

IBM Developer Series

Join our webinar series to expand your development skills

Cloud Native Thursdays

Data Science Fridays

Red Hat OpenShift Saturdays

AI Sundays

[meetup.com/IBM-Cloud-MEA/](https://www.meetup.com/IBM-Cloud-MEA/)

IBM Developer



Discover hidden Facebook usage insights with Watson

Fawaz Siddiqi

Developer Advocate, UAE

Faiz Hasan

Developer Advocate, UAE

Get Started Here:

https://ibm.biz/discover_facebook_insights

IBM Developer



Agenda

AI vs ML

Main Challenges
AI vs. IA

IBM Watson Studio

Watson NLU

What is NLP
Challenges in NLP

Watson Visual Recognition

Focus of Visual Recognition
Uses of Visual Recognition

04

05
06

07

09

10
11

13

14
15

IBM Cognos Analytics

Data Visualization

Hands-On

DDC: Hybrid Cloud

Useful Links

16

17

19

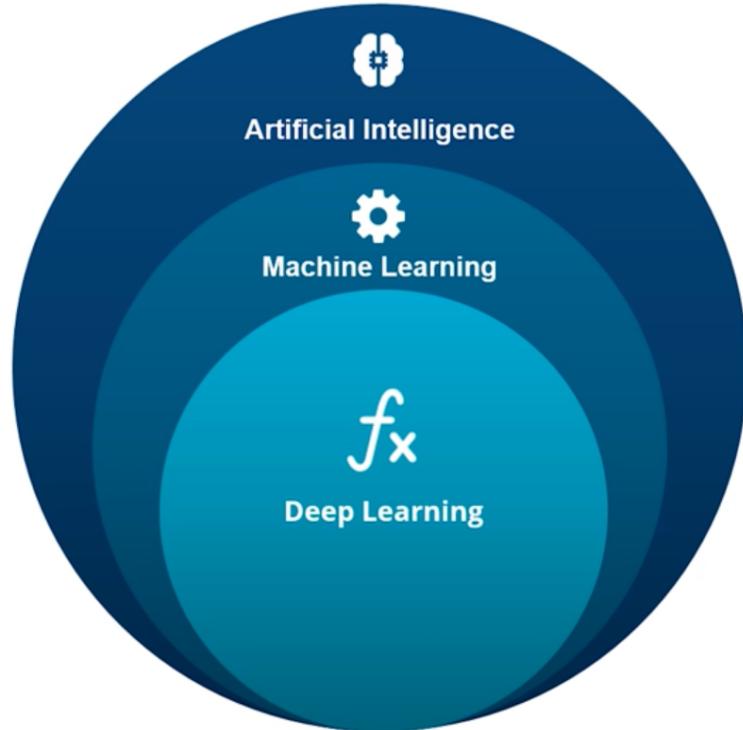
20

21

Artificial Intelligence vs Machine Learning

- **Artificial Intelligence** is the making of intelligent machines by enabling the machine to copy human behaviours.
- **Machine learning** is subset of AI uses statistics to enable machines to improve with experience.
- **Deep learning** is subset of machine learning that enables computers to solve more complex problems.

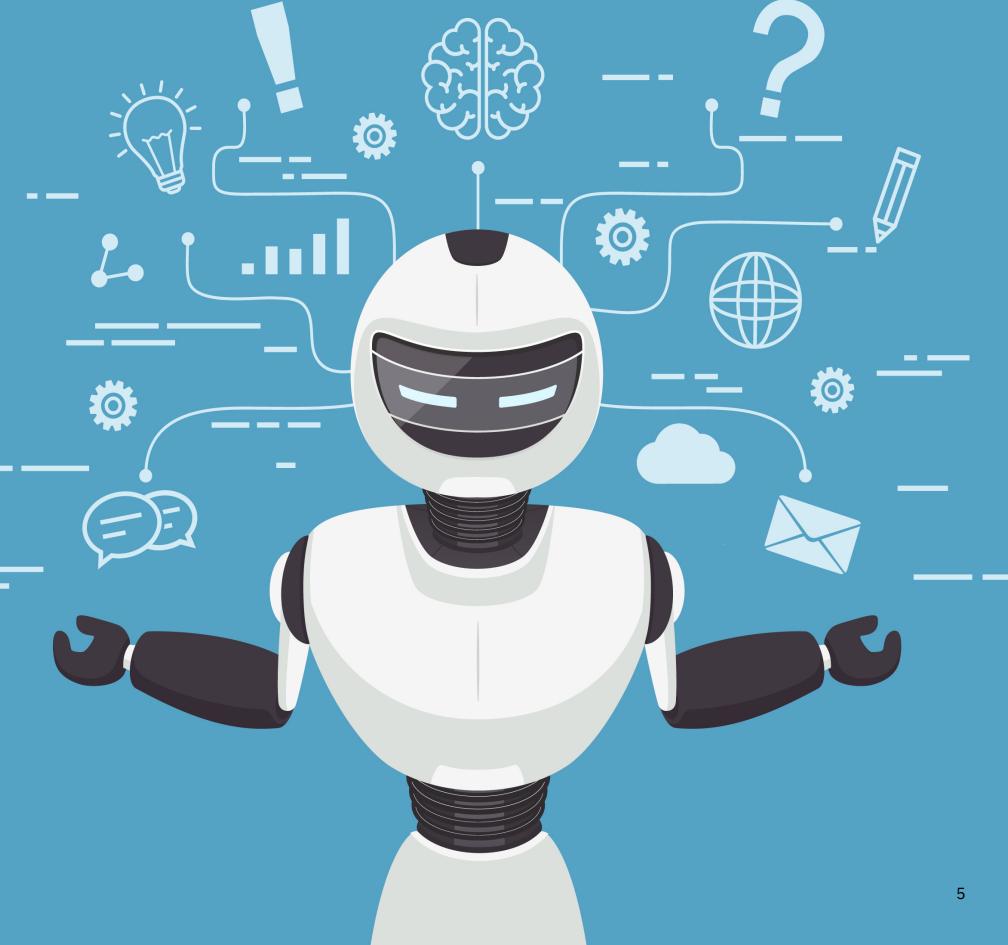
Get Started Here (https://ibm.biz/discover_facebook_insights)



Main Challenges These Days

- High demand for data scientists and ML engineers
- Lack of skills to meet the demand
- Traditional ML techniques are time consuming and require a lot of effort

Get Started Here (https://ibm.biz/discover_facebook_insights)



AI vs. IA

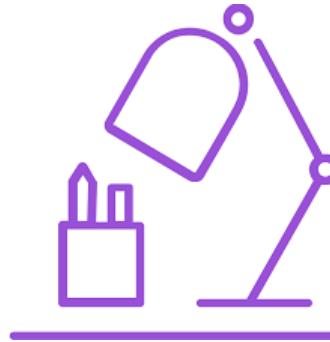
Artificial Intelligence

- Capability of a machine learning model to imitate human behavior
- Allows machines to be autonomous
- Examples:
 - Chatbots (Customer Service Agent)

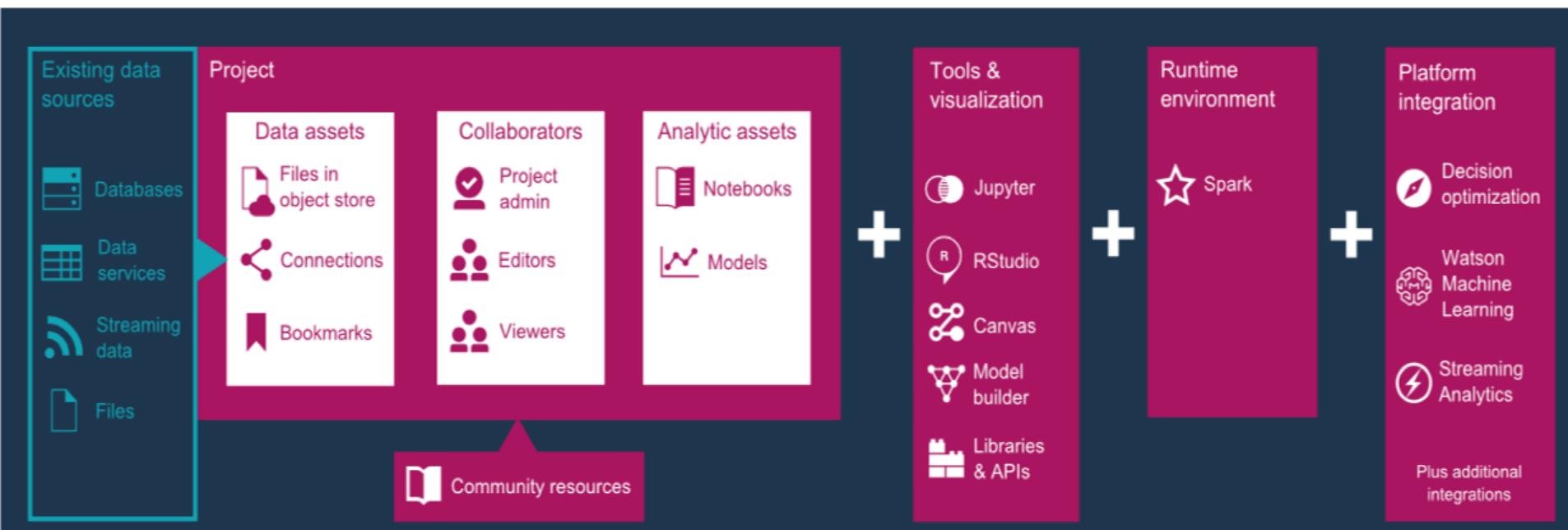
Intelligence Assistants

- Designed to enhance human intelligence
- Allows humans to amplify their intelligence by providing insights to solve problems
- Examples:
 - Collecting data
 - Visualizations

IBM Watson Studio



Watson Studio

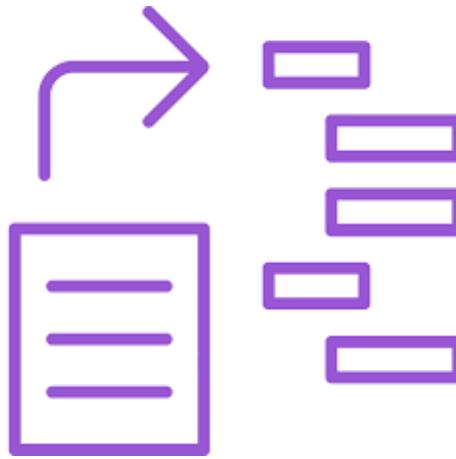


Watson Natural Language Understanding



What is NLP?

In NLP, we study methods to perform useful tasks by processing natural language. Example applications: predictive text on mobile phones, search engines, speech recognition, etc.



Challenges in NLP

Morphology

union + ized? un + ionized?

Syntax

Squad helps dog bite victim. (Does Squad help dog or victim?)

Ambiguity

Ability of having more than one meaning or being understood in more than one way

Phonetics and phonology

"I scream is delicious" vs. "ice cream is delicious"

Semantics

Jack invited Mary to the Halloween **ball**. (ball could be “dance” or a “decoration ball”)

Discourse

Merck & Co. formed a joint venture with Ache Group, of Brazil. **It** will be called Prodome Ltd. (“it” refers to what?)

The Problem:

Inability to mine unstructured data and lack of skills in machine learning

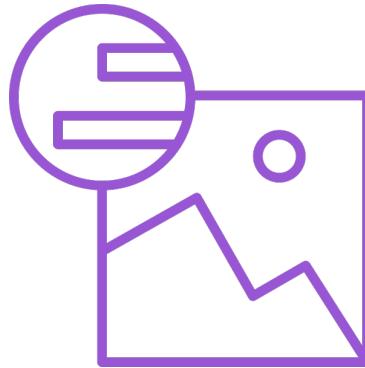
The Result

Lost revenue, missed opportunities, increased costs

The Solution

The IBM Watson Natural Language Understanding service enables developers to extract insights from unstructured text to power a new generation of cognitive apps.

Watson Visual Recognition



Watson Visual Recognition focuses on

Identification

Watson Visual Recognition **identifies** objects and people.



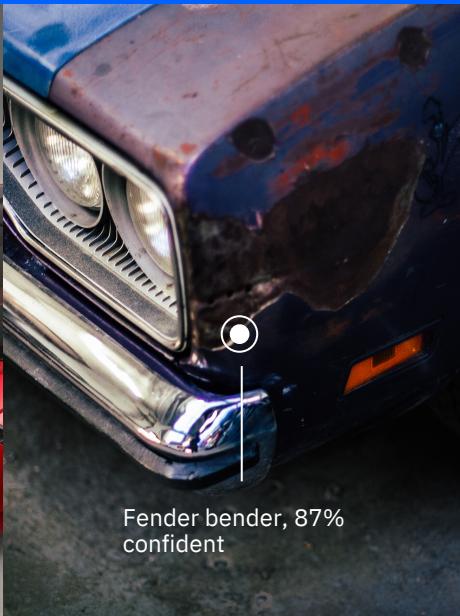
Categorization

Watson Visual Recognition **categorizes** for easy organization.



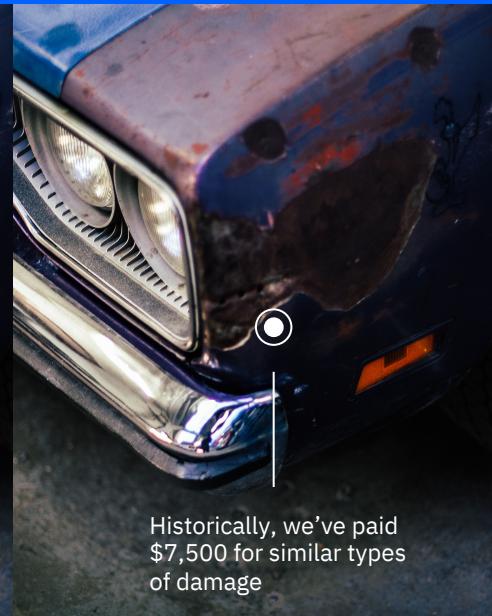
Assessment

Watson Visual Recognition **assesses** for better problem-solving.



Recommendation

Watson Visual Recognition for faster decision-making.



Watson Visual Recognition is used for

Visual Inspections

An Insurance company builds an image recognition solution to automate visual inspections for damage, defects, and quality assurance.

Social Media Listening

An Advertising agency analyzes visual content in social media posts to understand content, sentiment, and trends.

Demographics

A Retailer uses face detection capabilities to gather age and gender estimates of its shoppers.

Resource Identification

A Mining & Minerals company uses image recognition to automatically identify assets and sites in satellite imagery.

Content Enrichment

A Media company uses image recognition to automatically append metadata to visual content, turning dark data into searchable content.

Calorie Counting

A Health & Nutrition company automatically identifies foods and meals in order to more quickly return nutrition facts.

IBM Cognos Analytics



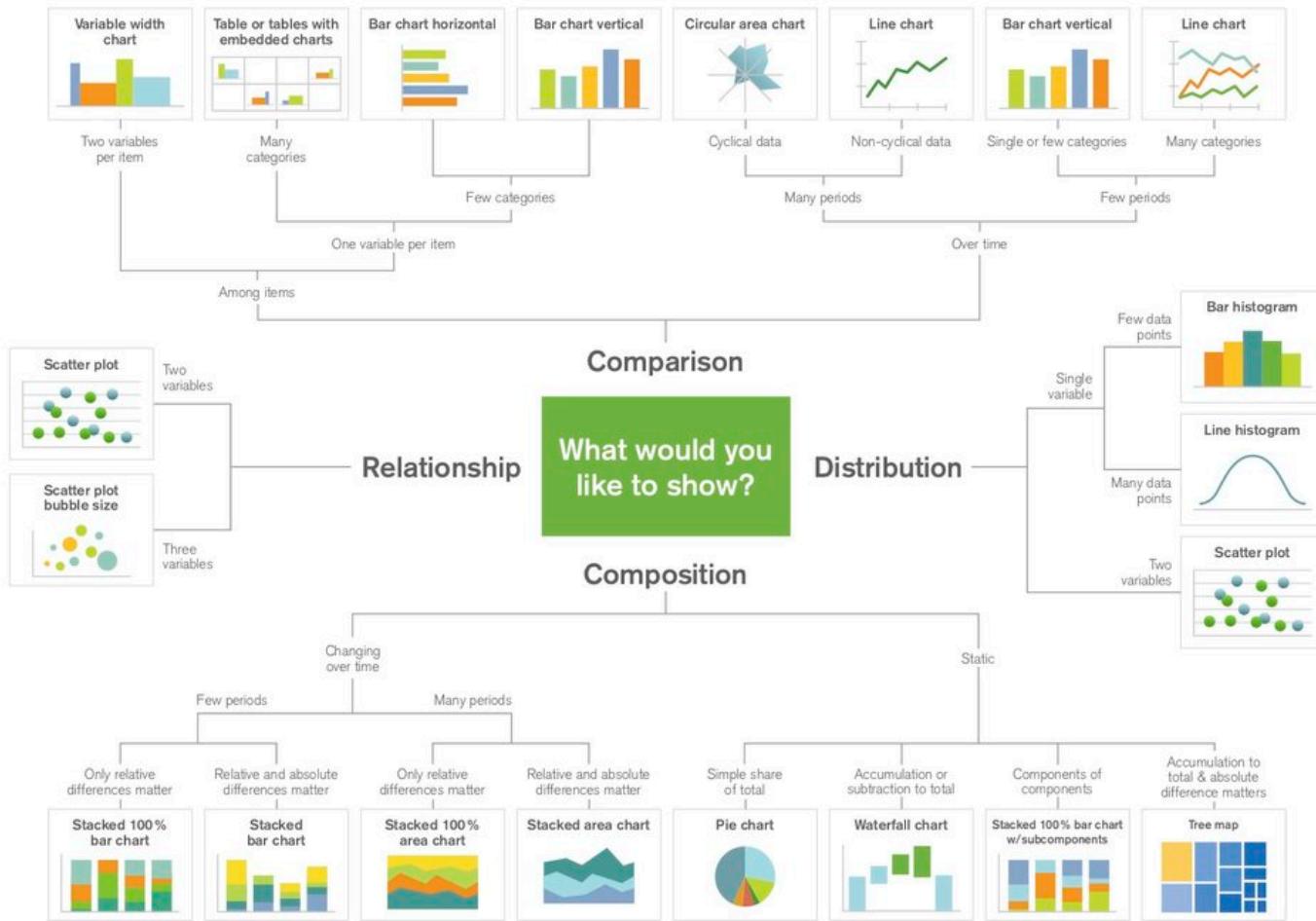
Data Visualization



Why Data Visualization?

- Explore data
- Communicate with others, showing them meaningful results of analysis
- Share unbiased representation of data

A way to show a complex data in a form that is graphical & easy to understand.

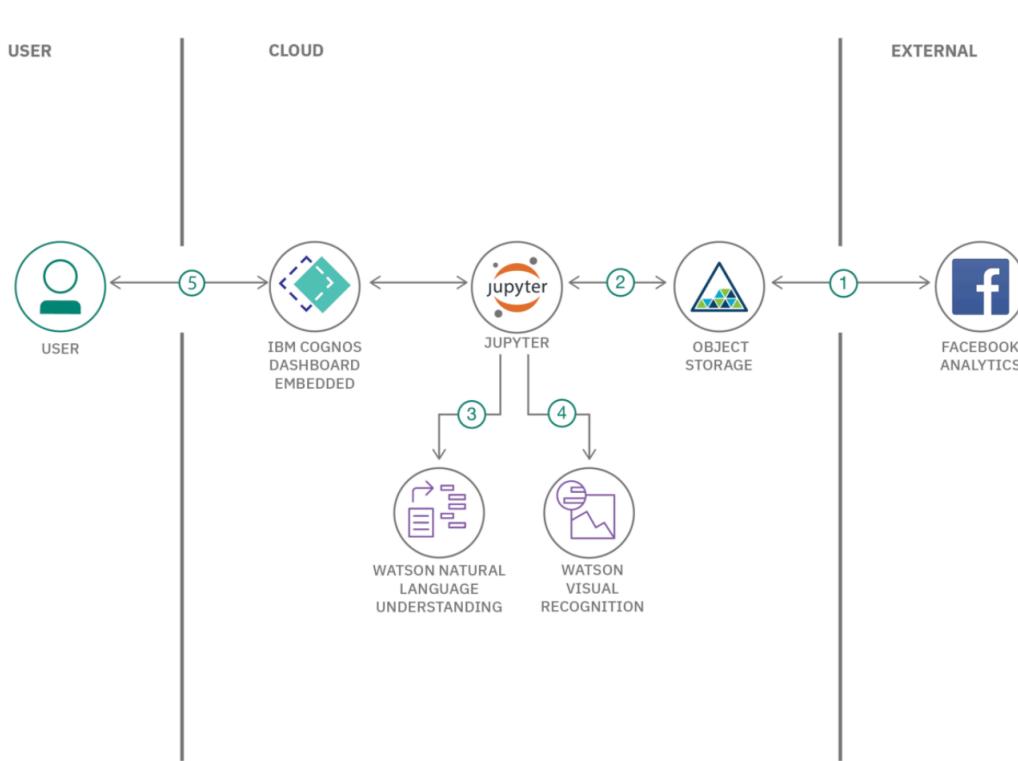


Hands On

- Sign up/Log in to your IBM Cloud Account
https://ibm.biz/discover_facebook_insights
- Follow along for the hands-on
https://ibm.biz/FB_HandsOn
- Workshop
Slides: https://ibm.biz/FB_Resources



Architecture Flow



Digital Developer Conference

Hybrid Cloud

Start your journey to OpenShift certification

Developer experts from IBM, Red Hat, and more show you how to build smart and secure applications using open source technologies, frameworks, and platforms like Kubernetes, Tekton, and Red Hat® OpenShift® on IBM Cloud®. Get the skills needed to migrate your cloud and modernize your applications starting:

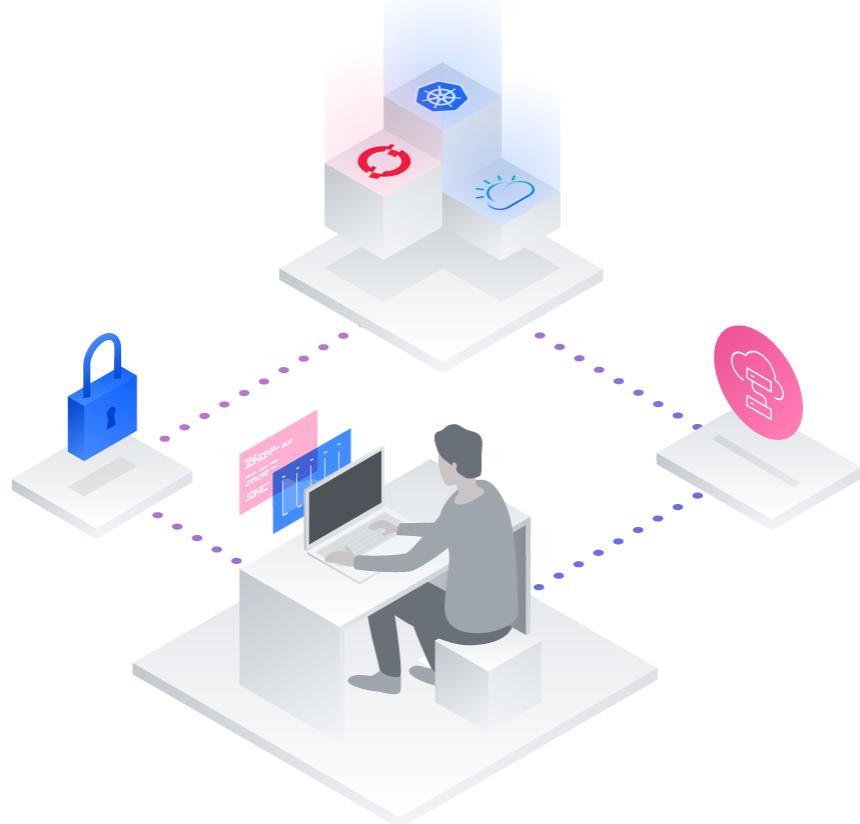
[Americas & Europe](#)
September 22

[Asia & Asia Pacific](#)
September 24

Continue your journey after the conference with Red Hat certification and training services

Receive an exclusive discount on select Red Hat course and exam services after attending the conference.

On-demand replays available post-event



Learn more and register at ibm.biz/devcon-cloud

Useful Links

Learn - develop - connect

Get Started Here (https://ibm.biz/discover_facebook_insights)

Hands-On Lab (https://ibm.biz/FB_HandsOn)

Workshop Resources: (https://ibm.biz/FB_Resources)

IBM Developer (<https://developer.ibm.com/>)

Meetup (<https://www.meetup.com/IBM-Cloud-MEA/>)

Thank you.

Fawaz Siddiqi

Developer Advocate

—

mohammad.fawaz.siddiqi@ibm.com

@fawaz_Siddiqi

<https://www.linkedin.com/in/fawazsiddiqi/>

Faiz Hasan

Developer Advocate

—

Faiz.hasan@ibm.com

@FaizHasan_123

<https://www.linkedin.com/in/faiz-hasan-2b5915107/>



https://ibm.biz/FB_Survey

Get Started Here (https://ibm.biz/discover_facebook_insights)

