Voyage to Visual Builder Cloud Service

Karen Cannell
kcannell@thtechnology.com
TH TECHNOLOGY
@thtechnology

- Classic Apps vs Visual Apps – you want Visual Apps, the Newer (Current) option

About Me ...

- TH Technology – Oracle Consulting Services, APEX Focus
- Mechanical/SW Engineer - Analyzed, designed, developed, converted, upgraded, enhanced legacy & database applications for 30+ years
- Building Web/APEX applications for government, medical, engineering industries since HTMLDB beginnings
- Leveraging Oracle, Oracle tools 25+ years
- ODTUG Director, Editor Emeritus, Technical Journal
- Oracle Ace
- APress Author

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About You ...

- Oracle Technology ?
- Low Code Platform?
- Cloud Accounts?
- Why Are You Here?

Why This Presentation?

- Intro to VBCS
- MY Experience – How Hard Is it?
- Building a Web App with VBCS
  - Investment to Productivity?
- Compare /Contrast w APEX

Agenda

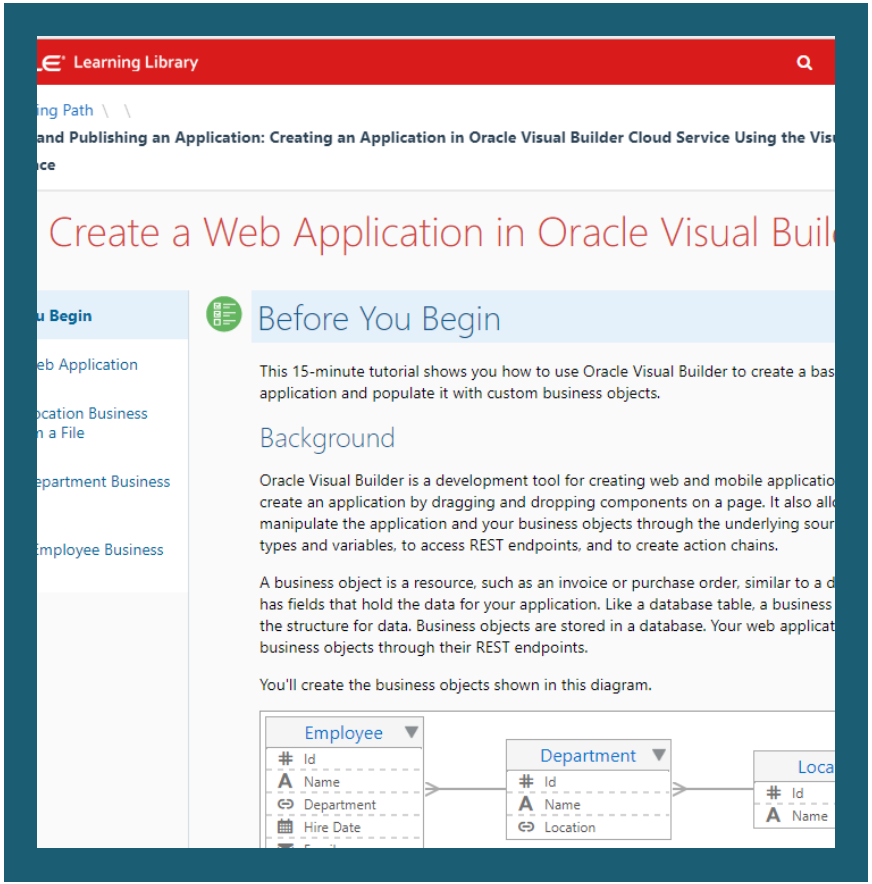
- Why ?
- VBCS Intro
  - Into a Cloud Trial/Account
  - Build An App
- Feature Review
- Compare and Contrast
- Wrap-Up

Why Does an APEX Gal Decide to Learn VBCS?

- Cloud
- Low Code
- JavaScript / JET
- Mobile and Desktop
  - Possible Reuse of Oracle Expertise?
- Curiosity
- Challenge

Voyage to VBCS

Intro to VBCS



Visual Builder Cloud Service

- Cloud-Based Low Code Dev Tool
- Web and Mobile Apps
- Business Objects
- Types, Variables
- Access Data via REST Endpoints
- Action Chains (Navigation)
- Code (JS JET) Optional

Demo Simple VBCS App

First Impressions

- No Database Objects
- No Thick Database
- Everything Data is REST
- JET Everything Else
- Less Hands-On Coding
- No "Save"s

Into a Cloud Account

- Trial – 30 days ELAPSED
- Changes – Classic vs OCI vs New
- Where to Go?
- Use Your Cloud Account Advocates/Representatives

Cloud Resources

- Trial – Oracle Contact
- Cloud Days
- Conferences
- Online Material
  - Learning Library
  - Forum
  - VBCS Pages
- Shay Shmetlzer Blogs

Time Investment

- More Than 30 Days!
- Attend Webinars/ Conferences
- Be A Vacuum

Into Your Cloud Account ...

- Find Visual Builder
- Create Instance
  - Start/Stop Instance
- Open Visual Builder Console

The Visual Builder IDE

- Browser (Cloud) –Based
- Jdev-Like Component Selection

JET

- Everything is JET
- IF You Need to Adjust Code...
  - Oracle JET Cookbook is your Friend

REST

- Everything Data is a REST Service
- No Direct Data Access
- No SQL, PL/SQL

Flow == Navigation

Authentication and Authorization

- Anonymous
  - Anonymous Has Configuration Steps
- Other Options

Data Security

- Back-End
- Enforced at Service Endpoint
  - By Business Object
  - Not By Field
- External REST Services
  - No VBCS Override

Users and Roles

- Role-Based UI
- Page or Component
- Enforced on Client
  - Secure the Data Too!

```
<oj-bind-if test="$application.user.roles.role_name" > </oj-bind-if>
```

The Transition from APEX

- JET / JavaScript - No PL/SQL
- Everything is REST
- Visual Events/Actions

- Drag and Drop Everywhere

"Business Objects"

- Analogous to Tables
- Upload via Spreadsheet
- Builds REST Behind the Scenes
  - Update to Business Object Updates the REST!

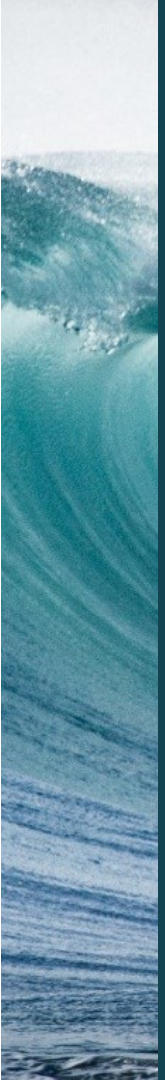
Business Objects

- Store Data
- Maintain Relationships ("joins")
- REST Interface
- Execute Business Logic re the Data

Business Objects, more

- Triggers, Functions, Validations
- Invoke From App or Outside
- Groovy Language
- Ex: Trigger Event to Send Email

(Reuse of ADF Business Components – so ADF BC Groovy references apply)



Apache Groovy | Learn | Documentation | Download | Support | Contribute | Ecosystem | Socialize

Fork me on GitHub

A multi-faceted language for the Java platform

Apache Groovy is a **powerful**, **optionally typed** and **dynamic** language, with **static-typing and static compilation** capabilities, for the Java platform aimed at improving developer productivity thanks to a concise, **familiar and easy to learn syntax**. It integrates smoothly with any Java program, and immediately delivers to your application powerful features, including scripting capabilities, **Domain-Specific Language** authoring, runtime and compile-time **meta-programming** and **functional** programming.

Flat learning curve

Concise, readable and expressive syntax, easy to learn for Java developers

Powerful features

Closures, builders, runtime & compile-time meta-programming, functional programming, type inference, and

Groovy Example

Desktop App

Mobile App !!

- Mobile App Interface
- Live Viewer – Change Phones
- Stage
- Deploy
- Android or iOS

Progressive Web App

Styling (Look and Feel)

- Manually in CSS
- JET Themes
  - SASS Only
  - Direct CSS on oj-* Not Supported
- Alta UI – Default
- JET Theme Builder
- No VBCS Theme Builder

How to Upgrade an Instance?

- **You Don't!**
- Upgrades **Pushed Out**
  - 18.4.5 – Dec 2018
  - 19.1 – March 2019

VBCS 19.1 New Features (March 2019)

- Progressive Web App Packaging
  - Web App Deployment Option
- Cordova Plug-ins
  - Leverage On-Device Features
- Take Photo Action
- New Mobile Template
- Content Exchange

Content Exchange

- March 2019 Release
  - https://blogs.oracle.com/groundside/introducing-the-new-component-exchange-feature-in-oracle-visual-builder
- VBCS and JET UI – Unified Component Plugins
  - JET Custom Web Components
  - Web Components – standard, webcomponents.org

Extras!

Oracle Developer Cloud Service

- Free!
- GitHub Repository –
- Auto Version Control via Git Repo connection

Extras!

Oracle Process Cloud Service

- Point and Click Business Process Builder
- Drag and Drop Into VBCS

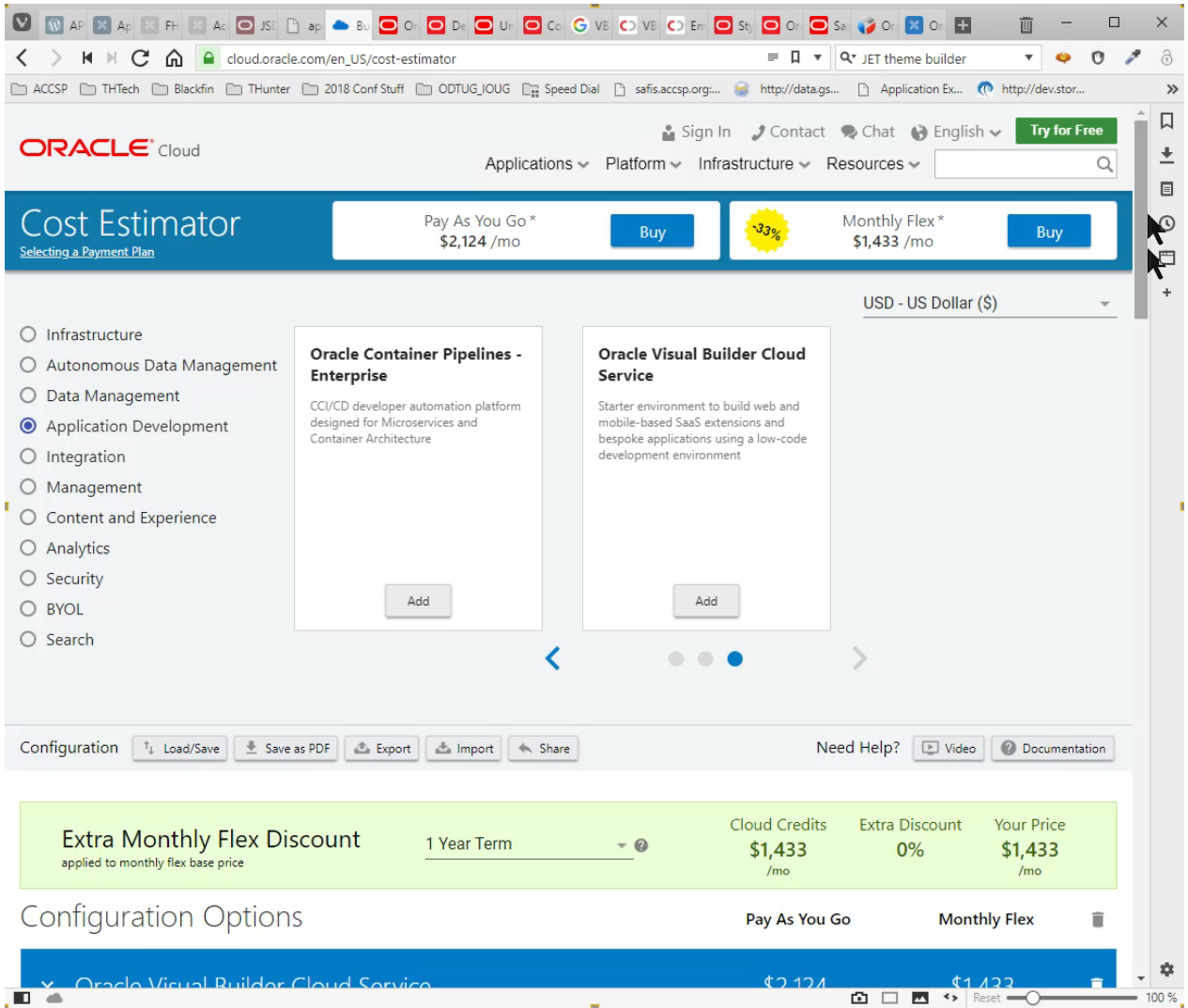
Investment ... Learning

- TIME To Learn > 30 Days
- JavaScript / JET
- Groovy

Operating Costs ...

- Cost Estimator
- Pay As You Go
- Monthly Flex
- Know Your Data, Your Usage

- https://cloud.oracle.com/en_US/cost-estimator


cloud.oracle.com/en_US/cost-estimator
JET theme builder
ACCSP
THTech
Blackfin
THunter
2018 Conf Stuff
ODTUG_IOUG
Speed Dial
safis.accsp.org:...
http://data.gs...
Application Ex...
http://dev.stor...
ORACLE Cloud
Sign In
Contact
Chat
English
Try for Free
Applications
Platform
Infrastructure
Resources
Cost Estimator
Selecting a Payment Plan
Pay As You Go *
$2,124 /mo
Buy
-33%
Monthly Flex *
$1,433 /mo
Buy
USD - US Dollar ($)
Infrastructure
Autonomous Data Management
Data Management
Application Development
Integration
Management
Content and Experience
Analytics
Security
BYOL
Search
Oracle Container Pipelines - Enterprise
CCI/CD developer automation platform designed for Microservices and Container Architecture
Add
Oracle Visual Builder Cloud Service
Starter environment to build web and mobile-based SaaS extensions and bespoke applications using a low-code development environment
Add
Configuration
Load/Save
Save as PDF
Export
Import
Share
Need Help?
Video
Documentation
Extra Monthly Flex Discount
applied to monthly flex base price
1 Year Term
Cloud Credits
$1,433
/mo
Extra Discount
0%
Your Price
$1,433
/mo
Configuration Options
Pay As You Go
Monthly Flex
Oracle Visual Builder Cloud Service
$2,124
$1,433
Reset
100 %

Question 1

- **VBCS Classic vs. Enterprise?**
  - Visual / Enterprise is the Better Product (think of it as Version 2), More Advanced Applications
  - Classic Is Limited in Functionality (Version 1)

Question 2

I Have Millions of Rows Across 5 Business Objects for a SaaS Extension App.

Can VBCS Handle This Volume of Data?

What is the Best Way to Handle High Data Volume for SaaS Extensions?

Can VBCS Handle Data Volume?

- It Depends.
- No Direct SQL Access
  - No Indexing
  - No PL/SQL Manipulation
- Use DB Cloud Service, Expose Objects via REST (ORDS)

Question 3

- Can I Customize the Look and Feel of My VBCS Apps?

  ex: Match the SaaS Theme?

Can I Customize the Theme?

- SaaS Theme - Coming
- Ability to Customize Theme - Coming
- Use JET Theme Builder, Apply to VBCS App

  https://blogs.oracle.com/vbcs/styling-visual-builder-cloud-service-applications

Learning Curve

Time! Invest Time!

Switch Your Brain

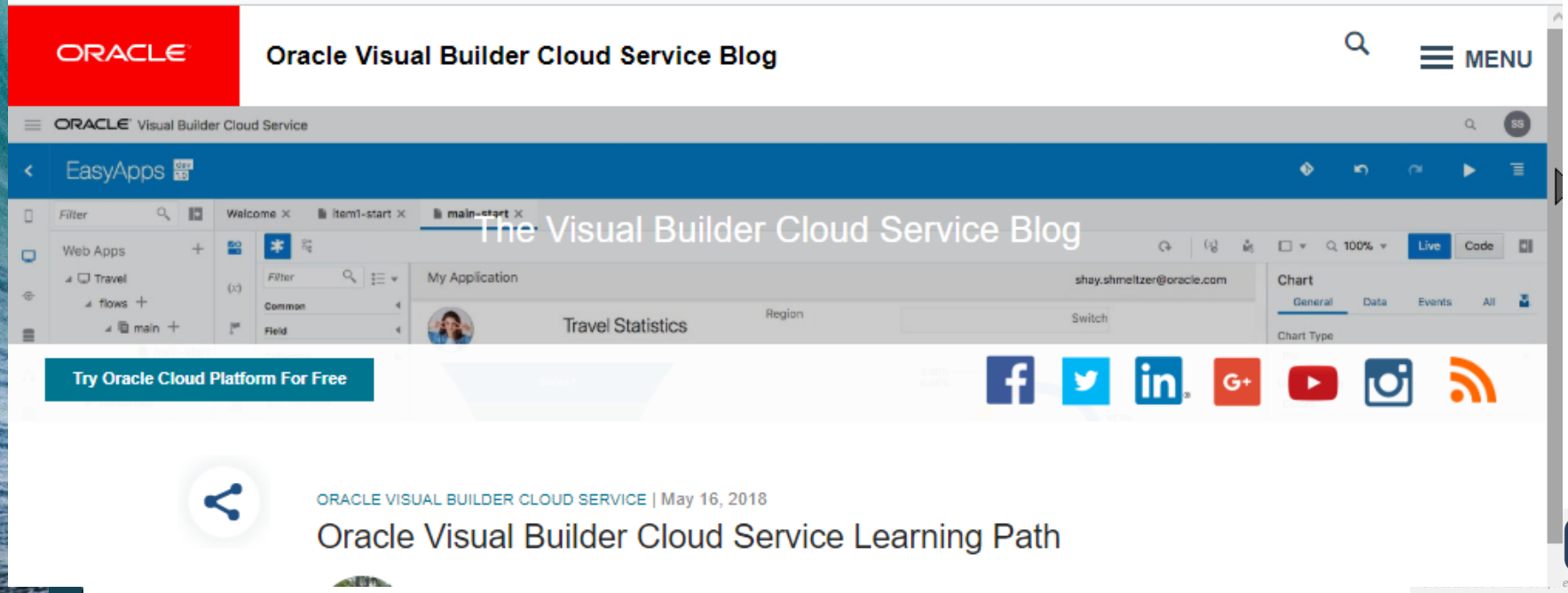
Do The Examples

Recap

- Understand VBCS
- Overview
  - Drag-Drop
  - REST
- Key Differences from APEX

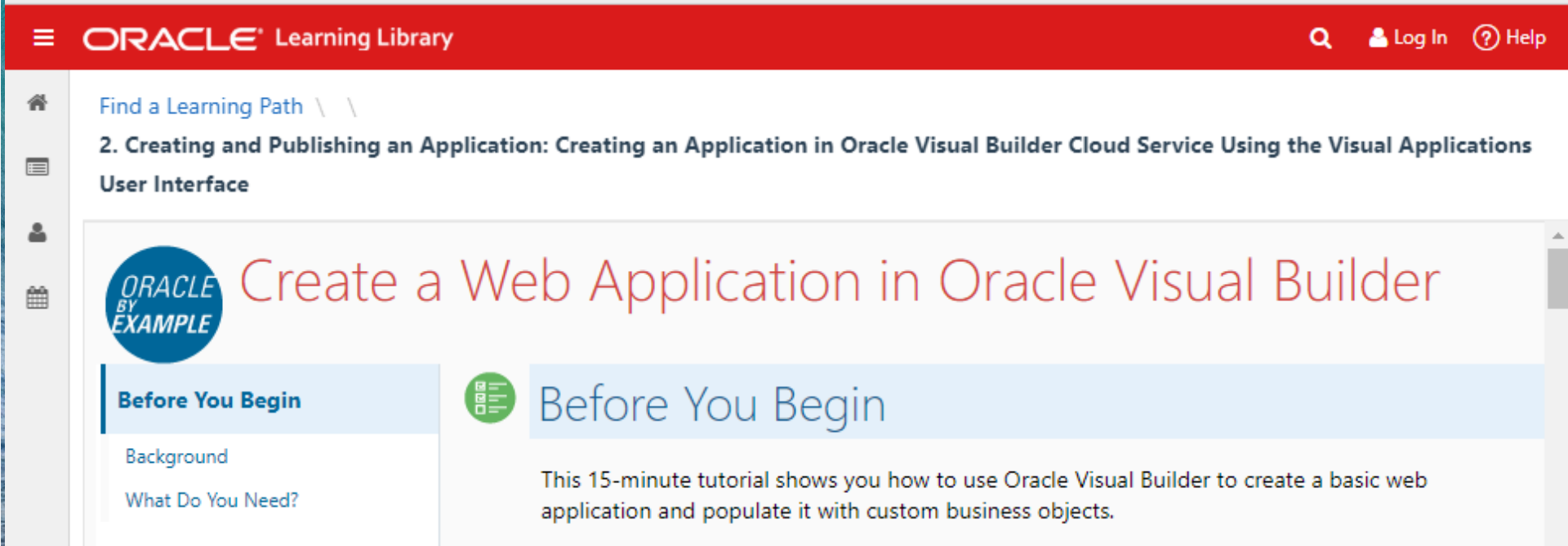
Learn More!

- VBCS Learning Path



Learn More!

- Oracle Learning Library



Comments? Questions? Thank You

Evaluations Please!

Karen Cannell
kcannell@thtechnology.com

Resources

- Oracle Visual Builder Cloud Service

  https://www.oracle.com/webfolder/technetwork/jet/index.html

  https://www.oracle.com/webfolder/technetwork/jet/jetCookbook.html

- Oracle VBCS community

  https://livesql.oracle.com/apex/livesql/file/tutorial_EDVE861IJ168OTUP6ZZ01MX84.html

- VBCS Forum

  https://community.oracle.com/community/database/developer-tools/oracle-jet

- Shay Shmeltzer Blog
- Oracle JET Cookbook
- JET Theming Guide

  https://docs.oracle.com/en/middleware/jet/4.2.0/develop/theming-applications.html

Resources

- Oracle JET Forum

  https://community.oracle.com/community/groundbreakers/development_tools/oracle-jet

- WebComponents.org

  https://www.webcomponents.org/introduction

- VBCS Forum

  https://cloudcustomerconnect.oracle.com/resources/e610f4723c/summary...