Oracle Hospitality Payment Interface

Multi-Properties Support Sizing Guide

Release 20.4
F95687-01
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Contents

Preface

Purpose

This document is designed to offer guidance on sizing a host machine for deploying one instance of Oracle Payment Interface (OPI) to support multiple OPERA properties. The sizing recommendations published in this document are based on analysis of data collected in test labs and designed to provide guidance on the transaction volume that can be supported on specific hardware.

Due to the fact that many environments have nuances specific to them, these guidelines should be used as a starting point when selecting server hardware. Once a system has gone live in the production environment, it may be necessary to modify the server configuration to account for customer specific requirements and conditions.

For special customers with higher transaction volume requirements than what is listed in this document, more powerful hardware configuration should be considered.

Audience

This document is intended for internal use by Presales and Sales consultants that require guidance for estimating the server needs of potential OPI users.

Customer Support

To contact Oracle Customer Support, access the Customer Support Portal at the following URL:

https://iccp.custhelp.com

When contacting Customer Support, please provide the following:

- Product version and program/module name
- Functional and technical description of the problem (include business impact)
- Detailed step-by-step instructions to re-create
- Exact error message received
- Screen shots of each step you take

Documentation

Oracle Hospitality product documentation is available on the Oracle Help Center at

http://docs.oracle.com/en/industries/hospitality/

Table 1-1 Revision History

Date	Description
June 2024	• Initial Publication

1

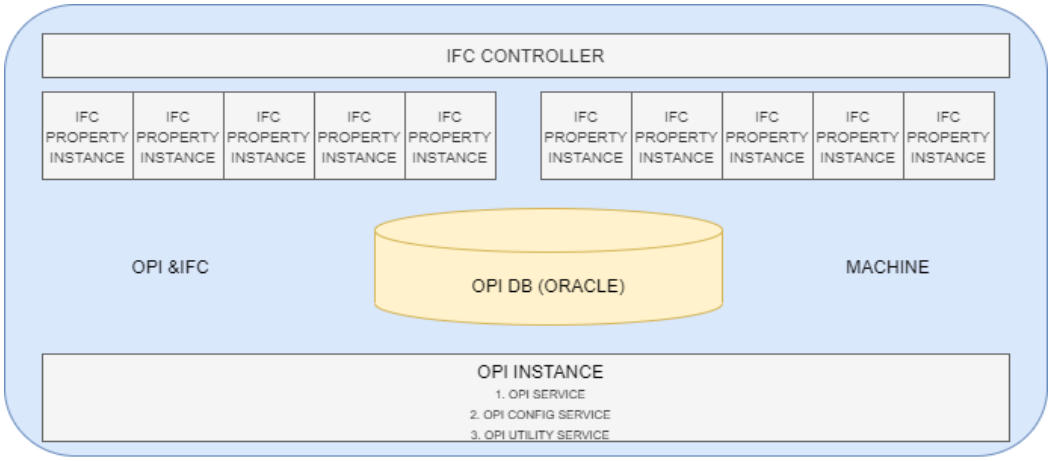
Sizing Methodology Overview

Oracle Payment Interface application is typically deployed on-premise to bridge the PMS systems and partner payment service providers (PSPs). It employs a semi-integrated model and works with the partner PSPs to provide credit card processing functionality to Hospitality PMS systems.

Different from the standard OPI deployment model where one instance of OPI is deployed for each hotel property, we will have to consider, in case of deploying one instance of OPI to support multiple hotel properties, the interaction between different IFC8 instances and OPI, as well as the impact from the interaction between OPERA web service and IFC8 controller.

With the careful consideration of all the interactions and potential throughput limit across the interfaces among OPERA web service, IFC8 controller, IFC8 instances and OPI instance, we will currently only support the deployment model of running the following software on the same machine to support using one instance of OPI to support multiple OPERA properties.

- 1 instance of OPI
- Oracle database for OPI
- 10 instances of IFC8
- IFC8 controller



The 10 instances of IFC8 in this case also means that this deployment supports up to 10 hotel properties using one OPI instance.

Server Sizing Methodology

There are three main components to servers:

- Central Processing Unit (CPU)
- Random Access Memory (RAM)
- Storage

Each component has factors that determine proper sizing. At a high level, CPU and memory are driven by the number of threads and the type of processing. Storage requirement is driven by data retention length, system configuration resiliency and necessity for speed of access. The price of memory has gone down considerably in the last few years, as per this document, the price of RAM is not a major factor.

In this case, we will need to consider the overall CPU, RAM and storage requirement for running OPI, IFC8 and Oracle DB on the same machine.

Notes on Virtualization

All recommendations put forth herein regarding the resource requirements for hardware are applicable to Virtualized environments as well as physical ones when current Virtualization technologies such as Oracle Virtual box, are used. Current technologies incur no real overhead cost, and therefore do not require separate consideration when choosing resource requirements.

Disk Capacity Sizing

The amount of disk space necessary for this deployment model is driven by the amount of data, backups, and database log files and application log files that would be generated by OPI, IFC8 and Oracle database retained on the drives.

2 Assumptions

The specification assumes the following:

1. Unless otherwise noted, the machine only installs the standard software that are listed in the software components section, no other irrelevant workload shall be introduced.
2. Best practices are followed for database maintenance.
3. Data purging is implemented to purge transaction data at a pre-defined interval based upon solution requirements.
4. Proper procedures should be established for maintaining the machine where OPI runs to ensure the data that OPI manages is properly protected – for example, a proper backup process is established to protect the data that OPI manages in order to minimize the risks such as loss of authorization and so on due to the loss of the data managed by OPI.

> **NOTE:**
>
> It should be noted that when compared to the normal OPI deployment model where one instance of OPI is deployed for each property, it becomes even more important to have a proper database backup process in place to protect the OPI transactional data in OPI database, as losing the data could potentially impact multiple sites in this case.

3
Software Components

In case of deploying one instance of OPI to support multiple hotel properties, we will support the model of running the following software in the same machine.

Table 3-1 – Software Components

Software Component	Number of instances
OPI software	1
IFC8	10
IFC8 Controller	1
Oracle database (for OPI), 12c/19c	1

Certainly user can optionally choose to set up IFC, OPI and Oracle database on their own separate machines if the hardware cost is not a concern.

4
Hardware Specifications

The specifications for the machine running OPI, IFC8 and Oracle Database is listed below:

Table 4-1 Hardware Specifications

Hardware	Specifications
OS	Windows Server 2012 R2, 2016 or 2019; 64 bit only
CPU	4 core
Memory	32GB
Hard disk	200GB

To ensure that OPI has been given sufficient memory, please make sure to set both the initial JVM memory size (Xms) and maximum JVM memory size (Xmx) to 4096 MB for OPI service application.

5
Transaction Throughput

The maximum credit card transaction throughput can be supported by this deployment model is listed below.

Table 5-1 Transaction Throughput

Total credit card transaction volume	18,000 / hour
Credit card transaction per minute per site (assuming supporting 10 sites)	30 / minute / site

This deployment model is not recommended if the sites are expecting to process more credit card transaction volume than what is listed above.