# Summary

This note describes a simple way of integrating Oracle APEX with other frameworks.

The idea is, from the system(app) that opens(calls) APEX app, we create a JSON Web Token (JWT) with user credentials and some item values that we want to pass along, sign it with a secret key(agreed between that app and our app) and append it to an APEX URL.

When the URL is visited, APEX custom authentication scheme’s sentry function detects a JWT, decodes it, sets the session user and any passed in parameters.

# Create JWT token in calling system

Since the software is also using Oracle database, at this stage, I have identified two simple method to create JWT token.

1. If the software is able to access our apex database via DB link, and execute package apex\_jwt
2. If not, we can install a third party(free) package [jwt\_ninja](https://github.com/morten-egan/jwt_ninja)

Note:

The following privileges are needed in the schema installing this package:

* grant create procedure to
* Able to execute **dbms\_crypto**

I’ll try to explain this with an example using Oracle package apex\_jwt.

1. Agree between two system to use a secret key:

kYedRDkPvEOJLFFOn66vjiS-pjeCwk7uNX4QbgrhdrnGVb86saIEhvt3CW\_\_CQAPqrHCLFrYo620lbJUo5MHE2Di8Z53lDd\_RRyTdeMVhdulECPCY5\_yUH3PKxzvNv23iP6knZmYrO1qARiEASphryaGr28PL6nkTl2Tjce4Sbfnbwi7hWl9Wb-9Xia6ICIyklU8aeoQU1tMxxZyDWj37dbWSld155LzkBGAIwlVBM2CPqIwmC22U3TOPL4w-xtyg18AM-Zl3nnWK8XqF-z5yR7lAOT1\_11lDYaIcFO71MMknTZhy9gejxVUVL1jMd1FHP6BW5sLcDLMGBIMw10a7g

1. Before calling our APEX app, run the following PLSQL to generate the url with token

Text

Description automatically generated

# Decode JWT in APEX

Create a sentry function within APEX to decode the token and set values.