted offsite backup of your application data, supporting tested Disaster Recovery (DR) with a Recovery Time Objective (RTO) of four (4) hours¹ and a Recovery Point Objective (RPO) of fifteen (15) minutes².
- ✓ *Production Monitoring*: Automated real-time monitoring of critical OS, networking, Genero and Database status, with SMS and email alerts on configurable system state, and a browser based dashboard.
- ✓ *Genero*: licensed and configured for production use.
- ✓ *IBM[®] Informix^{®3}*: licensed and configured for production use.
- ✓ *Open Source Software*: We will also install any open source you may need.

All cloud platforms run in a data center which meets industry recognized requirements for compliance, security, availability and performance, with global access provided by redundant, low latency, high speed network connectivity.⁴

You only need install and configure your application, and any additional third-party software.

Genero Cloud Managed Services

Genero Cloud includes a range of proactively managed services to support the Genero Cloud Platform. You may choose to have us fully manage all aspects of your SaaS offering, except for your application itself, or to manage your virtual machines and their installed software yourself, while we manage everything else.

¹An objective to have the system fully recovered in four (4) hours from the start of the DR activity.

²An objective to lose *no more than* the last fifteen (15) minutes of production data.

³ PostgreSQL[®] or MySQL[®] may be available upon request.

⁴ Genero Cloud can optionally be deployed on dedicated servers, behind a physical firewall in our Data Center, or on a Data Center you provide, which can leverage either your or our hypervisor and cloud management software.

We manage the cloud.

You manage your virtual machines, including the operating system and all installed software.

The following managed services are standard, and included with every Genero Cloud subscription.

Deployment

- ✓ Create and configure your virtual machines, ready for your production use.
- ✓ Configure your production monitoring dashboard and SMS and email alert messaging.
- ✓ Configure continuous, secure, off-site backups of your production data.

Support

- ✓ Provide 1st level support for Genero Cloud, and second and third level support for Genero, during normal business hours.
- ✓ Interact with all underlying vendors' support organizations to identify and troubleshoot any issues related to all Genero Cloud Platform components.

Production Services

- ✓ Provide 24x7x365 monitoring and alerting of your SaaS offering.

Compliance and Security

- ✓ Provide Data Center SOC2 or SSAE16 or equivalent and EU Safe-Harbor compliance certificates.
- ✓ Monitor US-CERT and CentOS security alerts and promptly remediate all Genero Cloud Platform components, *except* those requiring patches of your production systems, and communicate any relevant alerts to you.
- ✓ Install and maintain user accounts and per user SSH key access on your virtual machines. All other access is disabled.
- ✓ Configure secure, remote, user based logging of all virtual machines access and operations.
- ✓ Configure firewalls to limit access to secure SSH and HTTPS ports; install SSL certificates.

We manage the cloud.

We manage your virtual machines, including the operating system, Genero, and the database.

You manage your application and any third party software.

Optional Activities

These optional managed services provide you with a fully managed production platform.

Deployment

- ✓ Develop capacity estimates for your application running on the Genero Cloud Platform, by installing monitoring tools on a representative production environment you provide, and gathering and analyzing the production system load and performance characteristics.

Support

- ✓ Deploy and provide support for Red-Hat® Enterprise Linux®⁵.
- ✓ Provide support 24x7x365.

Production Services

- ✓ Investigate any issue related to your application's use of the operating system, Genero, and IBM Informix.⁶ Troubleshoot, tune and deploy patch upgrades to the operating system, Genero, and the database as it relates to the issue.
- ✓ Monitor your SaaS offering, respond to any alerts, and raise and investigate any issues that arise.
- ✓ Perform application and database health checks to identify where and how the application and database can be tuned to improve application performance.

Compliance and Security

- ✓ Deploy operating system patches to your production platforms in response to security alerts.
- ✓ Provide third party SSL certificates for your application servers.
- ✓ Configure your platform firewall.
- ✓ Provide and configure VPN access to your platform.
- ✓ Perform security scans of your applications' public IP addresses.

DR and High Availability

- ✓ Test your platform's DR procedures, and recover your application if a DR event happens.
- ✓ Maintain an HA copy of your application database.
- ✓ Maintain a load balanced HA configuration of your SaaS offering.
- ✓ Maintain an offsite DR copy of your application database.
- ✓ Maintain an offsite, load balanced DR configuration of your SaaS offering.

⁵ Operating system support is only available with this option.

⁶ Note managed support of the RHEL, Genero, and the database not include investigating your application itself as it relates to any issue.

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Revision 1.0 - 11/2/2014

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