

Oracle Financial Services Funds Transfer Pricing on Oracle Exalogic



Oracle Financial Services Funds Transfer Pricing provides application based multi-processing functionality which complements the Exalogic + Exadata architecture to provide extreme performance. This application, running on Oracle Exalogic, now allows financial institutions to measure the time taken for a variety of FTP processes in under an hour.

KEY FEATURES

- Exalogic is an open system, assembled by Oracle from its portfolio of standards-based, best-of breed component products and technologies.
- The Exalogic system reflects best-practices acquired and refined from thousands of customer deployments and extensive R&D effort.
- Exalogic is designed to meet the highest standards of reliability, availability, scalability and performance for a wide variety of time sensitive, mission-critical workloads
- OFSAA solutions, including Oracle Financial Services Funds Transfer Pricing, Profitability Management and Asset Liability Management, all benefit from this architecture

RELATED PRODUCTS

Oracle Financial Services Analytical Applications:

- Oracle Financial Services Data Foundation
- Oracle Financial Services Price Creation and Discovery
- Oracle Financial Services Asset Liability Management
- Oracle Financial Services Liquidity Risk Management

Move Beyond Traditional Transfer Pricing Approaches

Oracle Financial Services Funds Transfer Pricing is the industry-standard software application for implementing a matched rate funds transfer pricing system. Recognizing the value of matched rate transfer pricing, financial institutions are increasingly incorporating it into their performance measurement systems. Matched rate transfer pricing overcomes the shortcomings of traditional transfer pricing approaches, such as unprofitable growth, repricing risk, and rate risk trap, by using multiple transfer rates instead of the single rate that traditional approaches advocate. Under the multiple rate approach, assets and liabilities are given transfer rates that reflect their specific maturity and repricing characteristics.

Oracle Financial Services Funds Transfer Pricing calculates transfer rates at the lowest possible level of detail in the institution's balance sheet, the instrument record level. The organization can generate accurate charges and credits for all sources and uses of funds for your institution and measure net interest margin contribution at the instrument record level. With Oracle Funds Transfer Pricing running on Oracle Exadata banks can now run FTP daily, allowing for maximum accuracy.

Why Oracle Financial Services Analytical Applications on Exalogic?

The objective of testing Oracle Financial Services Funds Transfer Pricing on Oracle Exalogic was to measure the time taken for computing base FTP rates, FTP add-on rates for Liquidity Cost and the related funds charges/credits for each individual account record using a representative portfolio of product types and OFSAA FTP Transfer Pricing Methods. Oracle Exalogic was the best choice for supporting these calculations because the Funds Transfer Pricing engine consumes large chunks of data into memory, where FTP methodologies are applied. The business processes represented in the test were:

- Base transfer rate calculation and instrument charge/credit for various TP methods (limited to Cash Flow Zero Discount Factor for all instruments that have contractual maturity and Redemption Curve for all instruments that have no fixed maturity, e.g. checking/savings/credit cards)

- Oracle Financial Services Profitability Management
- Oracle Financial Services Balance Sheet Planning
- Oracle Financial Services Funds Transfer Pricing
- Oracle Financial Services Basel Regulatory Capital
- Oracle Financial Services Credit Risk Management
- Oracle Financial Services Economic Capital Advanced
- Oracle Financial Service Market Risk
- Oracle Financial Services Retail Portfolio Risk Models and Pooling

Oracle Applications:

- Master Data Management
- Application Integration Architecture

Oracle Fusion Middleware:

- Application Server
- Business Process Management
- Enterprise Manager

Oracle Database

- Oracle Database 11g
- Real Application Clusters
- Partitioning
- Advanced Compression
- Advanced Security
- Active Data Guard

Oracle Servers and Storage

- Systems
- Sun Servers
- Sun Storage and Tape

- Base liquidity adjustment rate calculation and instrument charge/credit (Using formula based rate adjustment method).

Today's financial services industry is very volatile, especially around interest rates, risk management and bank profitability. Oracle Financial Services Funds Transfer Pricing provides application based multi-processing functionality which complements the Exalogic + Exadata architecture to provide financial institutions extreme performance and enables bank management to act quicker when making decisions.

With the extreme performance of Oracle Financial Services Analytical Applications running on Oracle Exalogic, global financial institutions can dramatically reduce the lead times required to compute FTP rates for 32 million instrument records.

Oracle Financial Services Funds Transfer Pricing Running on Oracle Exalogic

Process Type / # of Processes (multi-process setting)	1	8	16	32	48
TP Rate Only		0:25:29	0:14:32	0:11:48	0:10:36
TP Rate + Instrument Charge/Credit	02:37:00	0:28:42	0:15:30	0:10:03	0:09:57
TP Rate + Adjustments		0:28:56	0:16:35	0:13:25	0:13:02
TP Rate + Adjustments + TP/Adjustments + Charge/Credit		0:33:19	0:18:35	0:12:53	0:11:26

Oracle Exadata X3-2 ½ Rack Configuration

4 x Database Servers, each with:

- 2 x Eight-Core Xeon® E5-2690 Processors (2.9 GHz)
- 128GB Memory (expandable to 256GB)
- Disk Controller HBA with 512MB Battery-backed Write Cache
- 4 x 300 GB 10,000 RPM Disks
- 2 x QDR (40Gb/s) InfiniBand ports
- 4 x 1/10 Gb Ethernet Ports (copper)
- 2 x 10 Gb Ethernet Ports (optical)
- 1 x ILOM Ethernet Port
- 2 x Redundant Hot-Swappable Power Supplies

7 x Exadata Storage Servers X3-2, each with:

- 2 x Six-core processor for SQL processing and
- 4 PCI Flash cards each with 400 GB(raw) Exadata Smart Flash Cache and 12x 3 TB 7,200 RPM High Capacity disks

Software

Oracle Database 11gR2 Enterprise Edition, Oracle Real Application Clusters, and other Oracle Database options. Oracle Linux 5 Update 8 , InfiniBand protocol used to communicate between the Exadata Storage Servers and the Oracle Database.

Oracle Exalogic Elastic Cloud X3-2 ½ Rack Configuration

16 x Oracle Sun X5-2 Servers, each with:

- 2 x Eight-Core Xeon® E5-2690 Processors (2.9 GHz)
- 256GB Memory (expandable to 512GB)
- 2 x 100 GB SSDs (RAID1)
- 1 x Dual port QDR (40Gb/s) InfiniBand HCA
- 1 x 10 Gb Ethernet Management Port (Base-T)
- 2 x Redundant Hot-Swappable Power Supplies

Storage Subsystem:

- (4) QDR InfiniBand ports (one active and one passive per storage head)
- 4 TB solid state disk read cache
- 292 GB solid state disk write cache
- 60 TB Serial Attached SCSI (SAS) disks
- (2) GbE management port (BASE-T)

Software

Oracle Exalogic includes extensions to Oracle Linux UEK for enhanced application performance and manageability while maintaining compatibility with existing applications. All software certified for the appropriate Linux versions is fully supported for Exalogic.

About Oracle Financial Services Enterprise Performance Management

Oracle Financial Services Analytical Applications bring financial institutions best of breed capabilities to proactively manage Financial Risk, Treasury, Finance and the Front Office. The applications are built upon a commonly available analytical infrastructure consisting of a unified financial services data model, analytical computations, a Metadata driven “R” modeling platform, and the industry-leading Oracle Business Intelligence platform. This provides one version of the analytical “truth” throughout the enterprise.

Financial institutions, regulators, and shareholders who are focused on the need to measure and meet risk-adjusted performance objectives can turn to Oracle Financial Services Enterprise Performance Management. This solution allows institutions to price products appropriately to reflect their true risk, track profitability trends and cost structures, and better understand how their institution is impacted by threats to liquidity, capital adequacy, and exposure to market rate volatility.



CONTACT US

For more information about Oracle Financial Services Asset Liability Management, visit oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.

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