

ONE PLACE DATA & CLOUD MIGRATION MANAGEMENT SOFTWARE

Whitepaper 2021

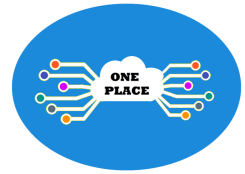
Abstract

One Place facilitates and enables organizations that use Oracle Golden Gate Technology to manage their data sync and cloud migrations much more effectively, at a reduced level of expertise.

The One Place tool enables Golden Gate usage with an enhanced set of valuable functionality that locates and identifies migration and synchronization errors in real-time which saves significant time in trouble shooting, problem location and issue resolution.

One Place for Golden Gate includes, migration services, troubleshooting, issues resolution, monitoring, and management.

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Purpose of this document

The purpose of this document is to provide a detailed description of modern enterprises to have the ability to automate the management, maintenance, and troubleshooting of Homogenous and Heterogeneous database deployments across the enterprise including on premise, hybrid and cloud deployments.

This document outlines in the form of a general description, various application usage scenarios, and planned future enhancements to the OnePlace Management console in relation to the Oracle Goldengate product.

GoldenGate Advantages

GoldenGate is Oracle's Flagship data migration tool, having been purchased as a stand-alone product in 2009. GoldenGate offers world-class and best in class for data migration and business continuity by replicating data up to 6x faster than traditional data movement solutions.

GoldenGate provides and delivers exceptional functionality for:

- Zero downtime for upgrades and migrations.
- High availability and Disaster recovery can be used with Oracle Active DataGuard
- Maintains Transactional Data Integrity
- Synchronize data between heterogeneous sources and targets (without impacting system performance)
- Sun Solaris, Linux, Windows, HP NonStop, HP-UX, HP TRU64, HP OpenVMS. IBM AIX, IBM z/OS
- Oracle, IBM DB2, SQL Server, Sybase ASE, Ingres, Teradata, Enscribe, SQL/MP, SQL/MX, MySQL, Netezza
- ETL products and JMS message queues
- GoldenGate Provides Uptime for Oracle Applications During Migrations and Upgrades

GoldenGate has superior data synchronization at Scale and therefore is ideal for those organizations with high data volumes making it an ideal for Cloud migrations and syncing data between on premise and cloud environments.

GoldenGate Disadvantages

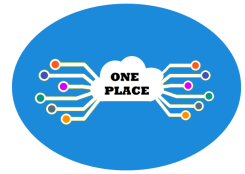
GoldenGate is a comprehensive solution with a wide range of functions and abilities. Typically operated by senior database administration it is an addition to the skill set provided by traditional DBA's.

This makes recruitment, training, resourcing and retention of staff more difficult and adds extra cost and investment in relation to maintaining a viable team of GoldenGate skilled practitioners.

Added to the resourcing issues is the actual functionality of the GoldenGate tool. The reason why an enhanced level of skills and expertise are required to operate GoldenGate is that when a data error occurs there is no immediate alerting to where the issue has arisen.

This requires expertise to drill down to the individual data line where the error has occurred not only does this require expert DBA knowledge it still takes a significant amount of time to locate and identify the issue and then make the appropriate changes. Until this is achieved the database syncing or migration exercise stalls and therefore is at risk.

Monitoring is or GoldenGate can be achieved using the Oracle Enterprise Manager Software package however this in many cases is cost prohibitive and is a significant investment above the cost of the Goldengate software.



OnePlace Migration & Monitoring Console

Introduction

One Place is add-on product that complements Oracle's GoldenGate real-time data integration functionality as to improve monitoring and data issue resolution saving significant time.

GoldenGate is more functional at a lower skill level in terms of usage and support in combination with OnePlace. Organisations can save significantly on their Support budget through a cost-effective licensing model in comparison to GoldenGate monitoring when using Oracle Enterprise Manager (OEM).

Dependencies

Customers with all required Goldengate and Goldengate for Big Data license can deploy One Place Management and Monitoring Console.

Solution Overview

OnePlace is a comprehensive suite of tools, functions and monitoring technology that reduces the expertise required to operate , manage and support GoldenGate. The OnePlace Console includes:

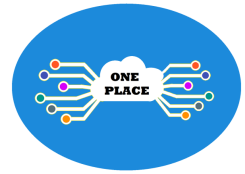
- A simplified management console for Goldengate implementation for across the complete enterprise.
- GoldenGate process monitoring, Administration Management, and Troubleshooting capability in a GUI console without using elaborate GoldenGate CLI commands.
- A modern development paradigm using REST API for centralized Cloud Monitoring and management.
- A privilege-based secure GUI access to the Goldengate deployment, thus avoiding any direct server access. The central console is designed for remote installs/upgrades/one-off patching with built-in data comparison capability.

Use Cases

- Zero Downtime Database migrate/upgrade for On-premise and Cloud Goldengate deployment.
- Zero Downtime Database Platform Migrations in Cloud
- Monitor/Manage/Troubleshoot all Goldengate deployments for both on-premise and cloud deployment

Enterprises can deploy Goldengate OnePlace Management to manage and monitor any of the below deployments.

- 1) Goldengate for Oracle
- 2) Goldengate for MySQL
- 3) Goldengate for SQLServer
- 4) Goldengate for Sybase
- 5) Goldengate for Teradata (only for Target Servers where Replicat is running)
- 6) Goldengate for PostgreSQL



Product Functions

The Goldengate OnePlace Management console addresses the most crucial aspect of day-to-day management, maintenance, and eases Troubleshooting steps that every DBA/Goldengate Engineer needs to go through. GUI interface provides the one-click capability to configure and manage Extract, pump, and replicate complex Goldengate implementations.

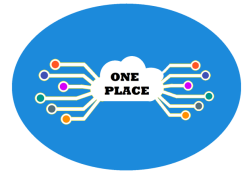
Product Technical Features and Functionality

Some of the Salient features are as described below:

- a. Manager: Functionalities as few below
 - i. Edit Manager Parameter file / View Report file
 - ii. Start/Stop/Refresh/Kill Manage
- b. Extract/Pump: Functionalities as few below
 - i. Unregister/Register an Integrated extract
 - ii. Add/Delete Ext/rmttrail
 - iii. View Report File/Checkpoint and Stats
 - iv. Start ATCSN/AFTERCSN
 - v. Stop/Force stop/Kill
 - vi. Option for an auto-upgrade from Classic to Integrated Extract
 - vii. Option for the auto downgrade from Integrated to Classic Extract
 - viii. Option for ETROLLOVER / Begin Timestamp
- c. Replicat: Functionalities as few below
 - i. View Report File/Checkpoint and Stats
 - ii. Start / Stop /Alter
 - iii. Skip Transaction
 - iv. Option for an auto-upgrade from Classic to Integrated Replicat
 - v. Option for ETROLLOVER / Begin Timestamp
- d. Logdump in a GUI console with access only to a specific role
 - i. All the complex commands are simplified with a click
- e. Inbuilt Data comparison tool which can compare the critical migrated data
- f. Maintain gold image and remote deploy of Goldengate images across the enterprise
- g. Centralized Monitoring and Management console with role based access

Troubleshooting GoldenGate Errors

A single pane of glass is provided in the Performance Monitor screen to monitor the system's overall health where Goldengate is deployed. This includes the resource usage (Threadwise CPU /Memory/Disk/Network) usage of the Goldengate processes . Also can view the process stack of each thread . DBAs/Goldengate Engineers are provided the facility to drill down into specific golden gate related process and review its performance indicators



Summary

The OnePlace Management and Monitoring Console for Goldengate is a valuable addition for organizations wanting to extract more value from their Goldengate investments and who need to reduce the risk and time taken to identify where and when a data process has failed.

With enhanced monitoring the OnePlace solution significantly reduces the cost of operating GoldenGate and add value in key areas such as trouble shooting and management.

For further information or to book a demonstration please send an email to jimmy@echoapps360.com