

Griddable.io and Oracle GoldenGate

Today's digital business imperative means more data in more places across more platforms connected at ever increasing speed. This puts new pressures on traditional enterprise data to migrate and operate across hybrid clouds, feed continuously up-to-date copies into real-time applications, and connect to globally distributed edge computing. A more flexible and highly connected approach is needed in the hybrid cloud world while making it easy to address performance and HA needs at scale.

Summary

The griddable.io cloud-first and SaaS platform for synchronized data integration delivers a new, flexible, hyper-connected, and policy-based approach for hybrid cloud.

While Oracle GoldenGate is the leading on-premise data integration solution, it was not designed for the new requirements of easy SaaS on-boarding -- flexible topologies across many clouds and database platforms, and customization of data services without extensive professional services and specialized skills.

Griddable.io can plug-in to existing GoldenGate installations to minimize disruption to operations while enabling new hybrid cloud use cases for real-time analytics, cloud innovation or re-engineering for cloud first, globally distributing data to edge compute systems.

Oracle GoldenGate

Oracle GoldenGate is the market leading replication product from Oracle with the largest revenue and the highest performance among change data capture (CDC) tools for Oracle.

Griddable.io

Griddable.io is the industry's first *smart grid for enterprise data* which brings a new approach optimized for synchronized data integration across any cloud and database platform. Griddable.io is purpose built for hybrid clouds and can also be installed on top of on-premise Oracle GoldenGate. Key attributes are:

- **A resilient scale-out grid** architecture that supports any topology and heterogeneous databases
- **Intelligent in-line grid services** that connect end-points and selectively filter, mask, or transform data while guaranteeing transaction consistency
- **Flexible grid policies that are easy to setup & change** using a declarative policy language, eliminating the need for complex custom coding or highly specialized expertise across a myriad of single function tools



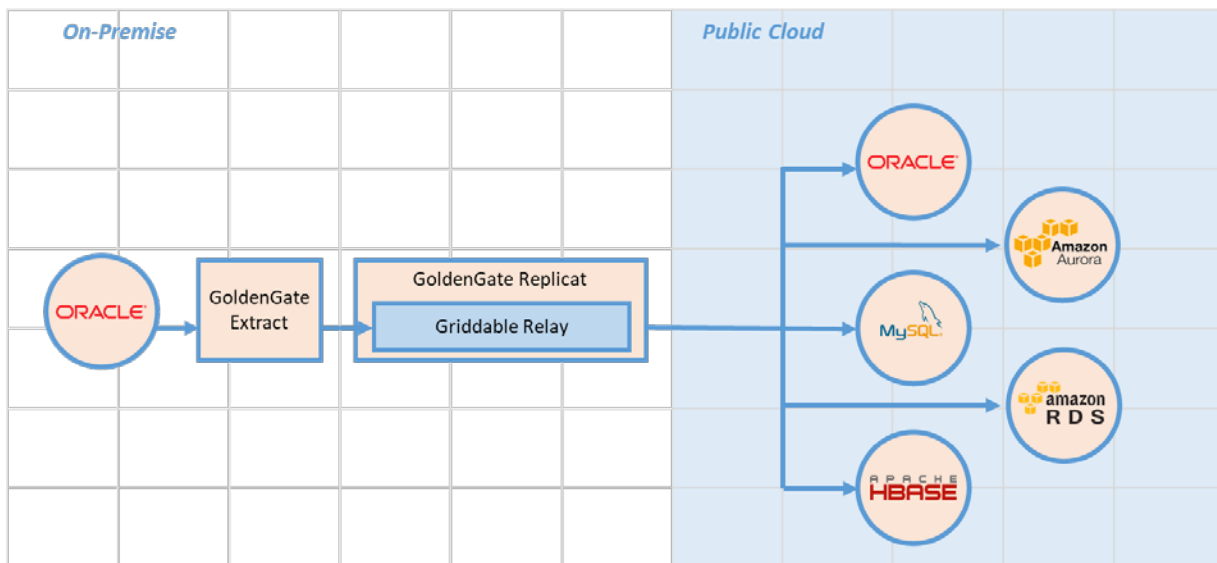
The griddable.io smart grid for enterprise data guarantees transaction consistency across any number of sources and destinations

	Griddable.io	Oracle GoldenGate
Easy to Use SaaS Experience	<ul style="list-style-type: none"> • SaaS on-boarding in 15 minutes for synchronized data integration between on-premise and public cloud or between public clouds • Available on AWS, GCE, and VMware VMC using your own credentials. Built-in support for public cloud data services like Aurora and RDS • Built-in UI to create grids and manage synchronized data integration across topologies 	<ul style="list-style-type: none"> • On-premise product with perpetual licensing requiring professional services to install and configure • GoldenGate Cloud Services is available as an annual subscription optimized for Oracle Cloud only and requires other add-on on-premise management products to be installed such as GoldenGate Director, GoldenGate Monitor, GoldenGate Veridata, GoldenGate Studio
Cloud-First Architecture	<ul style="list-style-type: none"> • Modern distributed and micro-services architecture is optimized for cloud deployments. • All core components are scale-out for performance and automated recovery • Open source cloud tools like Kubernetes, ELK, and ZooKeeper used for operations 	<ul style="list-style-type: none"> • GoldenGate is a traditional enterprise software product with a 15-year-old architecture developed before the cloud era
Cloud Scale Performance	<ul style="list-style-type: none"> • Scale-up and scale-down in cloud environments using dynamically-automated clusters • Minimal overhead on database sources when adding new destinations using griddable.io Change History Servers • In-memory change delivery achieves very low latency 	<ul style="list-style-type: none"> • File shipping disk-based architecture has high latency and requires scaling entities like data pumps, clustered filesystems that are not designed to scale in public cloud environments • Setting up and re-configuring clusters of extracts, replicats, and pumps can be very complex
Cloud Resilience	<ul style="list-style-type: none"> • High availability of all components enables synchronization to automatically recover from many failure scenarios while ensuring a consistent transaction timeline 	<ul style="list-style-type: none"> • High availability is complex to configure and recovery from failure is manual with checkpoints across extracts, replicats and data pumps
Customized Data Services	<ul style="list-style-type: none"> • JSON-like declarative policy language is used to define or change data services with no downtime • Selective field-level masking, obfuscation, encryption • Grouping mechanisms by tagging data with common attributes • Policies define data subsets to clone, with fast startup and automatic catch up and re-start from Change History Servers 	<ul style="list-style-type: none"> • Powerful controls to create sophisticated scripts but complex to program. Changes are manual and can require downtime • Does not support data masking for privacy • Initial copy from storage snapshots or restore from backup does not include automated recovery from failures. Initial load extract method has ability to re-start but requires creation of trail file for every database record and can be very slow
Flexible topologies	<ul style="list-style-type: none"> • UI simplifies initial creation and change of topologies without service disruption, with policy CLI for advanced configurations 	<ul style="list-style-type: none"> • All use-cases require professional services to setup and require downtime to change

Using griddable.io with Oracle GoldenGate

Griddable.io can be used with Oracle GoldenGate installations by deploying a griddable agent to read change data capture logs from Oracle GoldenGate instead of Oracle LogMiner. This allows customers to build-on existing on-premise data integration rather than rip-and-replace. This configuration is best for:

- Oracle RAC environments with high write throughput.
- Customers who have invested in GoldenGate license and written configuration code supporting it
- Customers who want hybrid clouds with destinations in public clouds (AWS, GCE, Azure) and on-premise has GoldenGate



The griddable.io relay which fetches change data capture records is implemented inside the Oracle GoldenGate Replicat as a Java User Exit, resulting in a blended architecture utilizing the best features of GoldenGate.

For more information

www.griddable.io contains more information on the griddable.io SaaS data integration platform.

griddable.io

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