

Griddable.io SaaS Platform for Synchronized Data Integration

Key Benefits

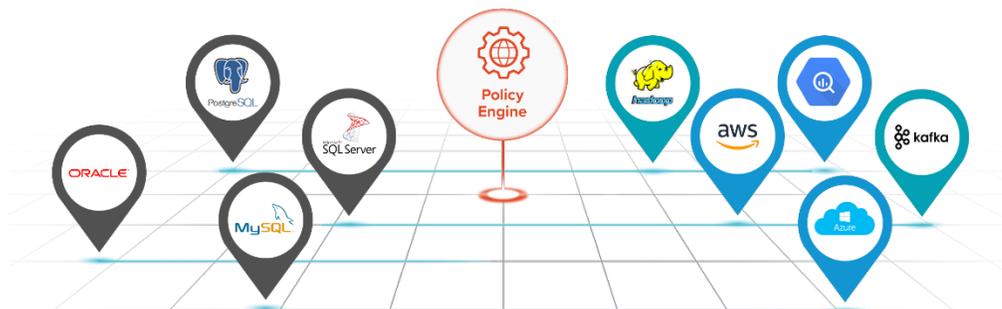
- *SaaS service brought online in minutes without professional services or extensive training.*
- *High-performance grid infrastructure to synchronize heterogeneous databases in real time.*
- *Simultaneous use of on-premise and public cloud databases with no risk of production disruption.*
- *Easily deploy sophisticated topologies – ranging from single source and destination to one-to-many and many-to-many configurations.*
- *JSON-like declarative policy language replaces heavily customized database engineering scripts.*

In today's digital business, it's imperative that data is geographically distributed across diverse platforms and connected at ever-increasing speed. This puts added pressure 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.

Smart grid for enterprise data

Griddable.io has built the industry's first smart grid for enterprise data. Key attributes include:

- **A resilient scale-out grid architecture** that guarantees transactional consistency. The grid allows flexible 1:1, 1:N, and N:M topologies.
- **Powerful policy engine** with a declarative policy language used to easily configure topology and intelligent grid services without service interruption.
- **Pluggable end-points** build on existing change data capture logs with minimal database overhead. Includes pre-built connectors and SDKs for relational, big data, and cloud-native services.



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

Cloud-first SaaS service

Rather than force-fitting an existing on-premise product into a cloud package, griddable.io has designed its smart grid as a complete next-generation SaaS service. The griddable.io service is available on a variety of public clouds and can perform data migration and synchronization from on-premise

or cloud databases to cloud destinations, in the same or on different clouds. A Griddable.io service subscription can be brought online in minutes without professional services or expert training. Each subscription creates an isolated environment individually owned and controlled for maximum flexibility and security. Each Griddable.io environment scales on demand to include additional cloud resources, or optionally to on-premise resources when desired.

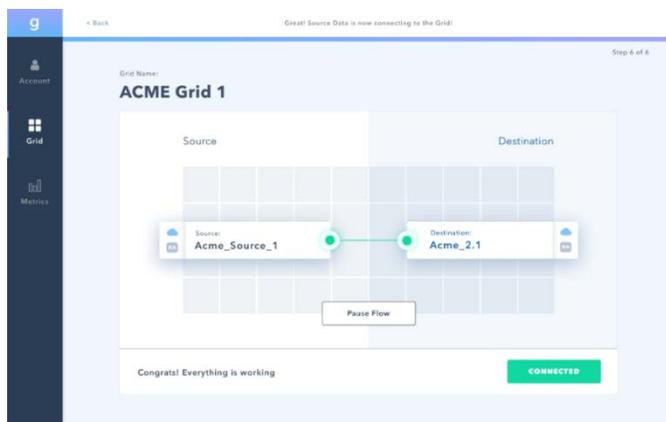
Continuous, heterogeneous data synchronization

Griddable.io synchronizes transactions with sub-second latency using revolutionary Databus in-memory transaction replication technology. Originally developed at LinkedIn, open source Databus technology ensures that each transaction is kept in timeline order, even when the databases are varied. With Griddable.io, IT organizations can synchronize data to the cloud with no risk to production data.

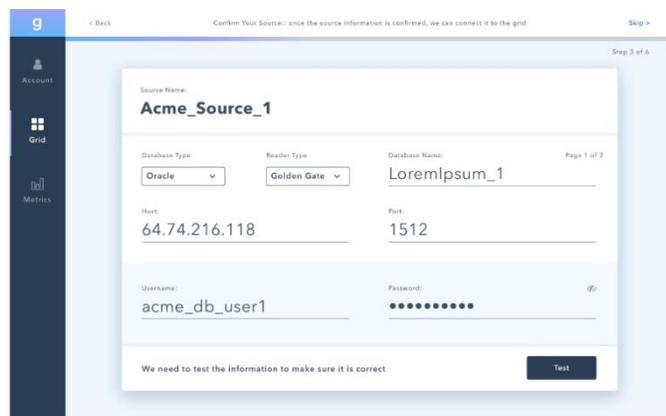
The grid automates every aspect of synchronizing databases. It starts by automatically creating an initial copy of the source database, then synchronizing each subsequent transaction without manual intervention or user tracking of transaction numbers and logs.

The grid frees organizations from dependence on legacy databases by automatically performing the data transformations required by different database types and enabling the simultaneous synchronization of several databases for different use-cases.

Connecting a new database to the grid is completed by simply entering the access credentials and change data capture (CDC) type. Griddable.io builds on existing CDC technologies to fit seamlessly into current IT infrastructures. At any point in the operation of the grid, new sources or destinations can be added without service interruption.



Connect on-premise data to a grid and begin synchronizing to a cloud destination in minutes



Griddable.io supports a variety of change capture technologies

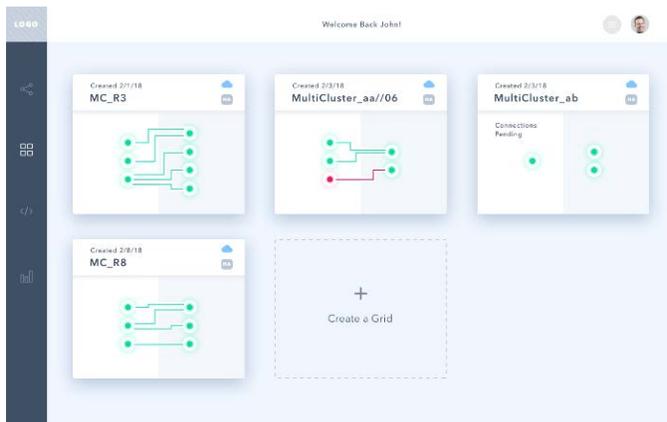
Data customizations

Griddable.io selectively filters, masks, encrypts or transforms data at the schema, table, row, or column level. All data

filtering and transformations are performed in grid services without impacting the source data. Also, the grid allows data customization at the source, destination, or both, enabling advanced use-cases for reducing network traffic or enhancing privacy. These advanced data filtering and transformation techniques can be a key strategy for compliance with GDPR, HIPAA or other privacy regulations.

Choice of grid topologies

Create sophisticated one to many, many to one, and many to many topologies in minutes using the Griddable.io transaction grid. Much more powerful than conventional point-to-point tools, Griddable.io grids are designed and engineered to be linearly scalable and fault resilient for demanding mission-critical situations. With Griddable.io, CIO's can run hybrid database operations with flexible data portability, and act on real-time analytics using transactionally consistent databases while protecting privacy.



Create sophisticated topologies like 1 to many, many to 1, and many to many

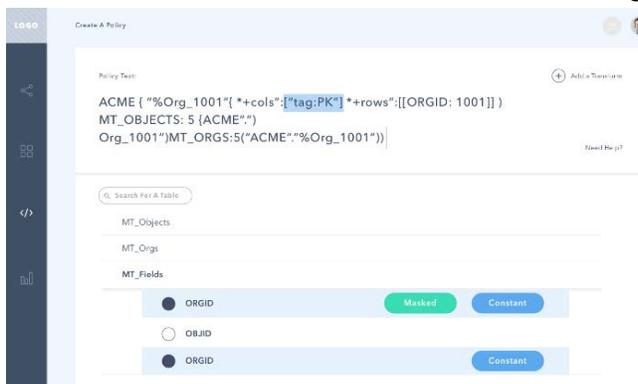
Using the Griddable.io grid, a graphical UI dramatically speeds the creation and configuration of grids. Once deployed, grid operation and health are managed by a

central graphical dashboard. During operation, modifications to the grid including the addition of new sources or destinations can be completed without interrupting data flow or connected databases.

Declarative policy language

Powerful and expressive to include everything needed to configure the grid, policies replace heavily-customized database engineering scripts for numerous replication and

Integration tools. Policies are declarative, allowing the data architect to focus on the results and not the mechanics of copying, filtering, masking and encrypting data.



Easily create policies and tags using a graphical UI, and visually verify their impact prior to production.

Define and tag groups of similar data, like personal data, then use tags in policies to normalize the synchronization, filtering, or masking actions for all the data in the group. With tags, achieving compliance with management goals or regulatory directives can be as simple as creating a grid policy which is shared throughout the organization.

Griddable's cloud-first architecture

Griddable.io uses a loosely coupled distributed architecture of relays and consumers to synchronize and transform data. Relays interface with source databases, posting changes to an in-memory pub/sub buffer. Consumers read changes from relays and enter them in their destination datastores.

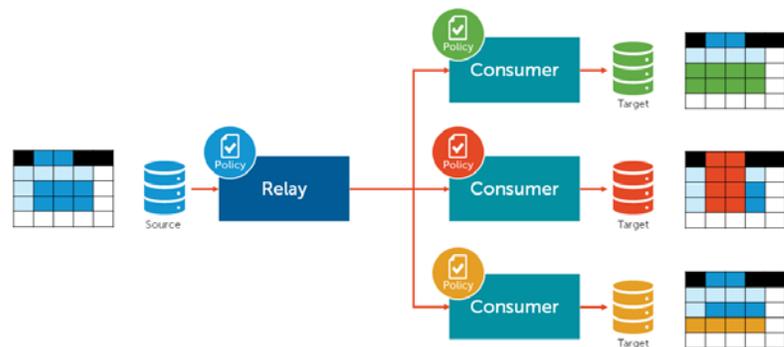
Between relays and consumers is the Griddable.io Change History Server, which archives changes and makes them available later. If a consumer falls behind due to load or network delay, the Change History Server provides required events without imposing delay on the relay, other consumers, or the source database.

The benefits of this loosely coupled architecture are reliability and scale. Consumers can pull changes from any relay, or the Change History Server, and relays are free to operate at optimal speed. There are no limitations in the system like the capacity of the file system to hold change data files. Both relays and consumers scale by simply adding additional relays or consumers and partitioning the load across them.

For further information on Griddable's cloud-first architecture, see the Griddable Architecture white paper, available on the Resources tab of company web portal.

Distributed architecture

At the core of Griddable.io architecture is the smart transaction grid. The grid is a collection of Griddable.io data services that facilitate the connection of one or more data sources to multiple data destinations. Relays interface with sources to publish change data and consumers interface with targets and pull changes from relays. Each Griddable.io relay and consumer uses a unique policy to choose the exact data to share and transform.



Each relay and consumer uses a policy to select the data to transform and share.

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