

Cloud Application Developer Training Assets

Section 1: Hosting Cloud Applications

- a. Describe Cloud service models and IBM Cloud offerings**

File: CDC1 Cloud Service Models.pptx <https://www.youtube.com/watch?v=bg-ArRT0KfI>

- b. Describe the different capabilities of IBM Bluemix**

File: CDC1 IBM Bluemix Capabilities.pptx <https://www.youtube.com/watch?v=SEb-wmJkuHl>

Section 2: Planning Cloud Applications

- a. Describe key components of IBM Bluemix PaaS environment**

File: CDC1 Bluemix PaaS.pptx <https://www.youtube.com/watch?v=5bakiMmukCo>

- b. Describe components of IBM Bluemix PaaS architecture based on Cloud Foundry**

File: CDC1 Bluemix and Cloud Foundry.pptx <https://www.youtube.com/watch?v=xsa2CJGc9w>

- c. Explain the process of staging an application in IBM Bluemix PaaS**

File: N/A <https://www.youtube.com/watch?v=xsa2CJGc9w>

- d. Describe the organization management elements in IBM Bluemix PaaS: Spaces, Users, Domains and Quota**

File: CDC1 Bluemix Management.pptx <https://www.youtube.com/watch?v=lhHyUZ6BTZM>

- e. Understand IBM Bluemix Regions and how to manage applications in multiple regions**

File: ???

- f. Use the Cloud Foundry CLI (cf) tool to manage applications in IBM Bluemix PaaS**

Files: CDC1 CloudFoundry CLI.pptx <https://www.youtube.com/watch?v=pXiajtaIRp8>

CDC1 CFCLI Lab.doc

CDC1 CFCLI Lab.pdf <https://www.youtube.com/watch?v=3rOvlfXH8Yk>

Section 3: Implementing Cloud Ready Applications

- a. Understand how to design, develop, deploy and manage a IBM Bluemix PaaS application following the Twelve-Factor App methodology**

File: N/A <https://www.youtube.com/watch?v=B-jyq7-Zvaw>

b. Understand scaling concepts for a Cloud application and steps to scale an application in IBM Bluemix PaaS

Files: CDC1 Application Scaling.pptx <https://www.youtube.com/watch?v=EtqtjuR5G54>
CDC1 App Scaling Lab.docx
CDC1 App Scaling Lab.pdf <https://www.youtube.com/watch?v=Pw32ma3jg0U>

c. Debug a Cloud application using development mode of IBM Bluemix PaaS

Files: CDC1 App Debugging in Bluemix.pptx <https://www.youtube.com/watch?v=FxPbAeWRIY>
CDC1 Bluemix Debug Lab.docx
CDC1 Bluemix Debug Lab.pdf <https://www.youtube.com/watch?v=q0P4FKRKmic>

d. Perform load testing on Cloud applications using simulated loads and describe the benefits of load testing

File: CDC1 Load Testing.pptx <https://www.youtube.com/watch?v=M7HFxEQT0rk>
https://www.youtube.com/watch?v=Tk2jgK_z028

e. Explain various methods to monitor an application in IBM Bluemix PaaS

Files: CDC1 App Monitoring.pptx <https://www.youtube.com/watch?v=7MLDGyFvK8s>
<https://www.youtube.com/watch?v=EDqCIK4x-hY>
CDC1 App Monitoring Lab.docx
CDC1 App Monitoring Lab.pdf

Section 4: Enhancing Cloud Applications using Managed Services

a. Improve performance and scalability of IBM Bluemix PaaS applications with caching

Files: CDC1 Enhance Caching.pptx <https://www.youtube.com/watch?v=u2voDKAp6rl>
CDC1 Cache Services Lab.doc
CDC1 Cache Services Lab.pdf <https://www.youtube.com/watch?v=QU6UIQTFBjY>

b. Understand how to configure external authentication for IBM Bluemix PaaS web applications with the Single Sign On service (SSO)

Files: CDC1 External Authentication.pptx <https://youtu.be/D5ujtw6XYC4>
<https://www.youtube.com/watch?v=hwvkG085TbI>
CDC1 External Auth Lab.doc
CDC1 External Auth Lab.pdf

c. Enable loosely coupled integration for IBM Bluemix PaaS applications and components by using Messaging Services

Files: CDC1 Messaging In Cloud.pptx	https://www.youtube.com/watch?v=RRD9GqKlxio
CDC1 Messaging Lab.docx	
CDC1 Messaging Lab.pdf	https://www.youtube.com/watch?v=fji76cTPH28

d. Describe cognitive capabilities to process unstructured data and images in IBM Bluemix PaaS

Files: CDC1 Using Cognitive API.pptx	https://www.youtube.com/watch?v=TQuNuDLJE2M
CDC1 Cognitive Lab.pdf	https://www.youtube.com/watch?v=rcG2yIGW-ic

e. Understand how to store and retrieve files using the IBM Object Storage service in Bluemix

Files: CDC1 Object Storage.pptx	https://www.youtube.com/watch?v=KtdM8yuubjE
CDC1 Object Storage Lab.docx	
CDC1 Object Storage Lab.pdf	

Section 5: Using DevOps Services & tools to Manage Cloud Applications

a. Describe capabilities of IBM Bluemix DevOps Services

File: CDC1 DevOps Services Capabilities.pptx <https://www.youtube.com/watch?v=1pJrWXX7sqM>

b. Plan and track work for agile team collaboration

File: CDC1 DevOps Track and Plan.pptx https://www.youtube.com/watch?v=Se_PHD8jk5A

c. Edit and debug Cloud applications using IBM Bluemix DevOps Services Web code editor

File: CDC1 DevOps Web Editor.pptx	https://www.youtube.com/watch?v=dhg3fimRMnA
CDC1 DevOps Web Editor Lab.docx	
CDC1 DevOps Web Editor Lab.pdf	https://www.youtube.com/watch?v=RVP6yZ3E-Zw

d. Understand capabilities of IBM Bluemix DevOps services source code management for projects

Files: CDC1 DevOps SCM.pptx	https://www.youtube.com/watch?v=Mom6eM-Zodg
CDC1 DevOps SCM Lab.docx	
CDC1 DevOps SCM Lab.pdf	https://www.youtube.com/watch?v=3kWf7PN7XSw

e. Describe how use the to Build & Deploy option to manage continuous integration and continuous delivery

Files: CDC1 DevOps Delivery Pipeline.pptx	https://www.youtube.com/watch?v=q5DH-8O_K70
CDC1 DevOps Delivery Pipeline Lab.docx	
CDC1 DevOps Delivery Pipeline Lab.pdf	https://www.youtube.com/watch?v=7grZiT8gybU

Section 6: Using Data Services

a. Describe the different types of data services available in IBM Bluemix PaaS

File: CDC1 Bluemix Data Services.pptx <https://www.youtube.com/watch?v=0NncaEp6GH8>

b. Describe the unique features of IBM Bluemix PaaS data services

File: CDC1 Data Services Features.pptx <https://www.youtube.com/watch?v=8jMRrArX5R0>

c. Manage instances of IBM Bluemix PaaS data services: Cloudant NoSQL Database, dashDB, and SQL Database.

Files: CDC1 Manage Data Services Instances.pptx
<https://www.youtube.com/watch?v=Nsn80crmHjA>
<https://www.youtube.com/watch?v=mO1TVTWVYR4>
CDC1 Data Services Lab.docx
CDC1 Data Services Lab.pdf

d. Describe the IBM DataWorks service for Bluemix.

Files: CDC1 Manage DataWorks Instances.pptx
<https://www.youtube.com/watch?v=JwYOXVhfPeE>
<https://www.youtube.com/watch?v=1uruoVN2iqg>
CDC1 DataWorks Lab.docx
CDC1 DataWorks Lab.pdf