

IRI Voracity on OCI & Autonomous: Simplifying Data Management & Our Business

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IRI, The CoSort Company

Oracle Global Leaders Event, Miami Jan 22-23rd 2020

ORACLE[®]
Oracle Global Leaders
Program



Total Data Management

Selected Customers



Mercedes-Benz



HONDA



Total Data Management

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About IRI, The CoSort Company

Melbourne, FL data management ISV specializing in fast, big data manipulation & security, w/wo Hadoop.

Silver level Oracle Partner. Global users & channels.

Renown since 1978 for JCL sort & data migration, DB/DW/BI acceleration, PII masking & test data.



IRI Voracity

An Insatiable Appetite for Data



IRI Partnership with Oracle

- Our customers are asking for PaaS-native solution options.
- No one wants to be in the business of managing data centers.
- Increasing demand from cloud-minded customers who need high security, horizontal scalability, and ease of use.
- Today IRI products and the Voracity platform are only available on-premise or in customer-managed Cloud VM's
- We're partnering to create Voracity-based *PaaS* solutions in Oracle Cloud Infrastructure + Autonomous Linux + Autonomous Database

Outcomes for IRI & Oracle Customers

Reduce costs
while reducing
data risk

Move from
administration
to innovation

Increase
productivity to
drive business
growth

New ways to
deliver apps,
services and
experiences

Scale on
demand. Pay
for what you
use.



The graphic features a stylized cloud icon with red data blocks inside, a red square with a white letter 'B', and the IRI Voracity logo (a blue circle with a white swirl and a shark silhouette). Below these elements is the text 'Big Data in the Cloud' and 'Big Data Performance, Cloud Simplicity'.

Big Data in the Cloud
Big Data Performance, Cloud Simplicity

IT Needs (Unburdening)

70%

of time spent on maintenance; IT is unable to keep up

Implement emerging technologies to help the business innovate

39%

of DBAs handle 50 or more databases

Ensure performance SLAs, Security, Regulatory Compliance & Availability

95%

of DBAs are still creating and updating databases manually

Safeguard data so it can be trusted and accessed to get insight

LOB Needs (Analytics)

75%

of time spent in analytics
by 2020 compared to
25% in 2015

Finance

Cut costs, optimize spend,
track key business metrics
with rapid insights

375%

increase in analytics
spending by marketers
since 2017

Marketing

Use improved customer
insights and track
demand gen

4x

faster quota attainment
by sales teams that
use analytics

Sales

Ensure a constant 360
degree view of customer,
bookings, pipeline

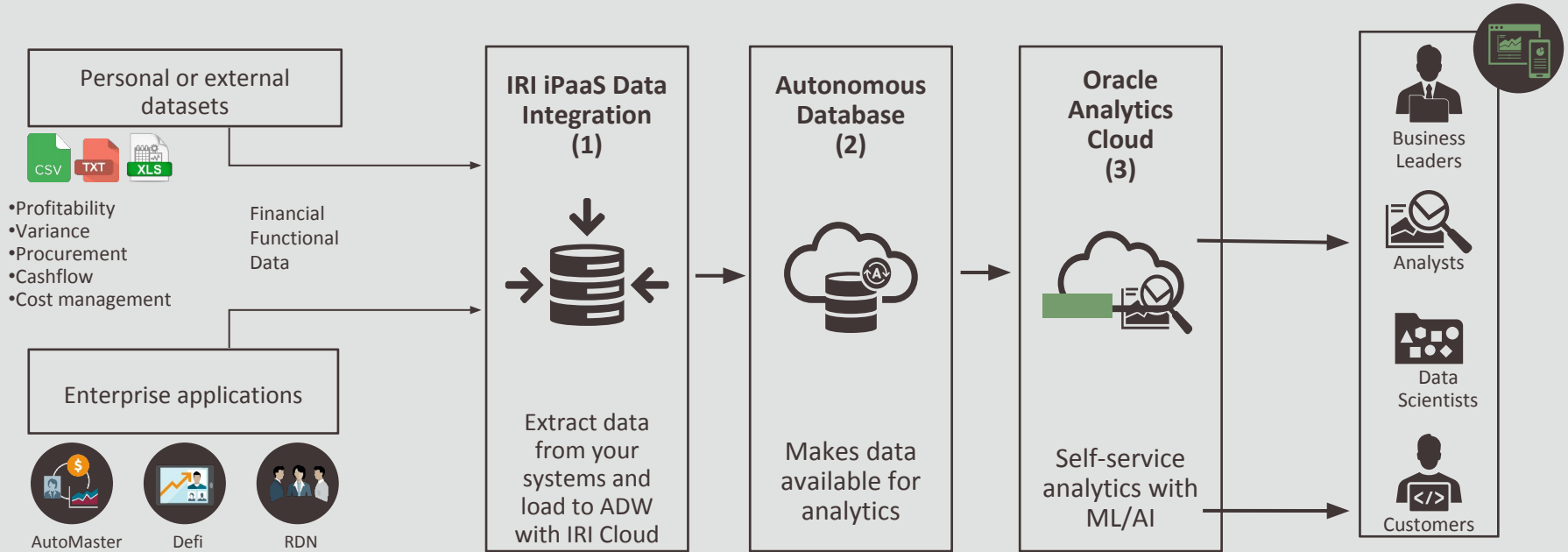
70%

in the midst of major data
projects for decision
making

HR

Improve employee
productivity, performance.
Track budget and recruiting

Voracity iPaaS / Data Wrangling in Oracle Cloud - Solution Architecture



Business Benefits - IRI Voracity on Oracle Cloud

- Reduce TCO up to 50% moving to cloud
- Deploy IRI technology in hours – not weeks
- Superior performance backed by SLAs
- No single point of failure
- OCI credits provide a flexible consumption model
- 2-10x faster reporting speeds

cloud.oracle.com/en_US/iaas/customers

Universal Credits = Flexible Consumption

Unlimited Access to all Oracle Cloud Services

Consumption Choices

Pay As You Go (PAYG)

- No upfront commitment
- Pay only for what you use
- Pay in arrears based on usage
- List price
- Best when usage is uncertain
- Elastic payments based on usage

Monthly Flex

- 1 year minimum term
- Agreed to monthly spend
- Observed 33%-60% savings vs PAYG
- Discounts based on size of deal and term of deal
- Lowest spending without sacrificing flexibility

- One simple contract, simplifies the buying experience
- Universal access to all current and future Oracle Cloud services
- Lower prices based on monthly dollar commitment
- Flexibility to upgrade, expand or move services across datacenters

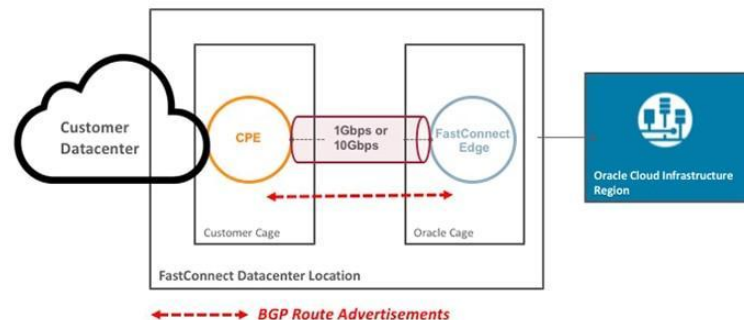
End-to-end Cloud Infrastructure SLAs

	ORACLE	AWS	Azure	GCP
Availability	Covered	Covered	Covered	Covered
Performance	Covered	No coverage	No coverage	No coverage
Manageability	Covered	No coverage	No coverage	No coverage



Oracle Cloud Infrastructure - FastConnect

- Easy, Elastic, and Economical way to create a dedicated and private connection which is consistently fast
- Get a reliable and 'big data' network experience compared to internet-based connections
- *No outbound data fees when paired with FastConnect*



OCI Compliance: Current Audit Programs

<p>Global</p>	 SOC 1 : SOC 2 : SOC 3	 27001 : 27017 : 27018	 Self-Assessment	 US Privacy Shield			
<p>Government</p>	 DoD DISA SRG IL2	 Moderate – Agency ATO	 VPAT – Section 508	 G-Cloud 11 - UK	 Model Clauses - EU		
<p>Industry</p>	 HIPAA	 PCI DSS	 FISC - Japan	 IG Toolkit - UK			
<p>Regional</p>	 GDPR - EU	 BSI C5 - Germany	 TISAX - Germany	 PIPEDA - Canada	 Cyber Essentials Plus - UK	 My Number - Japan	 Cloud Security Principles - UK

More IRI Voracity PaaS Plans for OCI

IRI iPaaS

Data Integration
(New or Legacy ETL)



Extracting data from your systems and loading to ADW via Voracity ETL in OCI Gen 2 Cloud.

IRI DMaaS

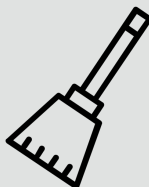
Data Masking
& Risk Scoring



Connecting, classifying, searching, de-identifying and auditing PII in RDB and NoSQL DBs, images, files & faces.

IRI DQaaS

Data Quality
& Unification



Validating, filtering, cleansing, enriching, standardizing and reconciling data and master data.

IRI TDaaS

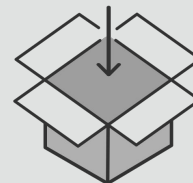
Test Data
Synthesis



Using DDL and file metadata to create structurally and referentially correct test data from scratch.

IRI BDaaS

Big Data
Package/Provision



Integrating, cleansing, and masking with or without Hadoop to wrangle data for analytics.

IRI MaaS

Data/DB
Migration



Extracting file or DB data from legacy systems and converting it for use in new DBs or apps.



IRI Voracity
An Insatiable Appetite for Data





ORACLE

Thank you.

Contact Me / Learn More:

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APPENDIX

*IRI Solution Software
and OCI Configurations*

for

*Oracle Data Administrators
and Data Professionals*

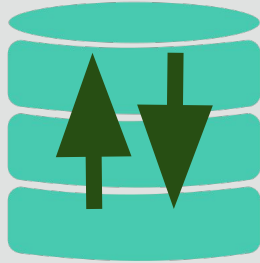
More on IRI and Voracity

- Named a 'top big data provider' by CIO Review & Insights Success
- Dubbed a Production Analytic Platform by Dr. Barry Devlin
- Covered by the BBBT
- Listed in 100 Most Important Companies in Data AND Trendsetting Products by DBTA
- Followed by Gartner & IDC in data integration and masking markets
- Featured in M&M global market forecast reports on:
Data Classification, Data Governance, and Big Data as a Service

IRI USPs:

- Best ETL industry price-performance ratio
- Multi-source PII classify/search/de-ID functionality
- Included DQ, BI, CDC, IoT, and test data capabilities
- Seamless/no-code Hadoop executions
- Supports all RDBs, LUW flavors + erwin, Splunk, KNIME

Fit-for-purpose IRI [software](#) products -- or their wizards in Voracity, backed by IRI [services](#) -- propel, protect, and prototype Oracle **DB, ODI & DV ops**. These will be available as ad hoc or bundled *PaaS* options in OCI in 2020.



Fast Unload & Load



Fast Query & Reorg

01100

10110

01100

10110

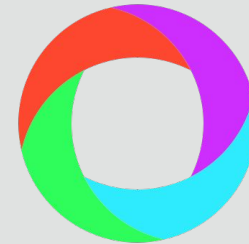
Migrate & Replicate



PII Search & Mask



Synthesize & Subset



*Transform (ETL) & Cleanse,
Wrangle & Report*



Sources

Big Data Platforms & Streams



Call Detail Records

ASN.1 TAP3

Cloud & SaaS



Databases



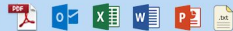
Files

COBOL, CSV, Fixed, JSON, LDIF, LS-RS-VS, MF-ISAM, MFVL, Pipes, VB, Vision, XML, etc.

Mainframe

Adabas, Datacom, IDMS, IMS, ISAM, Pick, Unidata, VSAM, etc.

Semi & Unstructured



Images

BMP, GIF, JPG, PNG, TIFF

Other Sources

Custom Apps, ETL/ELT Tools, Packaged Apps, Web Logs

DISCOVER

Data Classification
Dark Data Search
DB & File Search
DB & File Profiling
ER Diagramming
Metadata Definition
Metadata Forensics

Targets

Big Data Platforms & Streams



BI & Analytic Tools



Cloud & SaaS



Custom Reports

Detail & summary reports

Databases



Files

COBOL, CSV, Fixed, JSON, LDIF, LS-RS-VS, MF-ISAM, MFVL, Pipes, VB, Vision, XLS, XML

Other Targets

Custom Apps, Data & SpreadMarts, ETL/ELT Tools, Federated Views, Packaged Apps, Test Suites

INTEGRATE

Slowly Changing Dimensions
Public/Private Mashups
Change Data Capture
Fast DB Un/Load
Data Federation
One-Pass ETL

MIGRATE

Incremental Replication
Data & File Types
Endianness
Databases
JCL Sorts
ETL Jobs

GOVERN

Data Quality
Data Masking
Re-ID Risk Scoring
Data Reconciliation
Test Data Generation
Data & Metadata Lineage

ANALYZE

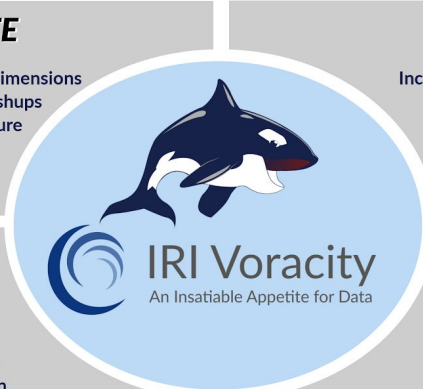
Embedded BI
Data Wrangling
Cloud Dashboard
Predictive Analytics
Clickstream Analytics
BIRT, KNIME & Splunk Feeds

DESIGN

Wizards with Rules
Graphical Dialogs
Scripts with Outlines
Workflow Palettes
Mapping Diagrams
Metadata Form Editors
Erwin Mapping Manager

DEPLOY

CoSort CLI/API
MapReduce 2 (Grid)
Spark (In-Memory)
Storm (Streaming)
Tez (Batch)
Java, SQL, YARN
Eclipse & More Job Launchers



IRI Data Manager Suite



IRI CoSort
Sort, Transform & Report

Speed or replace legacy sorts, and batch/ETL/SQL transforms

- Filter, join, aggregate, pivot, cleanse, lookup, calc, etc.
- Map, migrate, federate, and replicate data from 150 sources
- Segment data, capture changes, report details / summaries
- Analyze changing dimensions, support complex transforms



IRI FACT
Fast Extract for DBs

Speed RDBMS unloads for archival, migration, reorg, and ETL

- Extract tables to flat files in parallel using SQL queries
- Convert and re-format to change data types and layouts
- Create the data definitions for IRI software and DB loads
- Pipe to CoSort and DB loaders for faster reorg and ETL



IRI NextForm
Data, File & Database Migration

Unlock data and move between apps, DBs, and platforms

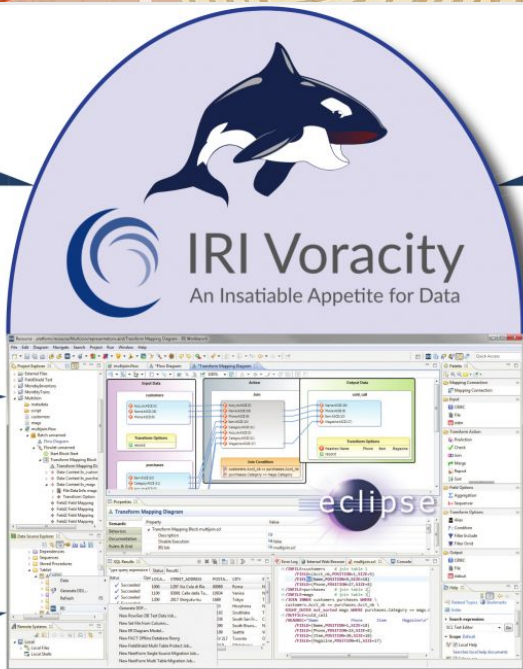
- Convert, federate, remap, and replicate legacy data
- Migrate data between databases and create new tables
- Change file formats, data types, and endian conditions
- Find, extract, and structure data in unstructured sources



IRI RowGen
Smart Test Data Generation

Prototype DBs and ETL, stress-test, outsource, benchmark

- Use real data models and formats, not production data
- Combine generation and selection, create new formats
- Preserve referential integrity and frequency distributions
- Feed test DBs, files, and custom reports simultaneously



IRI Voracity
An Insatiable Appetite for Data

Consolidate tools and tasks to process, protect, prototype, present

- Discover, define, and manage data in legacy and new sources
- Combine data integration, migration, governance, and analytics
- Exploit CoSort and Hadoop engines for optimum throughput
- Leverage Eclipse familiarity, functionality, and extensibility



IRI
Total Data Management

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IRI Data Protector Suite



IRI FieldShield
PII / PHI Classification & Masking

Comply with privacy laws, nullify breaches, and govern data

- Search, profile, and classify sensitive data in DBs and files
- Encrypt, hash, redact, pseudonymize, randomize, tokenize
- Apply cross-table rules to save time and referential integrity
- Score re-ID risk and audit your jobs to verify compliance



IRI CellShield
PII / PHI Search & Mask in Excel

Profile and de-identify PAN/PHI/PII in Excel spreadsheets

- Define or re-use patterns to search for sensitive data
- Locate, report, and open all found ranges in the LAN
- Click to encrypt, mask, or pseudonymize data directly
- Auto-log protections to verify privacy law compliance



IRI DarkShield
Unstructured Data Search & Security

Discover, deliver, and delete sensitive information in dark files

- Classify PII and search LAN-wide using different methods
- Simultaneously de-identify, remove, or report those values
- Comply with the right to erasure, portability, or rectification
- Query, analyze, and format job results for audit and display



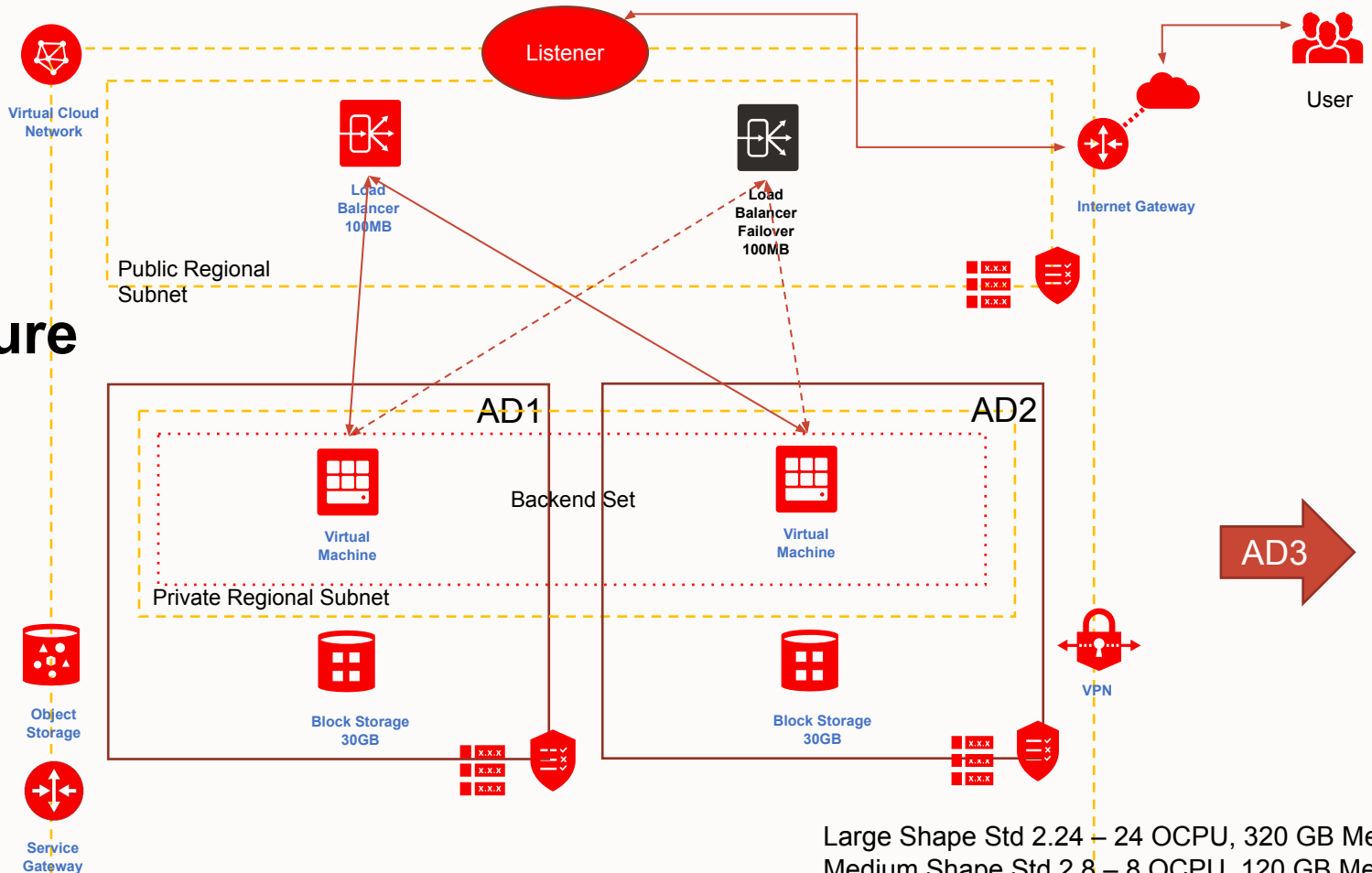
IRI DMaaS
Data Masking as a Service

Leverage expert data privacy engineers to find and mask PII

- Avoid learning curves, software expenses and staff diversion
- Reduce risk by agreement, monitored VPN, or secure cloud
- Use operational logs for reporting and compliance audits
- Select from competitive hourly, daily or project rates



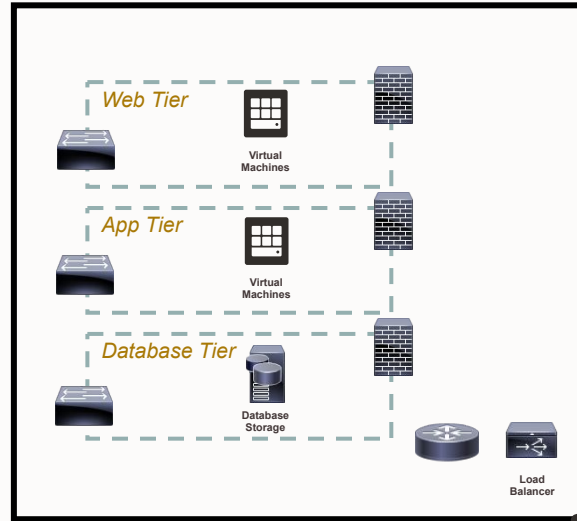
OCI Architecture



Large Shape Std 2.24 – 24 OCPU, 320 GB Mem
 Medium Shape Std 2.8 – 8 OCPU, 120 GB Mem
 Small Shape Std 1.2 – 2 OCPU, 14 GB Mem

OCI Networking Flexibility and Control

Customer data center



Oracle cloud region

