Architecture Overview

The COBI.wms Android app can receive its configuration from various sources, and it can connect to SAP Business One through various methods, as explained in the following sections.

App configuration sources

The following sections describe the ways you can deploy the app's configuration, such as the list of SAP Business One company databases it will offer in the login screen and how it should connect to each of them.

Management Database

In the Settings screen of the app, you can find the tab **Management DB** at the top. Under this tab, you can enter the IP address (or host-name) of an MS SQL Server or SAP HANA installation, on which you've created the COBI.wms Management Database.

Usually, entering the IP address, database user, and database password should be enough to connect; leave the other fields empty unless really needed.

When you set up the app this way, the actual configuration will be received from the Management Database. Please see the linked page for details on how to set it up correctly.

In-app company list

NOTE: *This configuration mechanism will soon be deprecated. Please only use it for connecting to cloud-based deployments of SAP Business One, where currently no other option is available.*

In the Settings screen of the app, when you select the **Companies** tab at the top, you can directly enter a list of SAP Business One companies into the app. This list of companies corresponds to the data you would normally enter in the **Companies** table of the COBI.wms Management Database.

When you set up the app this way, various features associated with the Management Database will not be available, such as license and permission management.

SAP Business One connection types

The following sections describe the ways in which the app can connect to an SAP Business One database, regardless of where the app receives its configuration from.

Direct DB connection + Integration Framework

In this connection variant, the app will open a direct database connection for reading data from SAP Business One, and will use the Integration Framework to make bookings and updates.

This option should only be used when Service Layer is not available.

Note that if you're using SAP HANA, you must install HANA Proxy to allow the app to use direct DB queries.

Direct DB connection + Service Layer

In this connection variant, the app will open a direct database connection for reading data from SAP Business One, and will use the Service Layer to make bookings and updates.

This is the most preferable connection method. It should be used if a direct database connection can be established (on-premises or private cloud deployment) and Service Layer is available.

Note that if you're using SAP HANA, you must install HANA Proxy to allow the app to use direct DB queries.

Service Layer only

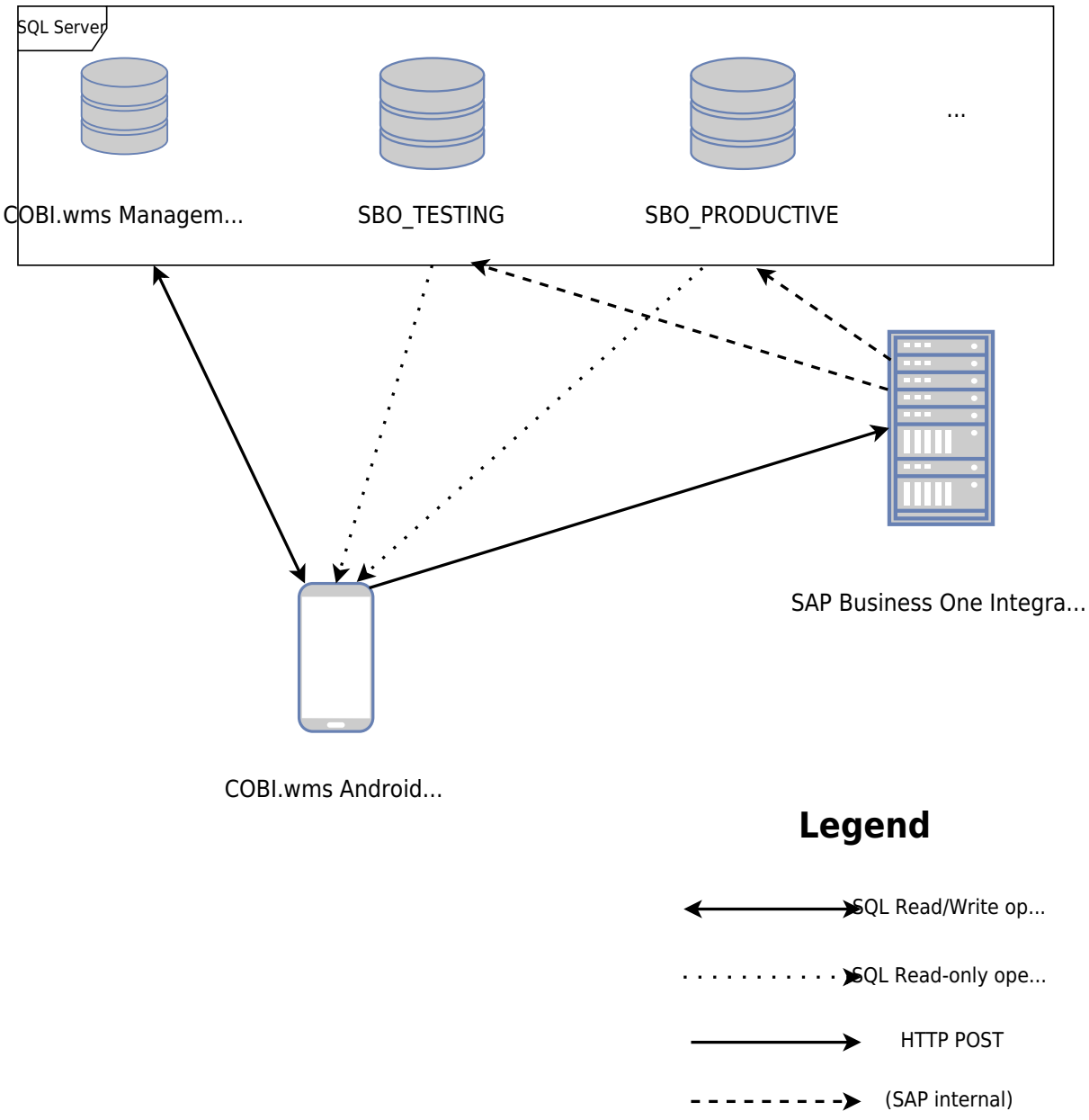
In this variant, the app will use Service Layer for all communication with SAP Business One. Reading data through Service Layer does not offer the same performance as direct database queries, so this connection method should only be used when a direct database connection cannot be established.

Diagrams

The following diagrams might help you in better understanding the architecture of COBI.wms with regard to configuration deployment and SAP Business One connection.

On-premises (or private cloud) with MS SQL Server

On-premises deployment / MS SQL Server...



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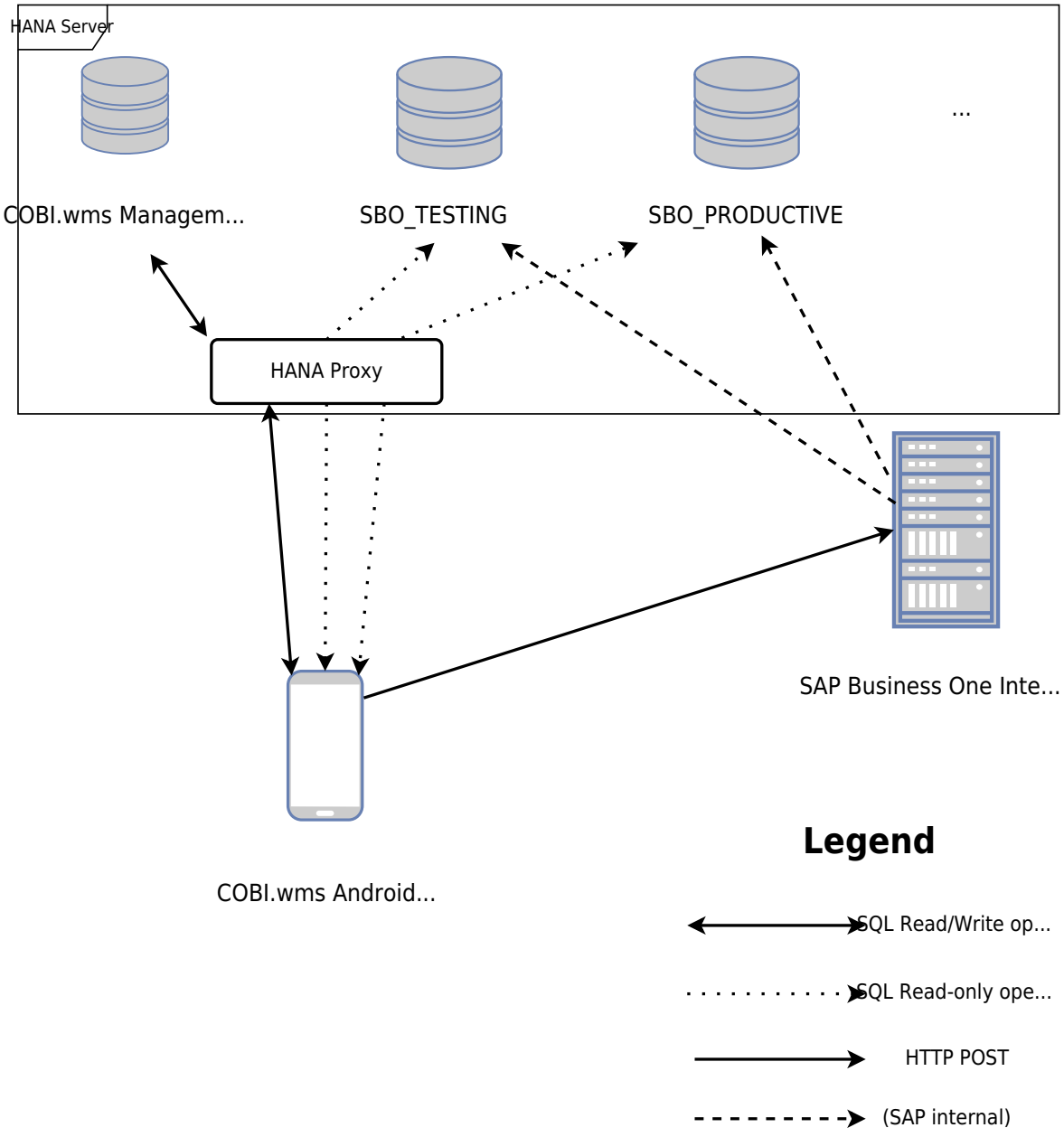
On-premises (or private cloud) with SAP HANA

On-premises deployment / SAP HANA...



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