

Oracle Service Cloud

Best Practices for Large Deployments

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INTRODUCTION

The Oracle Service Cloud is powerful and easy to use. This is especially true when customers implement best practices for deploying their Service Cloud presence, learn how to manage their data, and understand limits of the various features of the Service Cloud. The guidance in this document applies to all Service Cloud customers, but it is especially helpful for customers with globally diverse customer bases, who process hundreds of thousands of customer engagements daily, who must comply with one or more regulatory requirements, or who are targeting internal and external customers.

INTENDED AUDIENCE

This publication is for consideration by anyone involved in designing a successful Service Cloud deployment and anyone responsible for administering the Oracle Service Cloud environment.

DEPLOYMENT STRATEGIES

There are two basic strategies for deploying an Oracle Service Cloud presence: single-instance and distributed multiple instances. Numerous factors will influence the deployment approach that is best for your specific needs. Some factors to consider are:

- The natural segmentation of products, regions, or organization
- Anticipated volume of incident creation
- Anticipated volume of daily incident activity
- Geography of customers
- Number and geography of agents
- Regional data privacy or sovereignty laws
- Compliance requirements
- Sensitive data (PII, ePHI, PAN) processing requirements
- Risk mitigation strategy
- Other specific user cases for your business

As you can see, numerous considerations will affect the design of your organization's Service Cloud deployment, and Oracle Service Cloud can adapt to specific needs.

Single-Instance Deployment

In a single-instance deployment, there is one solitary database into which all data – incidents, contacts, answers, tasks, rules, etc. – will reside for agents and customers globally.

BENEFITS

The notable benefits of a single-instance deployment include:

- Ease of configuration
- Simplified reporting
- Single knowledgebase
- Centralized administration
- Manage a single, consolidated environment
- Consolidated code management
- Central point for application integration
- Customer data is accessible by all agents

CHALLENGES

A single-instance deployment comes with many challenges for large customer deployments that may not be obvious at first, but that can eventually surface. These include:

- Network latency may impact distant users
- Analytics reports may require longer run times as data volume increases
- Archiving may lag behind incident creation in certain high volume creation situations
- Maintenance activities may take longer to run
- Maintenance activities may lead to resource contention that may be visible to agents and customers
- A larger database will make troubleshooting and upgrades difficult
- Many interfaces (languages, brands) associated to a single instance could impact overall performance
- Optlists (lists of products, categories, or accounts) tend to be large which can degrade performance

RECOMMENDATIONS FOR SINGLE-INSTANCE DEPLOYMENT

A single-instance deployment is best suited for customers for which one or more of the following attributes applies:

- Local user base
- Centralized agents
- Low incident creation volume
- Limited administrative resources
- Agents or users who may be accustomed to network latency
- Low number of interfaces required

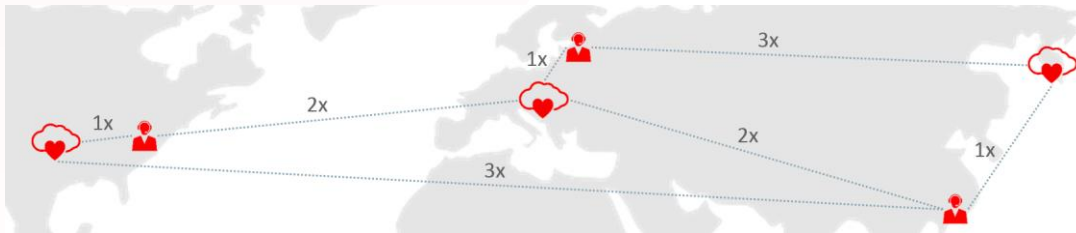
EXAMPLES OF SINGLE-INSTANCE DEPLOYMENTS

Some different examples where a single instance is common are:

- A customer who serves users in a national region but not global
- A customer with a base of 2,000 agents who are in the same geographical region
- A customer who creates 30,000 incidents per day
- A customer with an administrative team of just a few people
- A customer serving a geographic region where low latency is the norm

Distributed Deployment

In a distributed deployment, multiple Service Cloud instances are created to be more geographically aligned with your organizations' agents and customers. For example, if a significant agent presence in more than one location – say United States, Europe, and Asia – there could be three separate instances, one for each geographically significant area.



Example of the effect latency may have on distributed users. (The numbers represent a multiple of latency.)

BENEFITS

For distributed deployments, benefits include:

- Generally better performance due to reduced network latency
- Better analytics performance due to distributed data sets
- Better opportunity for archiving to keep pace with incident creation
- More efficient maintenance activities that are less likely to be visible to agents and customers
- Larger natural maintenance windows than with follow-the-sun operations on a single instance
- Improved ability to roll out process changes and upgrades
- Improved ability to troubleshoot problems due to a smaller instance footprint
- Easier upgrades
- Improved performance of search across multiple knowledgebases that ought not be consolidated
- Usually better performance when many interfaces (languages, brands, etc.) are distributed across multiple instances
- Usually Optlists can be smaller since the data comprising them is distributed

CHALLENGES

Common challenges for distributed deployments include:

- A potentially more complex configuration due to having multiple instances
- Reporting across multiple instances is manual unless using a third-party BI tool (recommended)
- Multiple knowledge bases to maintain
- Decentralized administration
- Multiple environments to manage
- Distributed code management
- Multiple points for application integration
- Customer data will be segmented and possibly redundant

RECOMMENDATIONS FOR DISTRIBUTED DEPLOYMENT

A distributed deployment is best for customers having one or more of the following attributes:

- A large and geographically-distributed user base
- A large and geographically-distributed agents base
- High incident creation volume
- Distributed administrative resources
- Agents or users are not accustomed to high latency
- Competing or conflicting regulatory requirements
- Preference for segregating different data types (i.e. ePHI vs. non-ePHI)
- Logical divides of knowledge (i.e. KB for one region is necessarily different from KB for another region)
- Twenty or more languages or brands

EXAMPLES OF DISTRIBUTED DEPLOYMENTS

Different examples where a distributed environment is common are:

- A customer who services users distributed globally
- A customer with a base of 7,000 agents geographically distributed across multiple regions
- A customer who regularly creates 70,000 incidents per day
- A customer expecting low network latency for their entire organization
- A customer with a discreet group of users for which the customer expects to properly manage ePHI data.
- A customer with some brands in some geographical areas and other brands in other areas.

Recommendations

Consider the various factors that drive the type of deployment right for your organization. Take into account the benefits and risks associated with each type. Oracle Service Cloud can adapt to the unique characteristics of your organization. Taking the time to plan your deployment in advance gives you the opportunity to deliver the quality customer service your customers deserve.

REGIONAL DATA PRIVACY AND SOVEREIGNTY LAWS

The global information age is getting complex regarding the storage and processing of data, and it is getting noticed by world governments. Deployment Strategies are likely to be impacted by both existing regulations and new regulations that are springing up across the globe. For the most part, these regulations affect where PII data (personally identifiable information data) can be stored and who has access to it. Some of the most prolific laws that govern cloud-based data today are listed below.

Regulations that May Affect Deployment

Here are some regulations and regulatory frameworks that may affect storage and processing of PII data:

- U.S. Patriot Act
- Canada Anti-Terrorism Act (ATA)
- U.K. Regulation of Investigatory Act (RIPA)
- France Law Nos 2001-1062 and 2006-64
- EU Directive 95/46/EC (1995)
- EU General Data Protection Regulation (will replace EU Directive 95/46/EC)
- U.S. Privacy Shield (this framework will soon replace the U.S.-EU Safe Harbor Framework)
- APEC Privacy Framework
- Dutch Data Protection Act (DPA)
- Italian Data Protection Code
- U.K. Data Protection Act (2000)
- Russia 242-FZ
- Philippines Data Privacy Act of 2012 (RA-10173)

Many of these regulations dictate what kind of data must reside in which location or region. Other laws affect how data must be kept private, shared, or otherwise protected and managed. Regardless of the requirements and regulations to which you must abide, Oracle Service Cloud is prepared to help you comply. As you plan your deployment in the Oracle Service Cloud, recognize that these and other laws and regulations in those global regions relevant to you and your customers could have an impact on your plans.

This is not legal advice. For the laws affecting your data and the regulations applicable to you, consult your legal department for guidance.

DATA MANAGEMENT GUIDELINES

To maximize success in the Oracle Service Cloud, proper data management is crucial. Oracle Service Cloud has many features that help with Data Volume Management, which includes monitoring database usage, configuring data management policies, bulk data deletion, and FAS volume management. To learn more about these features, see the Oracle Service Cloud Data Volume Management White Paper found on cx.rightnow.com in [Answer ID 10440: How do I optimize my Oracle Service Cloud database?](#)

CONCLUSION

This paper discussed best practices for customers with globally diverse customer bases, who process high volumes of daily customer engagements, who must comply with regulatory requirements, or who target internal and external customers. In addition, this paper outlined the benefits, challenges, and recommendations with different deployment approaches. By following the guidance provided, customers can optimize their users' experience of Oracle Service Cloud.

ORACLE CORPORATION

Worldwide Headquarters

500 Oracle Parkway, Redwood Shores, CA 94065 USA

Worldwide Inquiries

TELE + 1.650.506.7000 + 1.800.ORACLE1

FAX + 1.650.506.7200

oracle.com

CONNECT WITH US

Call +1.800.ORACLE1 or visit oracle.com. Outside North America, find your local office at

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Author: Sean Montgomery

