Oracle Database Application Developer Newsletter
Technical news, how-to articles, best practices, and more.

August 2022 News Highlights

- What’s New
- From the Desk of the Editor
- Developer Quiz
- Blogs of Interest
- Oracle APEX News
- Upcoming Events
- Learning Announcements

What’s New

- New releases
  - [Announcing Oracle APEX 22.1 upgrade on Oracle Cloud Infrastructure!](#)
  - [Oracle Machine Learning for R now on Oracle Autonomous Database](#)
Newsletter Changes – from the desk of the Managing Editor

Thanks for all the wonderful comments and suggestions. Please keep them coming. I want to make this a valuable addition to your Oracle knowledge base. Want to add your thoughts on what you want to see? Email me at bill.sawyer@oracle.com.

Developer Quiz

You create the table QZ_INVOICES and index QZ_INVOICE_ORDER_DATE_I:

```sql
CREATE TABLE qz_invoices (  invoice_id INTEGER NOT NULL PRIMARY KEY,
  order_id INTEGER NOT NULL,
  raised_datetime DATE NOT NULL,
  currency_code VARCHAR2(3) NOT NULL )

CREATE INDEX qz_invoice_order_date_i
  ON qz_invoices ( order_id, raised_datetime )
```

Which choices can go in the ##REPLACE## section, so adding the constraint will create the index QZ_INVOICE_U?

```sql
ALTER TABLE qz_invoices
  ADD CONSTRAINT qz_invoice_u
  UNIQUE ( ##REPLACE## );
```

Choice 1: `order_id`

Choice 2: `order_id, raised_datetime`

Choice 3: `order_id, currency_code`

Choice 4: `raised_datetime, order_id`

Choice 5: `order_id, raised_datetime, currency_code`

Answer is below.

Blogs of Interest

- [Unified Observability and OpenTelemetry](#) for Oracle Database
- JMS Messaging and Oracle Database
- Secure [SSL-based JDBC connections](#)
- [Fast geographic area mapping inside the Oracle Database](#)
Upcoming AskTOM Office Hours

- Technology Spotlight Series for Customers (7th Sep, 16:00 – 17:00 UTC)
- How to concatenate rows in a comma-separated list (13th Sep, 13:00 – 14:00 UTC)
- JSON in Oracle Database

For more AskTOM office hours in September and beyond, check the AskTOM Office Hours page.

Oracle APEX News

Success Stories

- **Aspen Medical** used Oracle Autonomous Database and APEX to establish a data warehouse for historic information, using APEX’s low-code application development to provide a rich user interface for querying legacy data, while also helping in building other applications, including a health and safety auditing system.
- **Bliva** cut costs by 80% while providing scalable solutions to the travel industry using Oracle Autonomous Database and APEX on OCI. Lennart Ereback, CEO, Bliva said, “By using APEX, we can quickly develop and deploy our Blieasy service. By fully leveraging APEX in combination with OCI, we can deliver functionality faster and stay ahead of our competitors.”
- **RD Station**, a Brazilian SaaS giant, turned to OCI to solve increased storage and data processing needs created by consolidating data from multiple business areas, and using APEX helped RD Station build scalable, secure enterprise apps, which it deployed with rapid time to market.

Blogs and Videos

- [Implementing Multi-Approvals in Oracle APEX 22.1](#)
- [Helpful URLs to Bookmark for Oracle APEX on Oracle Cloud](#)
- [It's Time to Build a Progressive Web App, Here's How](#)
- [Managing Intersection Rows with Drag & Drop](#)

APEX App Creator Spotlight: APEX gives everyone the ability to be a creator and turn ideas into compelling apps. Here are some creators and the stories behind them.

  “Users enjoy the rich functionality of Oracle APEX. The user friendliness and power of interactive reports add significant value to the system.”

- **Mathias Maciel**, one of Club Escuela Solidaria’s technology coordinators, used APEX to develop the CES app, which helps the school’s educators collect and store data on the academic performance of their students. “The application has a big impact because it collects data faster than the previous manual process. It’s difficult to collect useful information and to get a real projection of child performance in workshops when you are recording only with paper.”

Submit your story and let us showcase your application!

Upcoming APEX Events:
• What's new in Flows for APEX v22.2 (September 29)

Developer Quiz

The August developer quiz answers are:

Choices 3 and 5.

Upcoming events | event recaps

AnDOUC TechCast Days
This 3-day live virtual event has daily themes focusing on Spatial/Machine and Analytics, and a special day is devoted to Data Lakehouse architectures. sessions for developers, DBAs, architects, and IT managers, and also include from the utilities and airport industries. This is a free event.

View the agenda and register.

Oracle Database World | Replays
Heads up all you developers, DBAs, analysts and data scientists out there! latest Oracle Database World 2022 (ODW '22) presentations are now for replay on-demand on YouTube (with no registration required)! ODW designed to help you get the most out of your data by sharing practical, knowledge from Oracle Database experts. Read more on the Database blog.

Learn more... for free!

Build Expertise with hundreds of Oracle workshops on a variety of Oracle products, 24x7 for free, on Oracle LiveLabs.

Learn, Write, and Share SQL at Oracle’s interactive Live SQL site, built with Oracle APEX running on Oracle Database.

Build Muscles at the Oracle Dev Gym by taking workouts, quizzes and even entire classes on SQL, PL/SQL, database design, logic and more.

Useful links to keep your skills sharp

Blogs: Oracle Developers | Oracle Database Insider | Oracle APEX

Websites: Oracle Database | Oracle Autonomous Database | Oracle Developer Center | Oracle APEX