

Excel4apps Wands 5 Architecture



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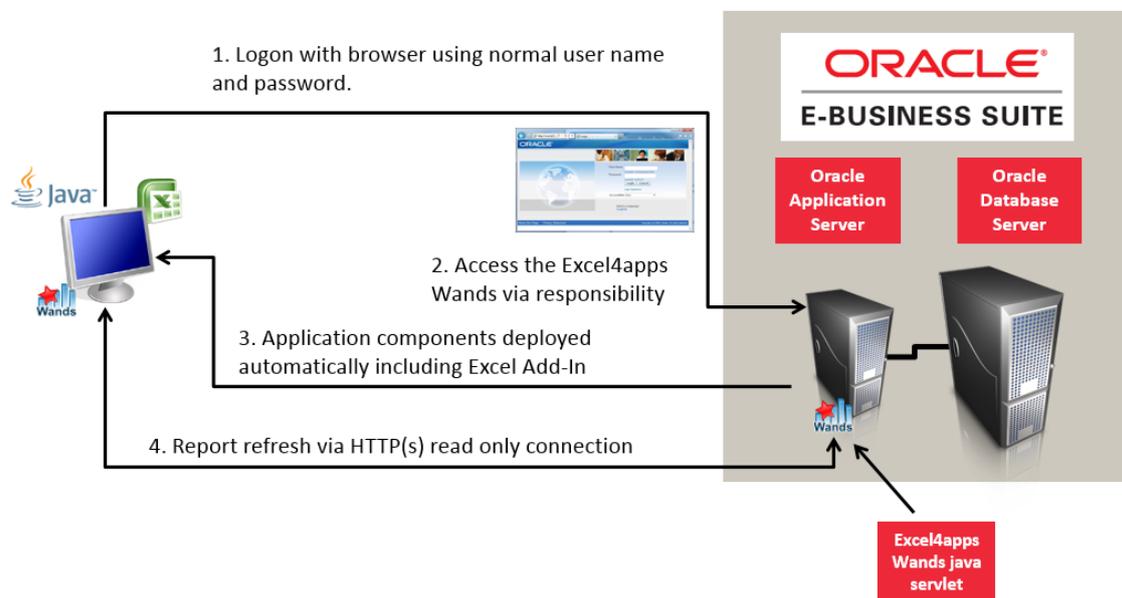
1 Introduction

This document sets out the key points of the Excel4apps Wands (version 5) architecture and specifically what the server component comprises and how the client to server communication functions.

2 Overview

This diagram shows an overview of the components of the architecture.

Excel4apps Wands 5 - Architecture



3 Client

There is no Excel4apps software required to be installed on the client. The client only needs a browser, Microsoft Excel and a version of the Java Runtime Environment which meets the prerequisites specified in the installation document.

The Excel4apps Wands are accessed via a new responsibility in the E-Business Suite application. The menu item under this responsibility launches our Java based application framework which loads all the required components onto the client PC, connects to Excel and activates the Excel Add-In. All files are deployed in the user's application data folders and therefore administrator rights are not required on the PC.

4 Server

The Excel4apps Wands server component consists of a number of elements:

- Java Servlet
- Oracle Applications Framework (OAF) page
- Menu and Function
- Responsibility

Our installation program deploys all these components on the server automatically when the installation script is executed.

4.1 Java Servlet

The installation process deploys the servlet files and configures the application server configuration files to enable access to the servlet. Running AutoConfig and bouncing the application tier makes the servlet active.

This component receives all the messages from the client, executes the SQL against the database and returns the results to the client. The connection to the database is established using an internal Oracle Java API based on the authenticated user application session. The APPS schema database password is not stored or used in this process.

4.2 OAF Page

Two OAF pages are also loaded as part of the installation process. The first page is the Excel4apps Wands home page and the second is the launch page for the application.

4.3 Menu and Function

The installation process will load the required Excel4apps Menu and Functions. These facilitate navigating to the Excel4apps home page and application launch page from the Excel4apps responsibility.

4.4 Responsibility

The Excel4apps responsibility is the component that gives an Oracle E-Business Suite user access to the Excel4apps application. Assign this responsibility to an Oracle user if they should be allowed access to the Excel4apps application.

4.5 Administration

The first time that you launch the Excel4apps Wands application you will need to enter a license key and assign a system administrator. The administrator has access to assign products to other users and configure the system settings. All these settings are configured from the Excel user interface under the Excel4apps Tab > Admin Options menu. You can have multiple users set up as system administrators.

4.6 Communication

The communication between the client and server is as follows:

- Messages are sent over HTTP from the client Excel4apps java application to the Oracle web server.
- This communication with the Oracle e-Business Suite is via HTTP, or HTTPS if that is configured on the Oracle system.
- The HTTP message is routed to the application server and ultimately to the Excel4apps java servlet.
- The Excel4apps java servlet makes a call to Oracle to validate the user session.

- If the session is valid, Oracle returns a connection to the database.
- The servlet executes the required queries on this database connection and returns the results to the client.

4.7 Security

The Excel4apps Wands are tightly integrated with Oracle E-Business suite and leverage all of the built in Oracle security. The following points are relevant in this regard:

- Users must log on with their Oracle user name and password to access the Excel4apps application.
- Single sign on is supported.
- HTTPS is supported.
- A user can only access the responsibilities that are assigned to their Oracle user.
- A user can only report off the Set of Books / Ledgers or Ledger Sets that they have access to in Oracle.
- When reporting off General Ledger data, GL Wand will impose the same accounting flexfield security rules as Oracle.
- When reporting off the secured tables and views in the E-Business Suite database, the Excel4apps Wands applications will impose the same limitations on the data returned as Oracle does. This applies to GL Wand drill down reports to the sub ledger as well as running your own SQL in a Reports Wand report.