# IBM Cloud Transformation Advisor

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# IBM Cloud Transformation Advisor

Quickly evaluate on-premises Java EE apps for deployment to the cloud

Included in IBM Cloud Private, WebSphere 9.0.5 and IBM Cloud Pak for Applications

Introspects WebSphere ,Tomcat, and WebLogic deployments

Provides recommendations and automation for App Modernization

**Analysis Report**

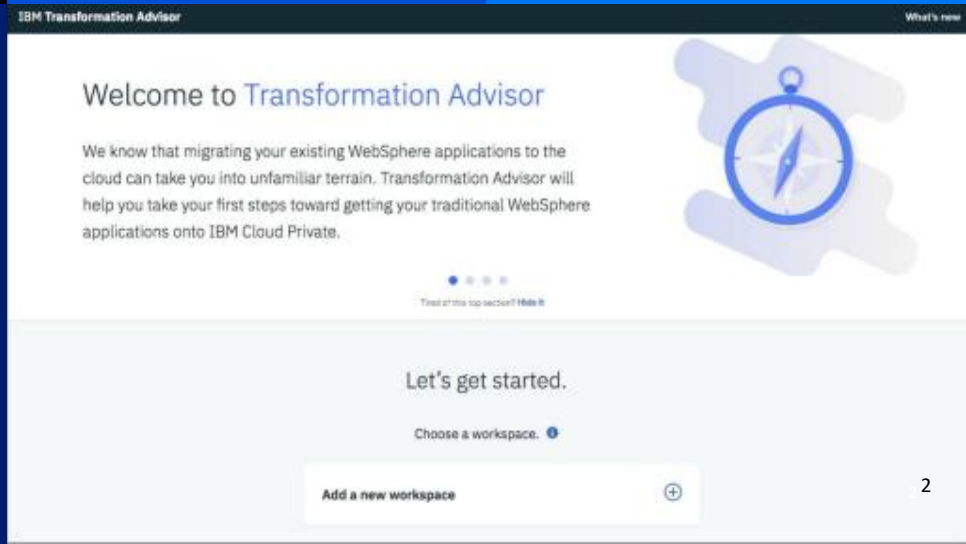
Potential issues, severity & possible solutions

**Technology Report**

Details on IBM platform support for technologies used in the app

**Inventory Report**

High-level inventory of application content and structure

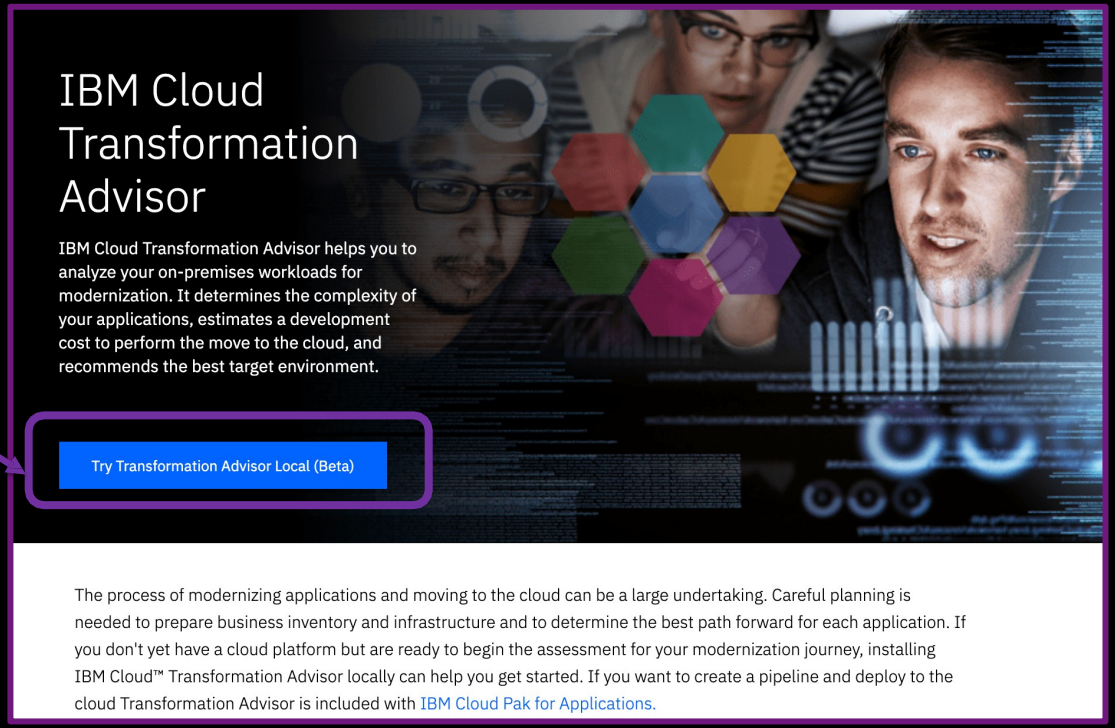


# Transformation Advisor – Local Edition

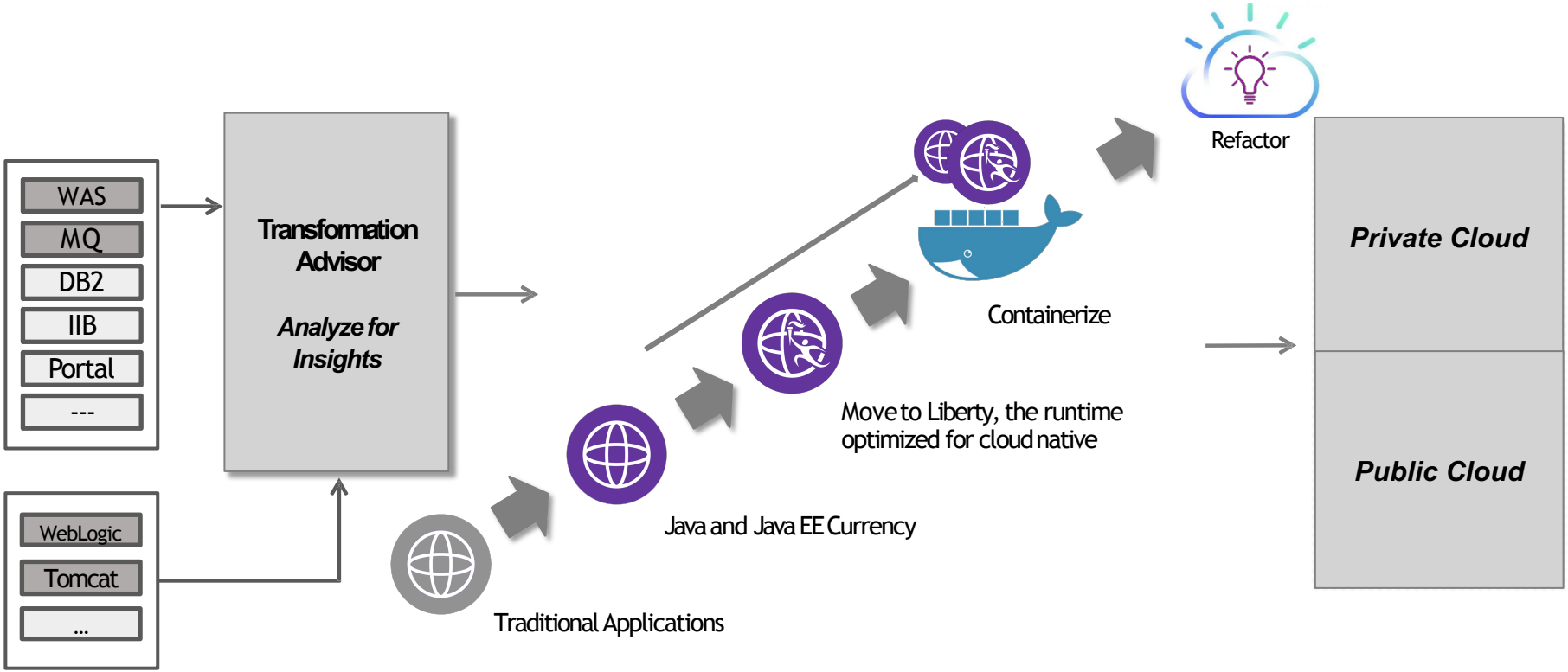
Beta

http://ibm.biz/cloudta

Download
IBM Cloud
Transformation Advisor
to run it in Docker on
Linux,
MacOS,
Windows V10,or
Windows V7



# TA Accelerates the Modernization Journey

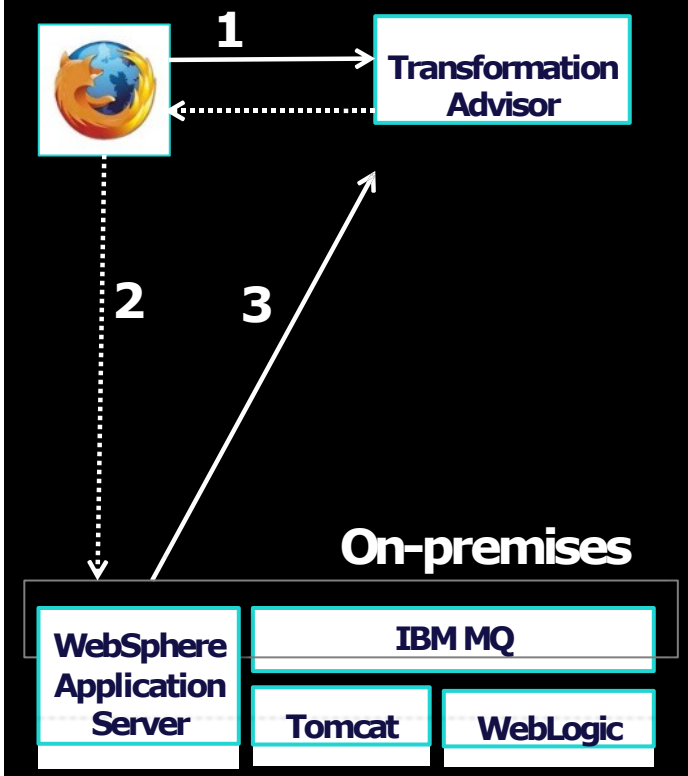


## How Transformation Advisor Works

# Demo



IBM Cloud




1. Access the TA user interface via a web browser and **Download the Data Collector** for your on-premise Java EE and/or IBM MQ runtime environment platform

2. **Execute the Data Collector** in each runtime environment you want to analyze. Supplying administrative access to the runtime will permit configuration data to be collected, providing optimum results.

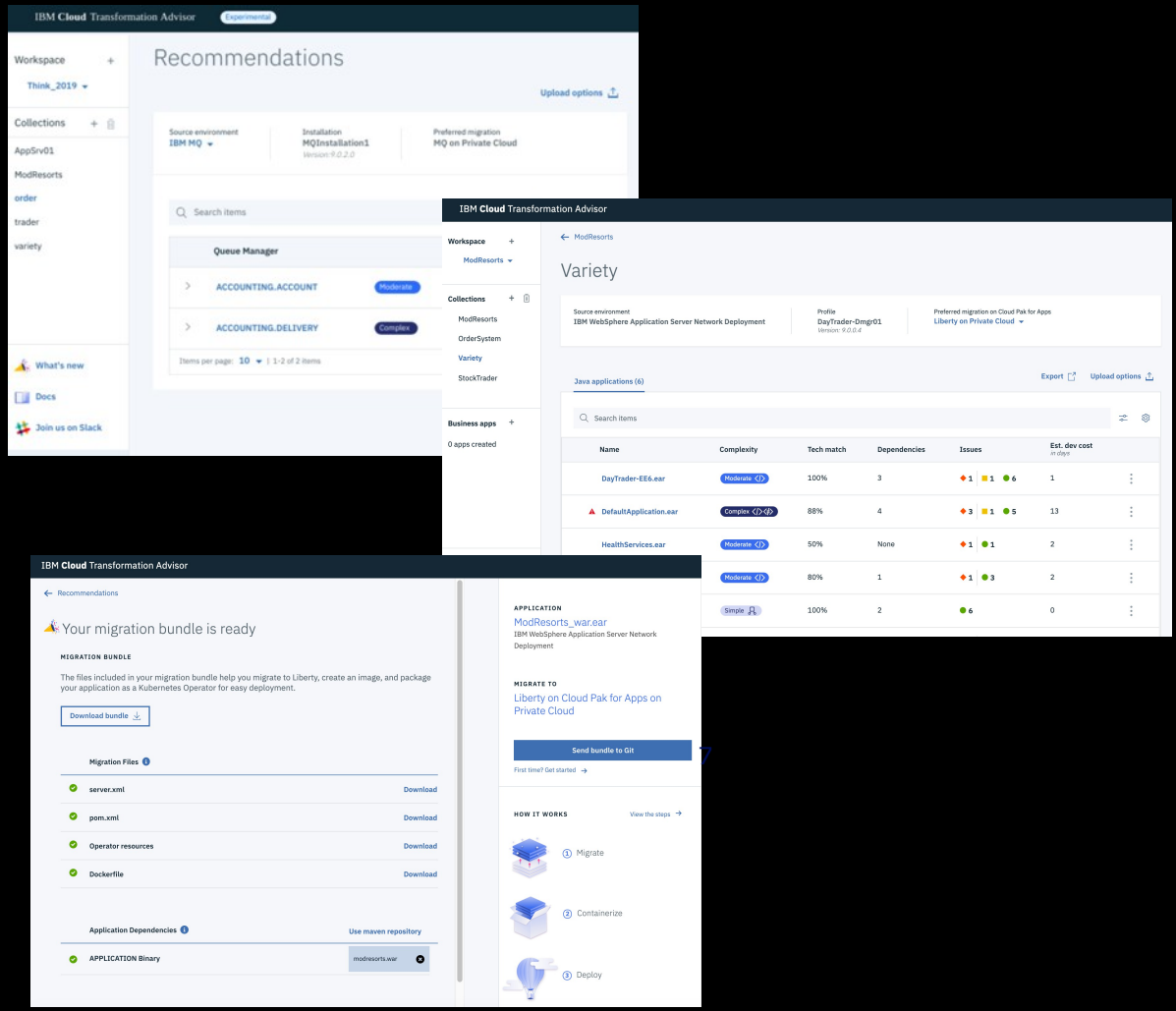
   The Data Collector gathers technology-specific information about your deployed applications, queue managers, and related configuration.

3. **Collected results are sent back** to TA when there is direct connectivity – or – the results zip file can be uploaded through the User Interface.

5. **TA analysis** considers app technology needs, config, dependencies, relationships, container and desired cloud impacts.

6. **TA provides insights and guidance** specific to each application and Queue Manager

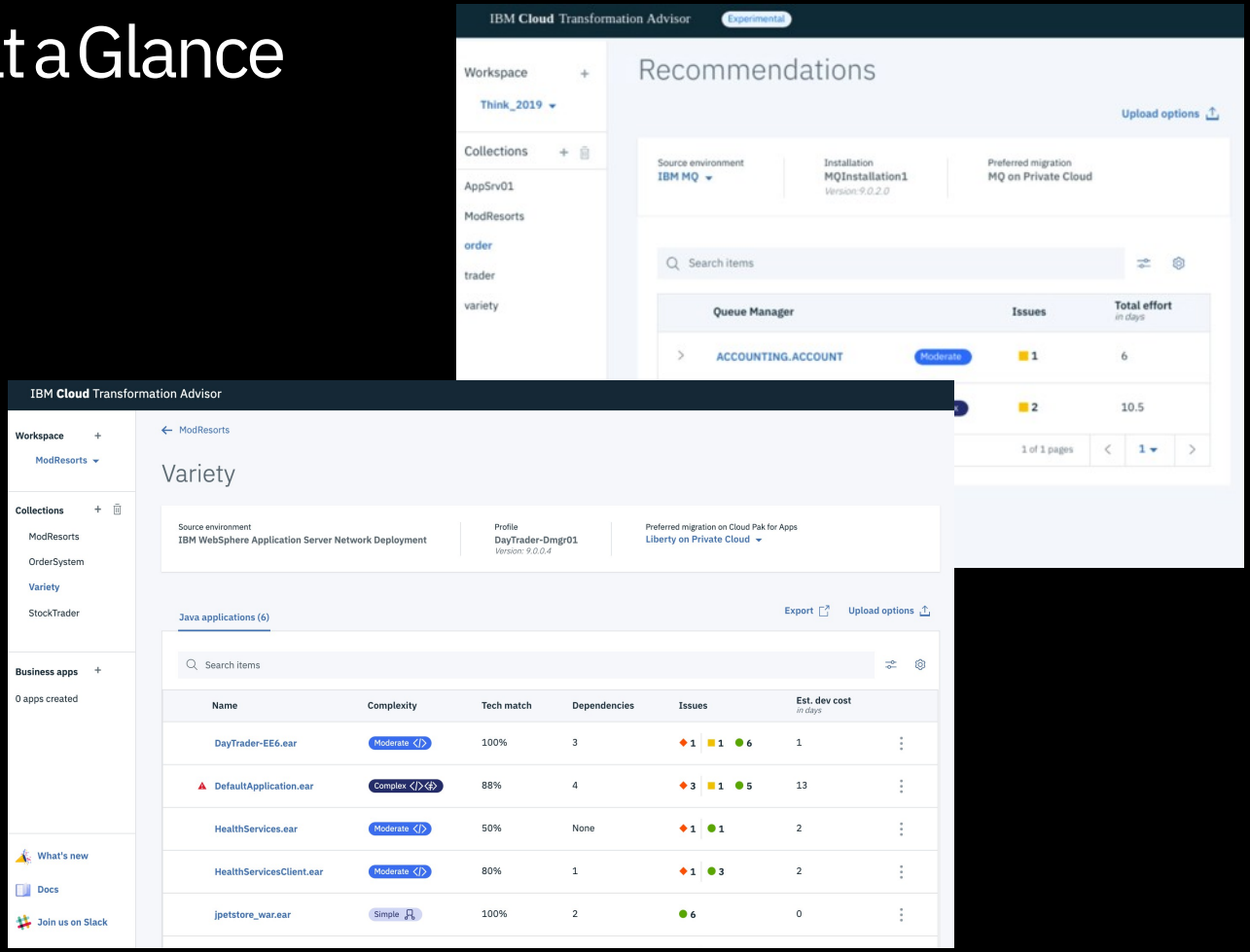
7. **TA generates customized app artifacts.** Automates containerization and public and private cloud Kubernetes deployment



# Valuable Insights at a Glance

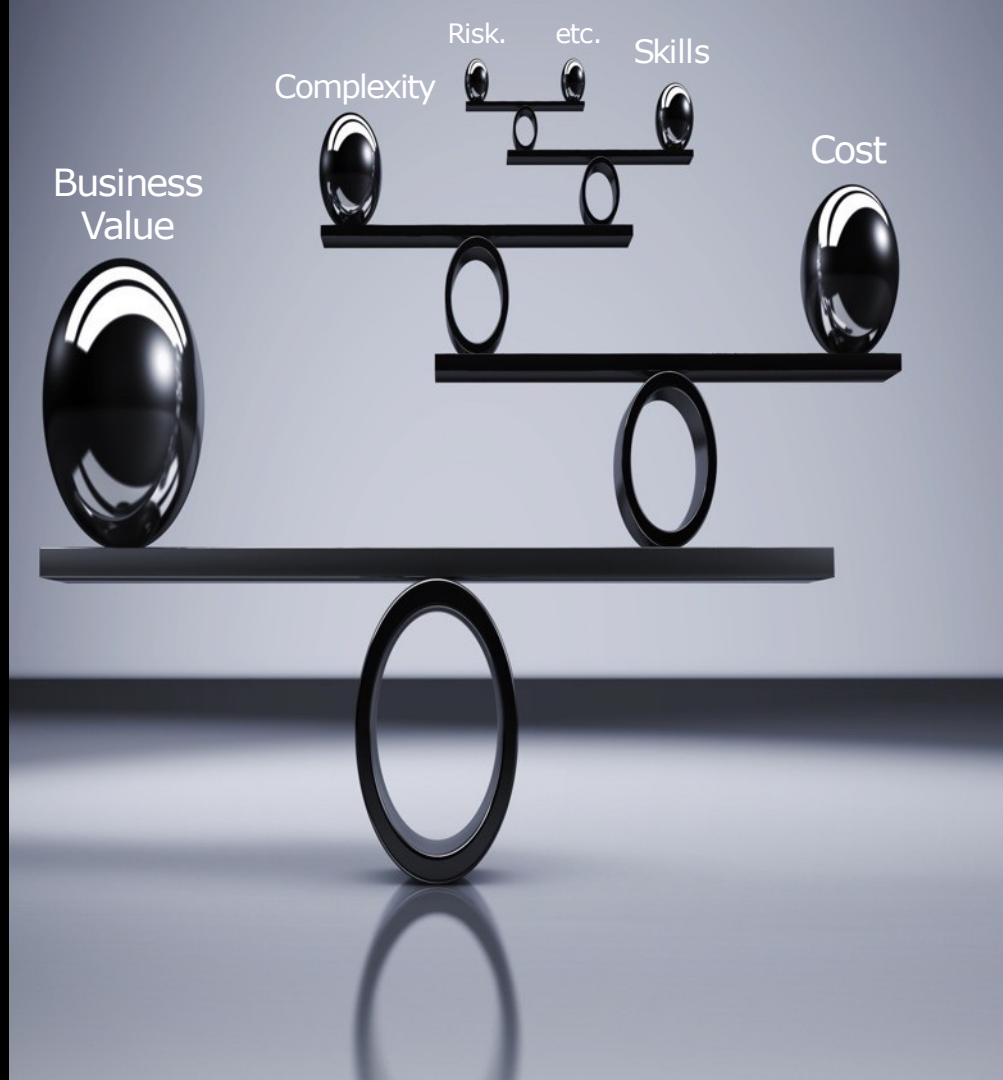
- Runtime Inventory
- Complexity Classification
- *Technology Fit
- *List of Dependencies
- Issues to be Tackled
- Resolution Estimate

*Java EE Applications

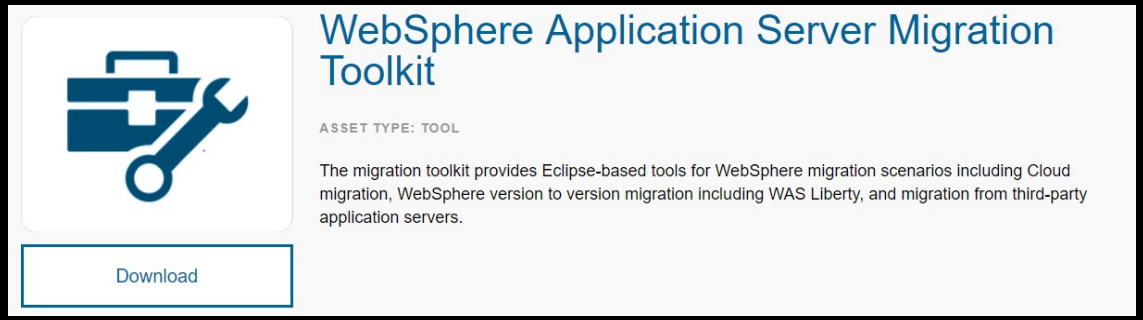


# Modernization Complexity

| Complexity | Java EE | IBM MQ |
|---|---|---|
| Simple | No code changes needed | DNS reconfiguration required |
| Moderate </> | Code changes required | Cluster reconfiguration ,changing custom logic (e.g. Exits) |
| Complex </><#> | Incompatible technologies; external dependencies | Client Authentication reconfiguration |

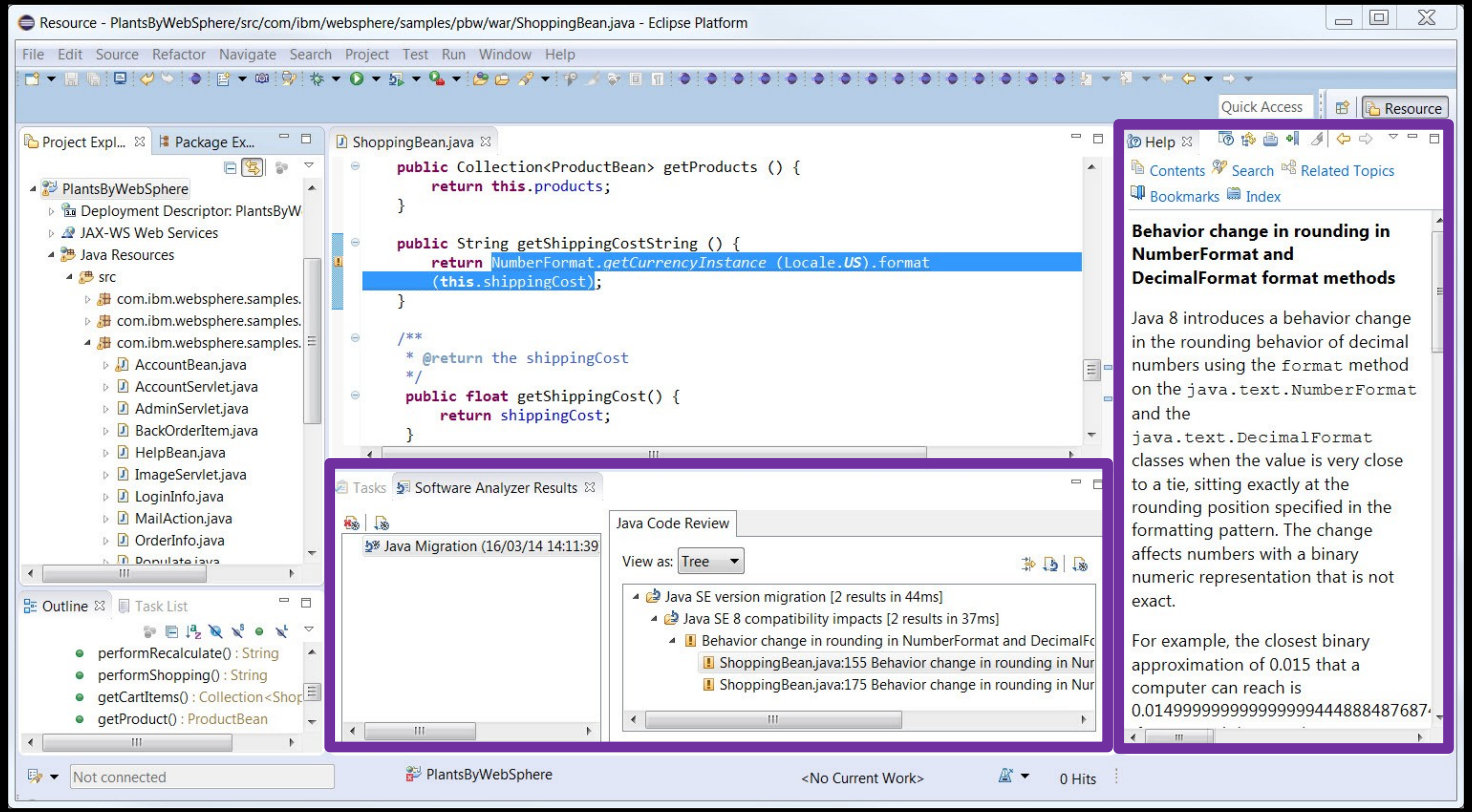


# WebSphere Application Server Migration Toolkit

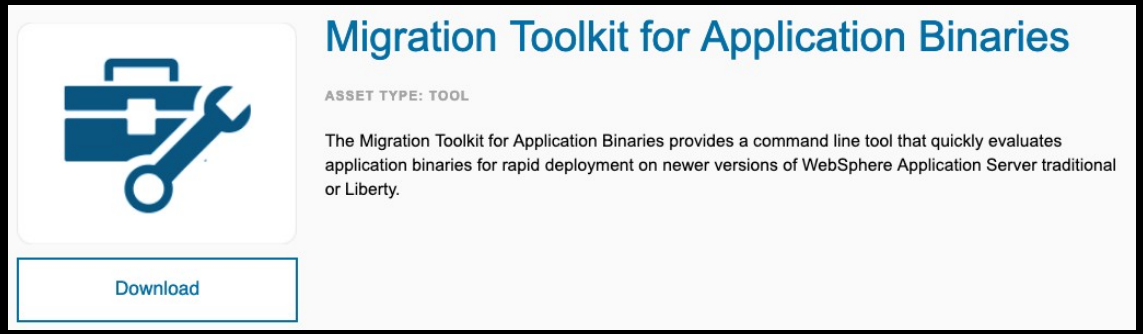



- Scans application source code in the Eclipse IDE
- Click-and-go to affected code line
- Variety of scenarios:
  - On-premise cloud
  - WebSphere traditional to WebSphere Liberty
  - Competitive Application Servers to WebSphere
- Download: [http://ibm.biz/WAMT4Eclipse](http://ibm.biz/WAMT4Eclipse) or the EclipseMarketplace

# WebSphere Application Server Migration Toolkit



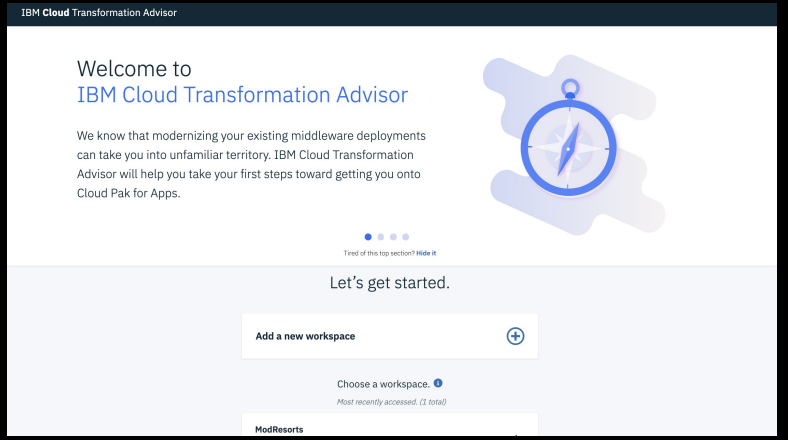
# Migration Toolkit for Application Binaries




- Scans application binaries from the command line
- Available to developers who do not use Eclipse
- Variety of scenarios:
  - On-premise → cloud
  - WebSphere traditional → WebSphere Liberty
  - Competitive Application Servers→ WebSphere
- Download: https://developer.ibm.com/wasdev/downloads/#asset/tools-Migration_Toolkit_for_Application_Binaries

# IBM Cloud Transformation Advisor

Collects information about your existing Java EE Applications , Java , and MQ Environments, combines that with rules and insights gained from years of migrating and modernizing applications and middleware, and provides recommendations for your cloud journey




## CHALLENGES ADDRESSED

- Leveraging existing application logic
- Need to accelerate application development and maintenance
- Monolithic applications that are complex and tightly coupled

## BENEFITS

- Provides recommendations, guidance and artifacts for deployment in Liberty containers and Kubernetes clouds
- Introspects existing WebSphere, IBM MQ, WebLogic, and Tomcat deployments
- Categorize effort either as Simple, Medium ,or Complex to re-platform on the cloud

IBM Cloud Transformation Advisor

# Resources

# Resources – TA and Migration Tools

- Transformation Advisor (TA Local) – https://ibm.biz/cloudta
- WebSphere Application Migration Toolkit - https://developer.ibm.com/wasdev/downloads/#asset/tools-WebSphere_Application_Server_Migration_Toolkit
- Migration Toolkit for Application Binaries - https://developer.ibm.com/wasdev/downloads/#asset/tools-Migration_Toolkit_for_Application_Binaries

# Resources – Modernization Labs

- Follow the click-through product tour of TA: https://www.ibm.com/cloud/garage/dte/producttour/evaluate-prem-websphere-application-migration

- Part one of the App Modernization labs: https://www.ibm.com/cloud/garage/dte/tutorial/cloud-enabled-use-case-app-modernization-journey-part-1

- Part two of the App Modernization labs: https://www.ibm.com/cloud/garage/dte/tutorial/move-prem-websphere-app-cloud-transformation-advisor

- If the labs above don't work for you, we can reserve Blue Demos for you.
  - https://bluedemos.com/show/2459

# Resources – Open Liberty

- Open Liberty - https://openliberty.io/
  - Source - https://github.com/openliberty
  - Guides - https://openliberty.io/guides/
  - Performance - https://openliberty.io/blog/2019/10/30/faster-startup-open-liberty.html
  - See the new dev mode - https://openliberty.io/guides/rest-intro.html
- WebSphere Customer Advisory Board – http://ibm.biz/WebSphereAdvisoryBoard

# Resources – DockerImages

- Open Liberty - https://hub.docker.com/_/open-liberty
- Open Liberty UBI images - https://hub.docker.com/r/openliberty/open-liberty
- Traditional WebSphere - https://hub.docker.com/r/ibmcom/websphere-traditional/
  - Best practices - https://github.com/WASdev/ci.docker.websphere-traditional#docker-hub-image

# WebSphere Customer Advisory Board – open invitation

email: claudiab@us.ibm.com

Sign up now at Think

Influence deliverables

**Choose your engagement level:**

1. **Stay ahead of the curve**: more time commitment
2. **Close the gap**: quarterly involvement
3. **At your own pace**: impact longer term goals

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