

**Oracle® Documaker**

**Oracle Documaker  
Enterprise Edition  
Security Guide**

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## **Preface**

This document provides guidelines for securing an ODEE system, highlighting the configuration and installation steps needed to meet security goals.

## **AUDIENCE**

This document is intended for Oracle Documaker Enterprise Edition users.

## **DOCUMENTATION ACCESSIBILITY**

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## CONVENTIONS

The following text conventions are used in this document:

Convention	Description
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
<code>monospace</code>	Monospace type indicates commands, URLs, code in examples, and information you enter.

### Tips, Notes, and Warnings

- A *Tip* provides a better way to use the software.
- A *Note* contains special information and reminders.
- A *Warning* contains critical information that if ignored, may cause errors or result in the loss of information.

## OVERVIEW

Protecting your company's sensitive data is a mission critical operation. Proper goals and security policies established within the organization drive the security plan that protects the livelihood of the company. Understanding these policies can help you to ensure that the security offered by each application within the enterprise aligns with the needs of the company.

The Oracle Documaker Enterprise Edition (ODEE) system may contain sensitive, confidential, or protected information and therefore requires security measures are taken to protect this data in accordance with your organization's policies.

This document provides guidelines for securing an ODEE system, highlighting the configuration and installation steps needed to meet security goals. Details on the types of security features and services that are available to detect and prevent a potential security breach are provided. These details encompass secure system deployment, protection of sensitive data, reliability and availability of the application, authentication and authorization mechanisms.

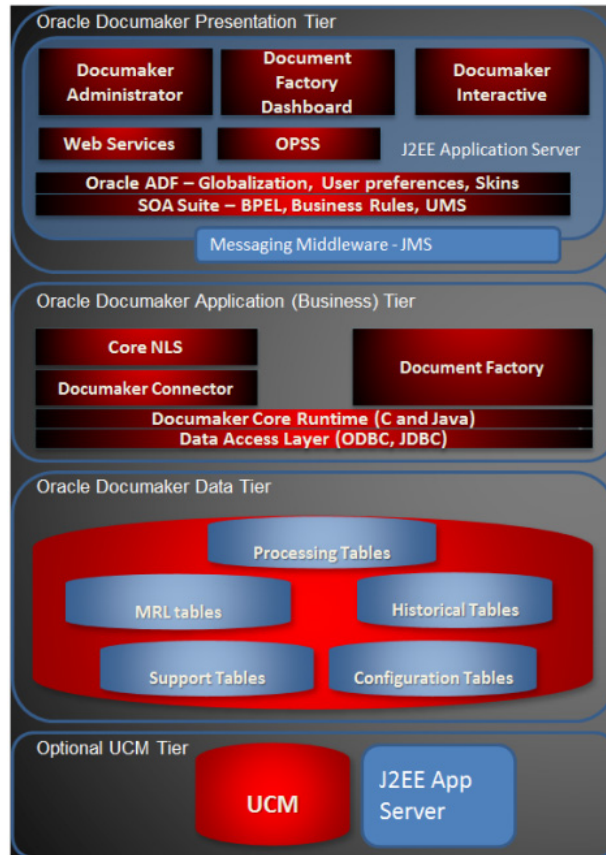
It is critical that an organization set security standards and properly implement them. The development and review of security documentation, an evaluation of business requirements, and the configuration and validation of available security measures and services should all be performed.

## DISCLAIMER

*This guide discusses the security options and features available in Oracle Documaker Enterprise Edition and its supporting component software. Note that the set of recommendations in this guide are not exhaustive and that no guarantee is given that implementing all the topics in this guide provides sufficient protection for all security threats from all potential attackers. The reason for this disclaimer is that you cannot delegate responsibility for secure application development to a third party or a single document but yet, as mentioned, the whole infrastructure and environment are critical components.*

## SYSTEM OVERVIEW

ODEE systems have three different tiers that must be individually considered with respect to security configuration. Overall, the system should be within the company's internal network.



## NETWORK SECURITY

When deploying ODEE on a network there are many security issues to take into consideration, especially the use of firewall and VPN technologies. A firewall will permit or deny network permissions based on configured rules, to protect the internal network from unauthorized access while permitting legitimate communications. Firewalls perform the following functions in a typical ODEE environment:

- Guard the company Intranet from unauthorized outside access.
- Separate Intranet users accessing the ODEE system from internal subnetworks where critical corporate information and services reside.
- Protect from IP spoofing and routing threats.
- Prohibit unauthorized users from accessing protected networks and control access to restricted services.

The ODEE user interface is browser-based and can be used to allow home-office users to access the functions deployed within ODEE. It is recommended that the users access the application from within the company network, secured behind the outside firewall. Virtual Private Network (VPN) technology should be used to allow employees working remotely to access the ODEE application. A VPN tunnels outside traffic through the firewall, placing outside clients virtually inside the firewall.

Please make sure that the firewalls used to secure an ODEE's environment support the HTTP 1.1 protocol. This enables browser cookies and inline data compression for improved performance.

A typical ODEE environment usually has the following security zones:

- **Internet:** External web service clients may come from outside of the company network.
- **Intranet:** A company network separated by the external firewall that gives home users access to the ODEE user interface. This is also where ODEE web servers and load balancers may be placed. Alternatively, for additional protection, web and load balancing servers may be placed in a separate demilitarized zone (DMZ) where external and internal clients first interact with the ODEE environment.
- **ODEE application server and database zone:** ODEE application servers, including Web servers, database servers and possibly authentication servers (for example, if a customer chooses to implement a single sign-on using LDAP servers) reside in this zone. Access to the database that holds critical client information must be secured, with access restricted to system and database administrators only.

## DATABASE

Appropriate database users for the ODEE application should be set up as per the instructions in the associated version of the ODEE Database Install Instructions, which is located on the Oracle Technology Network. In general DB users should not have more permissions that is required for proper application workflow.

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## CONFIGURING SSL

The Secure Sockets Layer (SSL) protocol provides communication security by encrypting traffic across a network in a way designed to prevent eavesdropping and tampering. It uses asymmetric cryptography for privacy and a keyed message authentication code for message reliability. Setting up an SSL-secured connection requires a digital certificate issued by a trusted certificate authority. Self-signed digital certificates should only be used for internal testing.

Any entry points for ODEE web services that are consumed by external third party clients should be secured with SSL. Also, organization standards may require securing communication between browser-based clients and web servers in the demilitarized zone that host the front end of the ODEE system.

Setting up a web server to use SSL-secured HTTP protocol (HTTPS) instead of unsecure HTTP is server-specific.

### SSL IN WEBLOGIC 10.3.6.0

For information on how to configure SSL in WebLogic please refer to the following websites or follow the steps below:

- [http://docs.oracle.com/cd/E23943\\_01/web.1111/e13707/ssl.htm#SECMG384](http://docs.oracle.com/cd/E23943_01/web.1111/e13707/ssl.htm#SECMG384)
- <http://download.oracle.com/javase/6/docs/technotes/guides/security/jsse/JSSERefGuide.html>

### SSL IN WEBSPHERE

For more information about managing SSL in WebSphere please refer to the IBM documentation/website.

## SUMMARY

This guide reviews some of the primary security features that can be configured within the Oracle Documaker Enterprise Edition environment. Remember that security is a mix of awareness, education, and technology in use. Please check with the [Oracle Support team](#) for additional information and knowledge base articles to stay current on this topic.



