

2022

DevOps Engineering Department

AWS Infrastructure

Scope: PoC

Sheffield/Peterborough

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Infrastructure

Version: 06-01

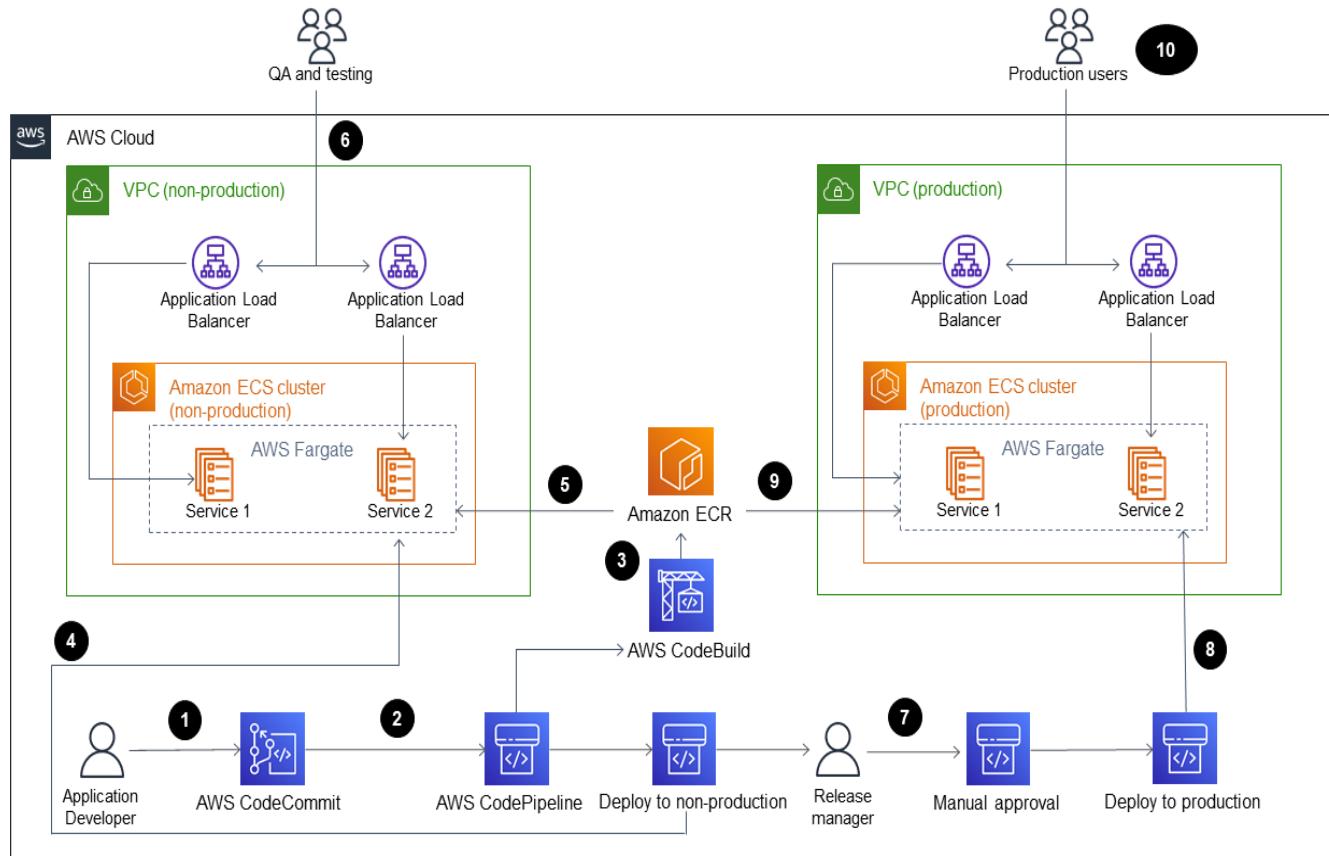
Date: 13/06/22

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Diagram



Technology stack

- AWS CDK
- CodeBuild
- Cloud Formation
- CodeCommit
- CodePipeline
- Amazon ECR
- Amazon ECS
- Amazon VPC

Appendix

- AWS CDK – AWS Cloud Development Kit (AWS CDK) is a software development framework for defining cloud infrastructure in code and provisioning it through AWS CloudFormation.
- AWS CodeBuild – AWS CodeBuild is a fully managed build service in the cloud. CodeBuild compiles your source code, runs unit tests, and produces artifacts that are ready to deploy.
- CloudFormation allows you to create and manage Amazon Web Services infrastructure deployments predictably and repeatedly
- AWS CodeCommit – AWS CodeCommit is a version control service that enables you to privately store and manage Git repositories in the AWS Cloud. CodeCommit eliminates the need for you to manage your own source control system or worry about scaling its infrastructure.
- AWS CodePipeline – AWS CodePipeline is a continuous delivery service you can use to model, visualize, and automate the steps required to release your software. You can quickly model and configure the different stages of a software release process. CodePipeline automates the steps required to release your software changes continuously.
- Amazon ECS – Amazon Elastic Container Service (Amazon ECS) is a highly scalable, fast container management service that is used for running, stopping, and managing containers on a cluster. You can run your tasks and services on a serverless infrastructure that is managed by AWS Fargate. Alternatively, for more control over your infrastructure, you can run your tasks and services on a cluster of Amazon Elastic Compute Cloud (Amazon EC2) instances that you manage.
- Docker – Docker helps developers to pack, ship, and run any application as a lightweight, portable, and self-sufficient container.

Summary

How the magic happens:



Task: Create a AWS Environment.

Description

- Create a directory named cicdproject on your local machine.
- Download the cicdstarter.zip file (attached) into the cicdproject directory and unzip it. This creates a folder named cicdstarter.
- Run the cd <user-home>/cicdproject/cicdstarter command.
- Set up the Python virtual environment by running the python3 -m venv .venv command.
- Run the source ./venv/bin/activate command.
- Configure your AWS environment by running the aws configure command or by using the following environment variables:
 - AWS_ACCESS_KEY_ID
 - AWS_SECRET_ACCESS_KEY
 - AWS_DEFAULT_REGION

Python Env and Aws configure

The screenshot shows the Visual Studio Code interface. In the Explorer sidebar, there are several files and folders: 'Get Started', 'readme.txt', 'Release Notes: 1.68.0', 'IRIS-SOFTWARE', 'cicdstarter', 'screenshots', 'attachment.zip', 'cicdstarter.zip', 'readme.txt', and 'starter-code.zip'. The 'readme.txt' file is open in the editor. In the terminal tab, the user has run the following commands:

```
(.holo) rami@zeus ~Documents/test-para-trabajos/IRIS-SOFTWARE/cicdstarter
$ pwd
/home/rami/Documents/test-para-trabajos/IRIS-SOFTWARE/cicdstarter
(.holo) rami@zeus ~Documents/test-para-trabajos/IRIS-SOFTWARE/cicdstarter
$ aws configure list
        Name            Value      Type    Location
        profile          <not set>  None    
access_key      ****shared-credentials-file
secret_key      ****shared-credentials-file
region          eu-west-2    config-file
(.holo) rami@zeus ~Documents/test-para-trabajos/IRIS-SOFTWARE/cicdstarter
$
```

Create a shared Infrastructure

Task: Create a shared Infrastructure

Description

1. In your working directory, run the cd cicdvpcsecs command.
2. Run the pip3 install -r requirements.txt command to install all required Python dependencies
3. Run the cdk bootstrap command to set the AWS environment for the AWS CDK.
4. Run the cdk synth --context aws_account=<aws_account_ID> --context aws_region=<aws-region> command.

Bootstrap and sync up

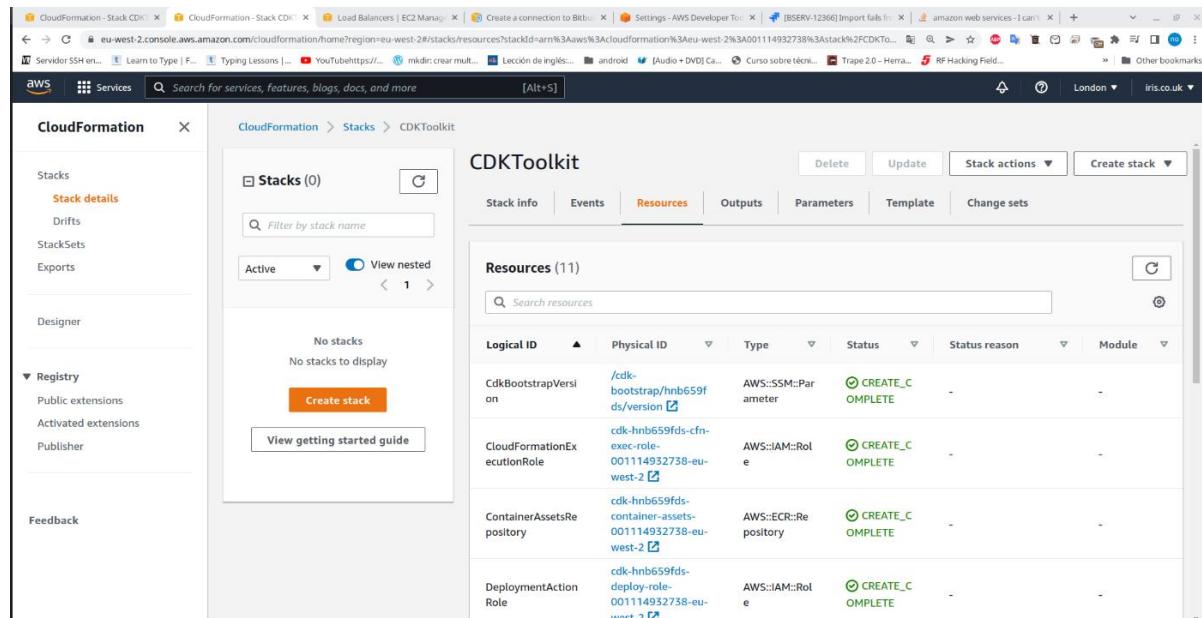
The screenshot shows the Visual Studio Code interface. In the Explorer sidebar, there are files: 'Get Started', 'readme.txt', 'Release Notes: 1.68.0', 'IRIS-SOFTWARE', 'cicdstarter', 'screenshots', 'attachment.zip', 'cicdstarter.zip', 'readme.txt', and 'starter-code.zip'. The 'readme.txt' file is open in the editor. In the terminal tab, the user has run the following commands:

```
(.holo) rami@zeus ~Documents/test-para-trabajos/IRIS-SOFTWARE/cicdstarter/cicdvpcsecs
$ cd cicdvpcsecs
$ cdk bootstrap aws://001114932738/eu-west-2
[WARNING] @aws-cdk/aws-ec2:ClusterProps.enableFargateCapacityProviders is deprecated.
Use {@link ClusterProps.enableFargateCapacityProviders} instead.
This API will be removed in the next major release.
[WARNING] @aws-cdk/aws-ec2:ClusterProps.enableFargateCapacityProviders is deprecated.
Use {@link ClusterProps.enableFargateCapacityProviders} instead.
This API will be removed in the next major release.
✖ Bootstrapping environment aws://001114932738/eu-west-2...
Trusted accounts for deployment: (none)
Trust account: (none)
Using default execution policy of '@awsamazon:AdministratorAccess'. Pass '--cloudformation-execution-policies' to customize.
CDKToolkit: creating CloudFormation changeset...
[2/2]
```

Output from the terminal shows the creation of CloudFormation resources:

```
14:07:06 | CREATE IN PROGRESS | AWS::CloudFormation::Stack | CDKToolkit
14:07:12 | CREATE IN PROGRESS | AWS::IAM::Role | FilePublishingRole
14:07:12 | CREATE IN PROGRESS | AWS::IAM::Role | CloudFormationExecutionRole
14:07:12 | CREATE IN PROGRESS | AWS::IAM::Role | LambdaPublishingRole
14:07:12 | CREATE IN PROGRESS | AWS::IAM::Role | LookupsRole
14:07:12 | CREATE IN PROGRESS | AWS::S3::Bucket | StagingBucket
```

GUI example



Bootstrap finish

The screenshot shows a terminal window with the following content:

```
EXPLORER OPEN EDITORS PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
```

OPEN EDITORS

- Get Started
- readme.txt
- Release Notes: 1.68.0

IRIS-SOFTWARE

- cicdstarter
- screenshots
- attachment.zip
- cicdstarter.zip
- readme.txt
- starter-code.zip

TERMINAL

```
(jola) -e@zeus ~Documents/test-para-trabajos/IRIS-SOFTWARE/cicdstarter/cicdpcecs
$ cdk bootstrap aws://00114932738/eu-west-2
[WARNING] @aws-cdk/aws-ecs.ClusterProps#capacityProviders is deprecated.
Use @aws-cdk/cluster-props.EnableFargateCapacityProviders instead.
This feature will be removed in the next major release.
[WARNING] @aws-cdk/aws-ecs.ClusterProps#capacityProviders is deprecated.
Use @aws-cdk/cluster-props.EnableFargateCapacityProviders instead.
This feature will be removed in the next major release.
[WARNING] @aws-cdk/aws-ecs.ClusterProps#enableDeploymentTrustedAccounts is deprecated.
Use @aws-cdk/cluster-props.EnableDeploymentTrustedAccounts instead.
Trusted accounts for deployment: (none)
Trusted accounts for lookup: (none)
[INFO] Using account arn:aws:iam::00114932738:root as 'arn:aws:iam::aws:policy/AdministratorAccess'. Pass '--cloudformation-execution-policies' to customize.
cdkToolKit: creating CloudFormation changeset...
[?] Environment aws://00114932738/eu-west-2 bootstrapped.

NOTICES

19838 AWS CDK V1 entering maintenance mode soon

Overview: AWS CDK V1 is entering maintenance mode on June 1, 2022.
Migrate to AWS CDK V2 to continue to get the latest features
^|[2~[ and fixes!

Affected versions: framework: 1.*; cli: 1.+
More information at: https://github.com/aws/aws-cdk/issues/19836

If you don't want to see a notice anymore, use "cdk acknowledge <id>". For example, "cdk acknowledge 19836".
-|
```

OUTLINE

TIMELINE

- Run the `cdk deploy --context aws_account=<aws_account_ID> --context aws_region=<aws-region>` command

6. The AWS CloudFormation stack creates the following infrastructure

- A non-production VPC named cicd-vpc-ecs/cicd-vpc-nonprod
- A production VPC named cicd-vpc-ecs/cicd-vpc-prod
- A non-production Amazon ECS cluster named cicd-ecs-nonprod
- A production Amazon ECS cluster named cicd-ecs-prod

CloudFormation Stack

The screenshot shows the AWS CloudFormation console with the stack details for 'cicd-vpc-ecs'. The 'Events' tab is selected, showing a list of events with the following data:

Timestamp	Logical ID	Status	Status reason
2022-06-14 14:19:11 UTC+0100	cicd-vpc-ecs	CREATE_COMPLETE	-
2022-06-14 14:19:09 UTC+0100	cicdvpcnonprodPrivateSubnet2DefaultRoute	CREATE_COMPLETE	-
2022-06-14 14:18:54 UTC+0100	cicdvpcnonprodPrivateSubnet2DefaultRoute	CREATE_IN_PROGRESS	GREEDY Resource creation initiated
2022-06-14 14:18:53 UTC+0100	cicdvpcnonprodPrivateSubnet2DefaultRoute	CREATE_IN_PROGRESS	GREEDY -
2022-06-14 14:18:51 UTC+0100	cicdvpcnonprodPublicSubnet2NATGateway5	CREATE_COMPLETE	-

Vpc

The screenshot shows the AWS VPC Management console with the 'Your VPCs' list. The table displays the following VPC information:

Name	VPC ID	State	IPv4 CIDR	IPv6 CIDR	DHCP options
cicd-vpc-ecs/cicd-vpc-nonprod	vpc-0a7f2af7d610e10b	Available	10.0.0.0/16	-	dopt-03c84
cicd-vpc-ecs/cicd-prod	vpc-00dc1edb983a79e64	Available	10.0.0.0/16	-	dopt-03c84
default	vpc-00edcf234465b1505	Available	172.31.0.0/16	-	dopt-03c84

ECS Cluster Empty

The screenshot shows the AWS Elastic Container Service (ECS) console with the 'Clusters' section. The table shows 0 clusters listed.

Clusters
Clusters (0)

No clusters

Awscli Cluster creation graphic

The screenshot shows the AWS CloudFormation AWS CLI command output. It includes sections for IAM Policy Changes and Security Group Changes.

IAM Policy Changes

Resource	Managed Policy ARN
+ \$irissecrole-id	arn:\$AWS::Partition:iam::aws:policy/service-role/AmazonECSTaskExecutionRolePolicy

Security Group Changes

Group	Dir	Protocol	Peer
+ \$iris-ecs-fargate-id/LB/SecurityGroup.GroupId	In Out	TCP 80	Everyone (IPv4) \$iris-ecs-fargate-id/Service/SecurityGroup.GroupId
+ \$iris-ecs-fargate-10/LB/SecurityGroup.GroupId	In Out	TCP 80	Everyone (IPv4) \$iris-ecs-fargate-10/Service/SecurityGroup.GroupId
+ \$iris-ecs-fargate-id/Service/SecurityGroup.GroupId	In Out	Everything	\$iris-ecs-fargate-id/LB/SecurityGroup.GroupId Everyone (IPv4)
+ \$iris-prod-ecs-fargate-id/LB/SecurityGroup.GroupId	In Out	TCP 80	Everyone (IPv4) \$iris-prod-ecs-fargate-id/Service/SecurityGroup.GroupId
+ \$iris-prod-ecs-fargate-10/LB/SecurityGroup.GroupId	In Out	TCP 80	Everyone (IPv4) \$iris-prod-ecs-fargate-10/Service/SecurityGroup.GroupId
+ \$iris-prod-ecs-fargate-id/Service/SecurityGroup.GroupId	In Out	Everything	\$iris-prod-ecs-fargate-id/LB/SecurityGroup.GroupId Everyone (IPv4)

(NOTE: There may be security-related changes not in this list. See <https://github.com/aws/aws-cdk/issues/1299>)

Do you wish to deploy these changes (y/n)? ■

Line numbers: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 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1111, 1112, 1113, 1114, 1115, 1116, 1117, 1118, 1119, 1119, 1120, 1121, 1122, 1123, 1124, 1125, 1126, 1127, 1128, 1129, 1129, 1130, 1131, 1132, 1133, 1134, 1135, 1136, 1137, 1138, 1139, 1139, 1140, 1141, 1142, 1143, 1144, 1145, 1146, 1147, 1148, 1148, 1149, 1150, 1151, 1152, 1153, 1154, 1155, 1156, 1157, 1158, 1159, 1159, 1160, 1161, 1162, 1163, 1164, 1165, 1166, 1167, 1168, 1169, 1169, 1170, 1171, 1172, 1173, 1174, 1175, 1176, 1177, 1178, 1178, 1179, 1180, 1181, 1182, 1183, 1184, 1185, 1186, 1187, 1188, 1189, 1189, 1190, 1191, 1192, 1193, 1194, 1195, 1196, 1197, 1197, 1198, 1199, 1199, 1200, 1201, 1202, 1203, 1204, 1205, 1206, 1207, 1208, 1209, 1209, 1210, 1211, 1212, 1213, 1214, 1215, 1216, 1217, 1218, 1219, 1219, 1220, 1221, 1222, 1223, 1224, 1225, 1226, 1227, 1228, 1229, 1229, 1230, 1231, 1232, 1233, 1234, 1235, 1236, 1237, 1238, 1238, 1239, 1240, 1241, 1242, 1243, 1244, 1245, 1246, 1247, 1248, 1248, 1249, 1250, 1251, 1252, 1253, 1254, 1255, 1256, 1257, 1258, 1259, 1259, 1260, 1261, 1262, 1263, 1264, 1265, 1266, 1267, 1268, 1269, 1269, 1270, 1271, 1272, 1273, 1274, 1275, 1276, 1277, 1278, 1278, 1279, 1280, 1281, 1282, 1283, 1284, 1285, 1286, 1287, 1288, 1289, 1289, 1290, 1291, 1292, 1293, 1294, 1295, 1296, 1297, 1297, 1298, 1299, 1299, 1300, 1301, 1302, 1303, 1304, 1305, 1306, 1307, 1308, 1309, 1309, 1310, 1311, 1312, 1313, 1314, 1315, 1316, 1317, 1318, 1319, 1319, 1320, 1321, 1322, 1323, 1324, 1325, 1326, 1327, 1328, 1329, 1329, 1330, 1331, 1332, 1333, 1334, 1335, 1336, 1337, 1338, 1338, 1339, 1340, 1341, 1342, 1343, 1344, 1345, 1346, 1347, 1348, 1348, 1349, 1350, 1351, 1352, 1353, 1354, 1355, 1356, 1357, 1358, 1359, 1359, 1360, 1361, 1362, 1363, 1364, 1365, 1366, 1367, 1368, 1369, 1369, 1370, 1371, 1372, 1373, 1374, 1375, 1376, 1377, 1378, 1378, 1379, 1380, 1381, 1382, 1383, 1384, 1385, 1386, 1387, 1388, 1389, 1389, 1390, 1391, 1392, 1393, 1394, 1395, 1396, 1397, 1397, 1398, 1399, 1399, 1400, 1401, 1402, 1403, 1404, 1405, 1406, 1407, 1408, 1409, 1409, 1410, 1411, 1412, 1413, 1414, 1415, 1416, 1417, 1418, 1419, 1419, 1420, 1421, 1422, 1423, 1424, 1425, 1426, 1427, 1428, 1429, 1429, 1430, 1431, 1432, 1433, 1434, 1435, 1436, 1437, 1438, 1438, 1439, 1440, 1441, 1442, 1443, 1444, 1445, 1446, 1447, 1448, 1448, 1449, 1450, 1451, 1452, 1453, 1454, 1455, 1456, 1457, 1458, 1459, 1459, 1460, 1461, 1462, 1463, 1464, 1465, 1466, 1467, 1468, 1469, 1469, 1470, 1471, 1472, 1473, 1474, 1475, 1476, 1477, 1478, 1478, 1479, 1480, 1481, 1482, 1483, 1484, 1485, 1486, 1487, 1488, 1489, 1489, 1490, 1491, 1492, 1493, 1494, 1495, 1496, 1497, 1497, 1498, 1499, 1499, 1500, 1501, 1502, 1503, 1504, 1505, 1506, 1507, 1508, 1509, 1509, 1510, 1511, 1512, 1513, 1514, 1515, 1516, 1517, 1518, 1519, 1519, 1520, 1521, 1522, 1523, 1524, 1525, 1526, 1527, 1528, 1529, 1529, 1530, 1531, 1532, 1533, 1534, 1535, 1536, 1537, 1538, 1538, 1539, 1540, 1541, 1542, 1543, 1544, 1545, 1546, 1547, 1548, 1548, 1549, 1550, 1551, 1552, 1553, 1554, 1555, 1556, 1557, 1558, 1559, 1559, 1560, 1561, 1562, 1563, 1564, 1565, 1566, 1567, 1568, 1569, 1569, 1570, 1571, 1572, 1573, 1574, 1575, 1576, 1577, 1578, 1578, 1579, 1580, 1581, 1582, 1583, 1584, 1585, 1586, 1587, 1588, 1589, 1589, 1590, 1591, 1592, 1593, 1594, 1595, 1596, 1597, 1597, 1598, 1599, 1599, 1600, 1601, 1602, 1603, 1604, 1605, 1606, 1607, 1608, 1609, 1609, 1610, 1611, 1612, 1613, 1614, 1615, 1616, 1617, 1618, 1619, 1619, 1620, 1621, 1622, 1623, 1624, 1625, 1626, 1627, 1628, 1629, 1629, 1630, 1631, 1632, 1633, 1634, 1635, 1636, 1637, 1638, 1638, 1639, 1640, 1641, 1642, 1643, 1644, 1645, 1646, 1647, 1648, 1648, 1649, 1650, 1651, 1652, 1653, 1654, 1655, 1656, 1657, 1658, 1659, 1659, 1660, 1661, 1662, 1663, 1664, 1665, 1666, 1667, 1668, 1669, 1669, 1670, 1671, 1672, 1673, 1674, 1675, 1676, 1677, 1678, 1678, 1679, 1680, 1681, 1682, 1683, 1684, 1685, 1686, 1687, 1688, 1689, 1689, 1690, 1691, 1692, 1693, 1694, 1695, 1696, 1697, 1697, 1698, 1699, 1699, 1700, 1701, 1702, 1703, 1704, 1705, 1706, 1707, 1708, 1709, 1709, 1710, 1711, 1712, 1713, 1714, 1715, 1716, 1717, 1718, 1719, 1719, 1720, 1721, 1722, 1723, 1724, 1725, 1726, 1727, 1728, 1729, 1729, 1730, 1731, 1732, 1733, 1734, 1735, 1736, 1737, 1738, 1738, 1739, 1740, 1741, 1742, 1743, 1744, 1745, 1746, 1747, 1748, 1748, 1749, 1750, 1751, 1752, 1753, 1754, 1755, 1756, 1757, 1758, 1759, 1759, 1760, 1761, 1762, 1763, 1764, 1765, 1766, 1767, 1768, 1769, 1769, 1770, 1771, 1772, 1773, 1774, 1775, 1776, 1777, 1778, 1779, 177

CloudFormation event graphic

The screenshot shows the AWS CloudFormation console with the URL <https://eu-west-2.console.aws.amazon.com/cloudformation/home?region=eu-west-2#/stacks/events/filteringStatus=active&filteringText=&viewNested=false&stackId=arn%3aws%3cloudformation%3eu-west-2%3a00114932738%3astack%2Fci...>. The left sidebar shows the 'Stack details' section under 'Stacks'. The main area displays the 'Events' tab for the 'cicd-vpc-ecs' stack, which was created on 2022-06-14 at 14:16:15 UTC+0100. The table lists 100+ events, mostly 'CREATE_COMPLETE', related to the creation of various resources like VPCs, subnets, and route tables.

Timestamp	Logical ID	Status	Status reason
2022-06-14 14:19:11 UTC+0100	cicd-vpc-ecs	CREATE_COMPLETE	-
2022-06-14 14:19:09 UTC+0100	cicdvpnonprodPrivateSubnet2 DefaultRoute6BA0ED60	CREATE_COMPLETE	-
2022-06-14 14:18:54 UTC+0100	cicdvpnonprodPrivateSubnet2 DefaultRoute6BA0ED60	CREATE_IN_PROGRESS	Resource creation initiated
2022-06-14 14:18:53 UTC+0100	cicdvpnonprodPrivateSubnet2 DefaultRoute6BA0ED60	CREATE_IN_PROGRESS	-
2022-06-14 14:18:51 UTC+0100	CicdvpnonprodPublicSubnet2 NATGateway58071452	CREATE_COMPLETE	-
2022-06-14 14:18:47 UTC+0100	cicdprodPrivateSubnet1Default RouteB270E806	CREATE_COMPLETE	-
2022-06-14 14:18:47 UTC+0100	cicdvpnonprodPrivateSubnet1 DefaultRoute49281E45	CREATE_COMPLETE	-
2022-06-14 14:18:33 UTC+0100	cicdprodPrivateSubnet2Default Route1CC58DE	CREATE_COMPLETE	-
2022-06-14 14:18:31 UTC+0100	cicdprodPrivateSubnet1Default RouteB270E806	CREATE_IN_PROGRESS	Resource creation initiated
2022-06-14 14:18:31 UTC+0100	cicdvpnonprodPrivateSubnet1 DefaultRoute49281E45	CREATE_IN_PROGRESS	Resource creation initiated
2022-06-14 14:18:31 UTC+0100	cicdvpnonprodPrivateSubnet1 DefaultRoute49281E45	CREATE_IN_PROGRESS	-
2022-06-14 14:18:31 UTC+0100	cicdprodPrivateSubnet1Default RouteB270E806	CREATE_IN_PROGRESS	-

Task: Test the AWS Cloud Formation stack

- After the cicd-vpc-ecs AWS CloudFormation stack is created, ensure that the cicd-vpc-ecs/cicd-vpc-nonprod and cicd-vpc-ecs/cicd-vpc-prod VPCs are created.
- Ensure that the cicd-ecs-nonprod and cicd-ecs-prod Amazon ECS clusters are created.

Important: Make sure that you record the IDs for the two VPCs and the security group IDs for the default security groups in both VPCs.

CloudFormation VPC

The screenshot shows the AWS CloudFormation console with the URL <https://eu-west-2.console.aws.amazon.com/cloudformation/home?region=eu-west-2#/stacks/events/filteringStatus=active&filteringText=&viewNested=false&stackId=arn%3aws%3cloudformation%3eu-west-2%3a00114932738%3astack%2Fci...>. The left sidebar shows the 'Stack details' section under 'Stacks'. The main area displays the 'Events' tab for the 'cicd-vpc-ecs' stack, which was created on 2022-06-14 at 14:16:15 UTC+0100. The table lists 100+ events, mostly 'CREATE_COMPLETE', related to the creation of various resources like VPCs, subnets, and route tables.

Timestamp	Logical ID	Status	Status reason
2022-06-14 14:19:11 UTC+0100	cicd-vpc-ecs	CREATE_COMPLETE	-
2022-06-14 14:19:09 UTC+0100	cicdvpnonprodPrivateSubnet2 DefaultRoute6BA0ED60	CREATE_COMPLETE	-
2022-06-14 14:18:54 UTC+0100	cicdvpnonprodPrivateSubnet2 DefaultRoute6BA0ED60	CREATE_IN_PROGRESS	Resource creation initiated
2022-06-14 14:18:53 UTC+0100	cicdvpnonprodPrivateSubnet2 DefaultRoute6BA0ED60	CREATE_IN_PROGRESS	-
2022-06-14 14:18:51 UTC+0100	CicdvpnonprodPublicSubnet2 NATGateway58071452	CREATE_COMPLETE	-
2022-06-14 14:18:47 UTC+0100	cicdprodPrivateSubnet1Default RouteB270E806	CREATE_COMPLETE	-
2022-06-14 14:18:47 UTC+0100	cicdvpnonprodPrivateSubnet1 DefaultRoute49281E45	CREATE_COMPLETE	-
2022-06-14 14:18:33 UTC+0100	cicdprodPrivateSubnet2Default Route1CC58DE	CREATE_COMPLETE	-
2022-06-14 14:18:31 UTC+0100	cicdprodPrivateSubnet1Default RouteB270E806	CREATE_IN_PROGRESS	Resource creation initiated
2022-06-14 14:18:31 UTC+0100	cicdvpnonprodPrivateSubnet1 DefaultRoute49281E45	CREATE_IN_PROGRESS	Resource creation initiated
2022-06-14 14:18:31 UTC+0100	cicdvpnonprodPrivateSubnet1 DefaultRoute49281E45	CREATE_IN_PROGRESS	-
2022-06-14 14:18:31 UTC+0100	cicdprodPrivateSubnet1Default RouteB270E806	CREATE_IN_PROGRESS	-

Vpc

The screenshot shows the AWS VPC Management Console interface. On the left, there's a navigation sidebar with sections like 'VPC dashboard', 'EC2 Global View', 'Virtual private cloud' (which is expanded to show 'Your VPCs', 'Subnets', 'Route tables', 'Internet gateways', 'Egress-only Internet gateways', 'Carrier gateways', 'DHCP Option Sets', 'Elastic IPs', 'Managed prefix lists', 'Endpoints', 'Endpoint services', 'NAT gateways', and 'Peering connections'), 'Security' (with 'Network ACLs' under it), and 'Feedback'. The main area is titled 'Your VPCs (3) Info' and contains a table with three rows:

Name	VPC ID	State	IPv4 CIDR	IPv6 CIDR	DHCP option
cldc-vpc-ecs/cldc-vpc-nonprod	vpc-0a7f2af7610e10b	Available	10.0.0.0/16	-	dopt-05cb4
cldc-vpc-ecs/cldc-prod	vpc-00dc1edb983a79e64	Available	10.0.0.0/16	-	dopt-05cb4
default	vpc-00edcf234465b1505	Available	172.31.0/16	-	dopt-05cb4

Below the table, a message says 'Select a VPC above'.

Security Group graphic

The screenshot shows the AWS Security Groups console. The left sidebar includes 'Egress-only Internet gateways', 'Carrier gateways', 'DHCP Option Sets', 'Elastic IPs', 'Managed prefix lists', 'Endpoints', 'Endpoint services', 'NAT gateways', 'Peering connections', 'Security' (with 'Network ACLs' and 'Security groups' under it), and 'Network Analysis'. The main area is titled 'Security Groups (8) Info' and displays a table of security groups:

Security group ID	Security group name	VPC ID	Description	Owner
sg-00da00469f14f4fb8	launch-wizard-1	vpc-00edcf234465b1505	launch-wizard created 2022-06-01T11:52:40.773Z	0011149322
sg-0ab662a8a5a3af693	iris-cldc-stack-irspodecsfargateidServiceSecurityGroup2E25B567-QPP1BJZZU702	vpc-00dc1edb983a79e64	iris-cldc-stack/iris-prod-ecs-fargate-id/Service/SecurityGroup	0011149322
sg-081b75ac7dce1b9c	iris-cldc-stack-irspodecsfargateidLBSecurityGroup27EB402C-1WC4BW2L50LB2	vpc-00dc1edb983a79e64	Automatically created Security Group for ELB iris-cldc-stack-irspodec...	0011149322
sg-01239ef0f5ce1007e	iris-cldc-stack-irsecsfargateidServiceSecurityGroup04142B20-IX6HNLD4VXKK	vpc-0a7f2af7af7610e10b	iris-cldc-stack/iris-ecs-fargate-id/Service/SecurityGroup	0011149322
sg-0fd08a7ff759a97d6	iris-cldc-stack-irsecsfargateidLBSecurityGroupAFC206AA-0JWL9NSLV58Y	vpc-0a7f2af7af7610e10b	Automatically created Security Group for ELB iris-cldc-stack-irsecsfar...	0011149322
sg-000ab9a14cad61258	default	vpc-00dc1edb983a79e64	default VPC security group	0011149322
sg-012bffa91a902fbac	default	vpc-00edcf234465b1505	default VPC security group	0011149322
sg-0956a485e287ab506	default	vpc-0a7f2af7af7610e10b	default VPC security group	0011149322

Create as CI/CD pipeline for a Microservice

Task: Create the Infrastructure for the microservice

1. Name your microservice. For example, this pattern uses `iris` as the microservice's name.
2. In your working directory run the `cd <working-directory>/cdk pipeline` command.
3. Run the `pip3 install -r requirements.txt` command.
4. Run the full `cdk synth` command that is available in the *Additional information* section of this pattern.
5. Run the full `cdk deploy` command that is available in the *Additional information* section of this pattern.

Note: You can also provide the values for both commands by using the `cdk.json` file in the directory.

CDK Synth graphic

The screenshot shows the Visual Studio Code interface with the terminal tab active. The command `cdk synth` is being run, and its output is displayed in the terminal window. The code editor shows a file named `readme.txt` with the same content as the terminal output.

```
(holo) ~\mlzeus ~\Documents\test-para-trabajos\IRIS-SOFTWARE\cicdstarter\cicdvpeces
$ cdk synth --context aws_account=001114932738 --context aws_region=eu-west-2 --context vpc_nonprod_id=vpc-0a7f12af4d7610e10b --context vpc_prod_id=vpc-00dc1eb983a79c
64 --context ecsg_nonprod_id=sg-0956e485e287ab306 --context ecsg_prod_id=sg-000ab9a14cad61258 --context code_commit_s3_bucket_for_code=cak-hmb59fds-assets-001114932738-eu-west-2 --context code_commit_s3_object_key_for_code=starter-code.zip --context microservice_name=iris
```

CDK Deploy graphic

The screenshot shows the Visual Studio Code interface with the terminal tab active. The command `cdk deploy` is being run, and its output is displayed in the terminal window. The code editor shows a file named `readme.txt` with the same content as the terminal output.

```
(holo) ~\mlzeus ~\Documents\test-para-trabajos\IRIS-SOFTWARE\cicdstarter\cicdvpeces
$ cdk deploy --context aws_account=001114932738 --context aws_region=eu-west-2 --context vpc_nonprod_id=vpc-0a7f12af4d7610e10b --context vpc_prod_id=vpc-00dc1eb983a79c
64 --context ecsg_nonprod_id=sg-0956e485e287ab306 --context ecsg_prod_id=sg-000ab9a14cad61258 --context code_commit_s3_bucket_for_code=cak-hmb59fds-assets-001114932738-eu-west-2 --context code_commit_s3_object_key_for_code=starter-code.zip --context microservice_name=iris
```

Task: Monitoring the AWS CloudFormation Stack

- Open the AWS CloudFormation console and monitor the progress of the myservice1-cicd-stack stack.
- Eventually, the status changes to CREATE_COMPLETE.

Cloud Formation Stack ready graphic

The screenshot shows the Visual Studio Code interface with the terminal tab active. The command `aws cloudformation describe-stacks` is being run, and its output is displayed in the terminal window. The code editor shows a file named `readme.txt` with the same content as the terminal output.

```
(holo) ~\mlzeus ~\Documents\test-para-trabajos\IRIS-SOFTWARE\cicdstarter\cicdvpeces
$ aws cloudformation describe-stacks
{
    "Stacks": [
        {
            "StackId": "arn:aws:cloudformation:eu-west-2:001114932738:stack/iris-cicd-stack/f70fffc10-ebe9-11ec-a1c-02c32005calc",
            "StackName": "iris-cicd-stack",
            "Description": "iris-cicd-stack",
            "CreationTime": "2021-06-01T10:45:00Z",
            "LastUpdatedTime": "2021-06-01T10:45:00Z",
            "Status": "CREATE_COMPLETE",
            "Outputs": [
                {
                    "OutputKey": "iris-cicd-stack-Output-1",
                    "OutputValue": "http://iris-1-1sc-20350MAR115-280025588.eu-west-2.elb.amazonaws.com"
                }
            ],
            "OutputsFn": "arn:aws:cloudformation:eu-west-2:001114932738:output/iris-cicd-stack-f70fffc10-ebe9-11ec-a1c-02c32005calc"
        }
    ]
}
```

CloudFormation Stack in progress graphic

The screenshot shows the AWS CloudFormation console with the URL <https://eu-west-2.console.aws.amazon.com/cloudformation/home?region=eu-west-2#/stacks/events?stackId=arn%3aws%3cloudformation%3aeu-west-2%3A001114932738%3Astack%2Firis-cicd-stack&filteringStatus=active&filteringText=&isNested=true&hideStacks=false&stackId=arn%3aws%3cloudformation%3aeu-west-2%3A001114932738%3Astack%2Firis-cicd-stack&sortOrder=desc>. The 'Events' tab is selected, showing one event:

Timestamp	Logical ID	Status	Status reason
2022-06-14 14:57:44 UTC+0100	iris-cicd-stack	CREATE_IN_PROGRESS	User Initiated

CloudFormation Stack ready

The screenshot shows the AWS CloudFormation console with the URL <https://eu-west-2.console.aws.amazon.com/cloudformation/home?region=eu-west-2#/stacks/events?filteringStatus=active&filteringText=&isNested=true&hideStacks=false&stackId=arn%3aws%3cloudformation%3aeu-west-2%3A001114932738%3Astack%2Fcicd-vpc-ecs&sortOrder=desc>. The 'Events' tab is selected, showing multiple events:

Timestamp	Logical ID	Status	Status reason
2022-06-14 14:19:11 UTC+0100	cicd-vpc-ecs	CREATE_COMPLETE	-
2022-06-14 14:19:09 UTC+0100	cicd-vpc-natprodPrivateSubnet2	CREATE_COMPLETE	-
2022-06-14 14:18:54 UTC+0100	cicd-vpc-natprodPublicSubnet2	CREATE_IN_PROGRESS	Resource creation initiated
2022-06-14 14:18:53 UTC+0100	cicd-vpc-natprodPrivateSubnet2	CREATE_IN_PROGRESS	-
2022-06-14 14:18:51 UTC+0100	cicd-vpc-natprodPublicSubnet2	CREATE_COMPLETE	-
2022-06-14 14:18:47 UTC+0100	cicd-vpc-natprodPrivateSubnet1	CREATE_COMPLETE	-
2022-06-14 14:18:47 UTC+0100	cicd-vpc-natprodPrivateSubnet1	CREATE_COMPLETE	-
2022-06-14 14:18:35 UTC+0100	cicd-vpc-natprodPrivateSubnet2	CREATE_COMPLETE	-
2022-06-14 14:18:31 UTC+0100	cicd-vpc-natprodPrivateSubnet1	CREATE_IN_PROGRESS	Resource creation initiated
2022-06-14 14:18:31 UTC+0100	cicd-vpc-natprodPrivateSubnet1	CREATE_IN_PROGRESS	Resource creation initiated
2022-06-14 14:18:31 UTC+0100	cicd-vpc-natprodPrivateSubnet1	CREATE_IN_PROGRESS	-
2022-06-14 14:18:31 UTC+0100	cicd-vpc-natprodPrivateSubnet1	CREATE_IN_PROGRESS	-

Task: Test the AWS Cloud Formation Stack

- On the AWS CodeCommit console, verify that a repository named **iris** exists and contains the starter code.
- On the AWS CodeBuild console, verify that a build project named **iris** exists.
- On the Amazon ECR console, verify that an Amazon ECR repository named **iris** exists.
- On the Amazon ECS console, verify that a Fargate service named **iris** exists in both a non-production and production Amazon ECS cluster.
- On the Amazon Elastic Compute Cloud (Amazon EC2) console, verify that the non-production and production Application Load Balancers are created. Record the DNS names of the ALBs.
- On the AWS CodePipeline console, verify that a pipeline named **iris** exists. It must have Source, Build, Deploy-NonProd, and Deploy-Prod stages. The pipeline should also have an in-progress status.
- Monitor the pipeline until all stages are complete.
- Manually approve it for production.**
- In a browser window, enter the DNS names of the ALBs.
- The application should display Hello World in the non-production and production URLs.

CodeCommit Repo graphic

The screenshot shows the AWS CodeCommit interface for the repository 'iris'. At the top, there are tabs for Management, Amazon Web Services Sign-In, CodeCommit - AWS Developer Tools, Settings - AWS Developer Tools, Importing repository — Bitbucket, and a plus sign for creating new repositories. Below the tabs, the URL is amazon.com/codesuite/codecommit/repositories/iris/browse?region=eu-west-2. The main content area displays the contents of the 'iris' repository. It includes a file tree on the left with files: Dockerfile, index.js, package-lock.json, package.json, and README.md. On the right, there are buttons for Notify (dropdown), master (dropdown), Create pull request, and Clone URL. Below the file tree, the README.md file is shown with its content: Starting, Run, and Example Run via Docker: `docker run -p 80:80 nodeapp:latest`.

ECR Repository graphic

The screenshot shows the AWS ECR interface for the repository 'iris'. At the top, there are tabs for Amazon Web Services Sign-In, CodeCommit - AWS Developer Tools, Settings - AWS Developer Tools, Importing repository — Bitbucket, and a plus sign for creating new repositories. Below the tabs, the URL is amazon.com/ecr/repositories/private/00114932738/iris?region=eu-west-2. The main content area displays the contents of the 'iris' repository. It includes a section for Images (3) with a search bar. A table lists three images: e343743016ad048ca808bd9920e97cb0d62c6950, latest (Pushed at June 16, 2022, 09:02:59 (UTC+01), Size 349.06 MB, Digest sha256:4244a4b29ac48e3cd9cd2889b9baa...); 6abd221fddc49224ab2adf051121dd652a7cff2e (Pushed at June 14, 2022, 15:31:36 (UTC+01), Size 349.06 MB, Digest sha256:f609d32404dc87f2e7e0a7c77f1e6d...); and 7a7521fb274aea9751b69fd7c9486c8648acc15f (Pushed at June 14, 2022, 15:05:15 (UTC+01), Size 349.06 MB, Digest sha256:547b9ad11b0e1f7de2ea23f4a664de...). Buttons for View push commands and Edit are also present.

Cluster Ready graphic

The screenshot shows the AWS ECS console interface. At the top, there are tabs for Amazon ECS, CodeCommit - AWS Developer Tools, cdk-hnb659fds-assets-00114932738, and a plus sign for creating new clusters. Below the tabs, the URL is eu-west-2.console.aws.amazon.com/ecs/v2/clusters?region=eu-west-2. The main content area displays the 'All Clusters' page. It includes a search bar for Clusters (2). Two clusters are listed: 'cicd-ecs-prod' and 'cicd-ecs-nonprod'. Both clusters show 'No default found' under their respective sections. Under 'cicd-ecs-prod', it shows 1 service and 2 tasks (0 Pending | 2 Running). Under 'cicd-ecs-nonprod', it shows 1 service and 2 tasks (0 Pending | 2 Running). A sidebar on the left provides navigation for the Amazon Elastic Container Service, including Clusters, Task definitions, Account settings, Amazon ECR, and Documentation.

Load Balancer ready graphic

The screenshot shows the AWS Management Console with the 'Load Balancers' section selected under 'Load Balancing'. A table lists two load balancers:

Name	DNS name	State	VPC ID	Availability Zones	Type	Created At
iris-irse-2PjSVDRAB1J5	iris-irse-2PjSVDRAB1J5-280025500.eu-west-2.elb.amazonaws.com	Active	vpc-0a7f27af07610eb	eu-west-2b, eu-west-2a	application	June 14, 2022 at
iris-irsp-1S1FRO1KXQYMP	iris-irsp-1S1FRO1KXQYMP-1334184522.eu-west-2.elb.amazonaws.com	Active	vpc-00dc1ed983a79e64	eu-west-2a, eu-west-2b	application	June 14, 2022 at

Pipeline in Progress graphic

The screenshot shows the AWS Management Console with the 'Pipelines' section selected under 'CodePipeline'. A table lists one pipeline:

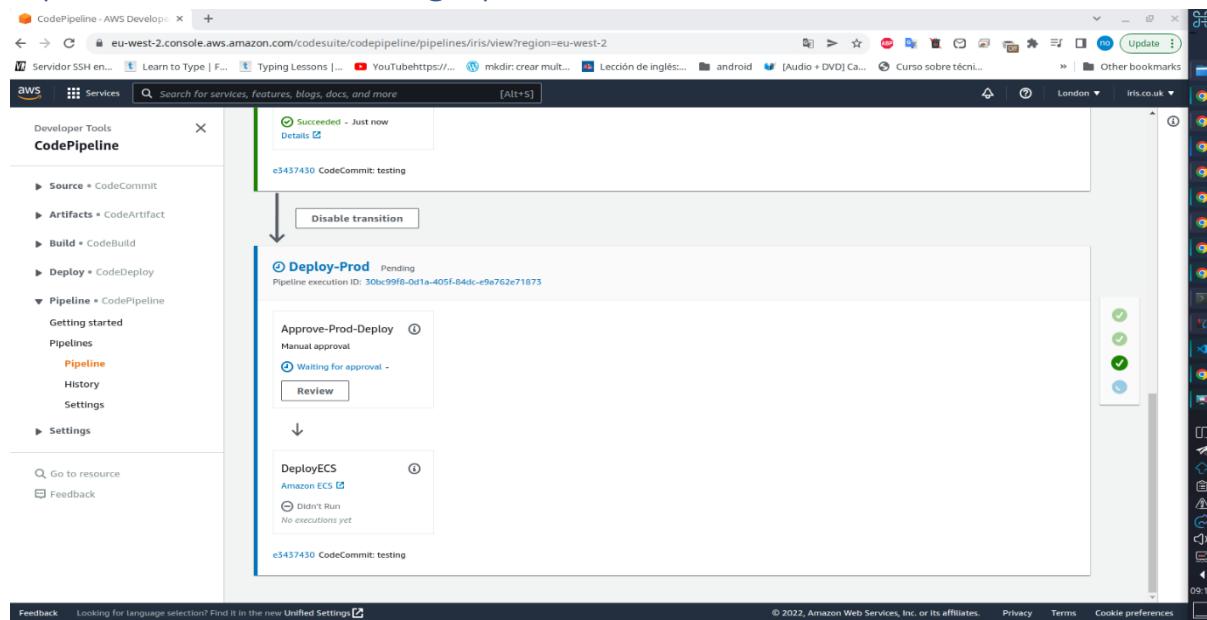
Name	Most recent execution	Latest source revisions	Last executed
Iris	In progress	CodeCommit - 7a7321fb: Initial commit by AWS CodeCommit	3 minutes ago

Pipeline Progress graphic

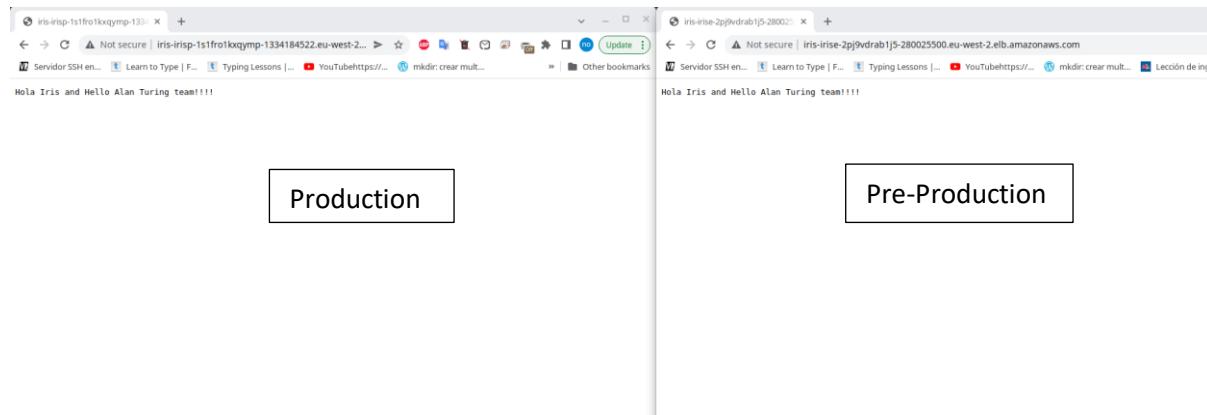
The screenshot shows the AWS Management Console with the 'Pipeline' section selected under 'CodePipeline'. It displays the execution details for the 'Iris' pipeline, showing three stages: Source, Build, and Deploy.

- Source:** Succeeded. Pipeline execution ID: 04d12ce0-cd47-4f5e-bb70-4ac3b99c52af. Status: Succeeded - 3 minutes ago. Details: 7a7321fb: CodeCommit: Initial commit by AWS CodeCommit.
- Build:** In progress. Pipeline execution ID: 04d12ce0-cd47-4f5e-bb70-4ac3b99c52af. Status: In progress - 3 minutes ago. Details: 7a7321fb: CodeCommit: Initial commit by AWS CodeCommit.
- Deploy:** Didn't run. Status: Didn't run.

Pipeline Pre-Production graphic



Webpage Pre and Production graphic



Before change into the code

The screenshot shows the AWS CodeCommit repository 'iris'. The 'index.js' file is displayed with the following code:

```
1 const http = require('http');
2
3 const port = 80;
4
5 const server = http.createServer((req, res) => {
6   res.statusCode = 200;
7   res.setHeader('Content-Type', 'text/plain');
8   res.end('Hola Iris and Hello Alan Turing team!!!!');
9 });
10
11 server.listen(port, () => {
12   console.log(`Server running at ${port}`);
13 });
14
```

The repository details show it was imported from Bitbucket. The master branch is selected, and there is a 'Create pull request' button.

Wait for manual approval

The screenshot shows the AWS CodePipeline console with a pipeline named 'iris'. A specific step, 'Approve-Prod-Deploy', is highlighted as 'Pending' status. The step details show it's a 'Manual approval' type, currently 'Waiting for approval'. A 'Review' button is visible. Below this, another step 'DeployECS' is shown as 'Didnt Run' with 'No executions yet'. The pipeline execution ID is 30bc99fb-0d1a-405f-84dc-e9a762e71873.

Feedback Looking for language selection? Find it in the new Unified Settings.

CodePipeline - AWS Developers eu-west-2.console.aws.amazon.com/codesuite/codepipeline/pipelines/iris/view?region=eu-west-2

Servidor SSH en... Learn to Type | F... Typing Lessons | YouTubehttps://... mkdir: crear mult... Lección de inglés... android [Audio + DVD] Ca... Curso sobre técni... Other bookmarks

aws Services Search for services, features, blogs, docs, and more [Alt+S]

Developer Tools CodePipeline

Source CodeCommit Artifacts CodeArtifact Build CodeBuild Deploy CodeDeploy Pipeline CodePipeline

Getting started Pipelines Pipeline History Settings

Settings Go to resource Feedback

Approve-Prod-Deploy Pipeline execution ID: 30bc99fb-0d1a-405f-84dc-e9a762e71873

Approve-Prod-Deploy Manual approval Waiting for approval Review

DeployECS Amazon ECS Didn't Run No executions yet

e3437430 CodeCommit: testing

Action Approve-Prod-Deploy was approved

Review summary

Action name Approve-Prod-Deploy Status Approved Comments about this action URL for review Reviewer ARN arm:aws:iam::001114932738:root Comments Everything is OK!!! Done

Feedback Looking for language selection? Find it in the new Unified Settings.

CodePipeline - AWS Developers eu-west-2.console.aws.amazon.com/codesuite/codepipeline/pipelines/iris/view?region=eu-west-2

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aws Services Search for services, features, blogs, docs, and more [Alt+S]

Developer Tools CodePipeline

Source CodeCommit Artifacts CodeArtifact Build CodeBuild Deploy CodeDeploy Pipeline CodePipeline

Getting started Pipelines Pipeline History Settings

Settings Go to resource Feedback

Approve-Prod-Deploy Pipeline execution ID: 30bc99fb-0d1a-405f-84dc-e9a762e71873

Approve-Prod-Deploy Manual approval Approved - Just now Details

DeployECS Amazon ECS Didn't Run No executions yet

e3437430 CodeCommit: testing

Feedback Looking for language selection? Find it in the new Unified Settings.

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Update the pipeline

The screenshot shows the AWS CodeCommit console with a repository named 'iris'. A commit message 'index.js has been committed to master' is displayed at the top. Below it, the file 'index.js' is shown with its content:

```
1 const http = require('http');
2
3 const port = 80;
4
5 const server = http.createServer((req, res) => {
6   res.statusCode = 200;
7   res.setHeader('Content-Type', 'text/plain');
8   res.end('!!UPDATE DE POC!!!!');
9 });
10
11 server.listen(port, () => {
12   console.log(`Server running at ${port}`);
13 });
14
```

The sidebar on the left provides navigation for other CodeCommit, CodeArtifact, CodeBuild, and CodeDeploy resources.

Feedback Looking for language selection? Find it in the new Unified Settings.

Amazon ECS CodeCommit - AWS Developers EC2 Management Console Importing repository — Bitbucket Microsoft Word - Represent... eu-west-2.console.aws.amazon.com/codesuite/codecommit/repositories/iris/browse/ref/heads/master/-/index.js?region=eu-west-2

Servidor SSH en... Learn to Type | F... Typing Lessons | YouTubehttps://... mkdir: crear mult... Lección de inglés... android [Audio + DVD] Ca... Curso sobre técni... Trape 2.0 - Herr... RF Hacking Field... Other bookmarks

aws Services Search for services, features, blogs, docs, and more [Alt+S]

Developer Tools CodeCommit

Source CodeCommit Repositories Code Pull requests Commits Branches Git tags Settings Approval rule templates

Artifacts CodeArtifact Build CodeBuild Deploy CodeDeploy Pipeline CodePipeline

Getting started Settings

Go to resource Feedback

index.js has been committed to master

Developer Tools > CodeCommit > Repositories > iris

iris / index.js info

```
1 const http = require('http');
2
3 const port = 80;
4
5 const server = http.createServer((req, res) => {
6   res.statusCode = 200;
7   res.setHeader('Content-Type', 'text/plain');
8   res.end('!!UPDATE DE POC!!!!');
9 });
10
11 server.listen(port, () => {
12   console.log(`Server running at ${port}`);
13 });
14
```

Notify master Create pull request Clone URL Edit

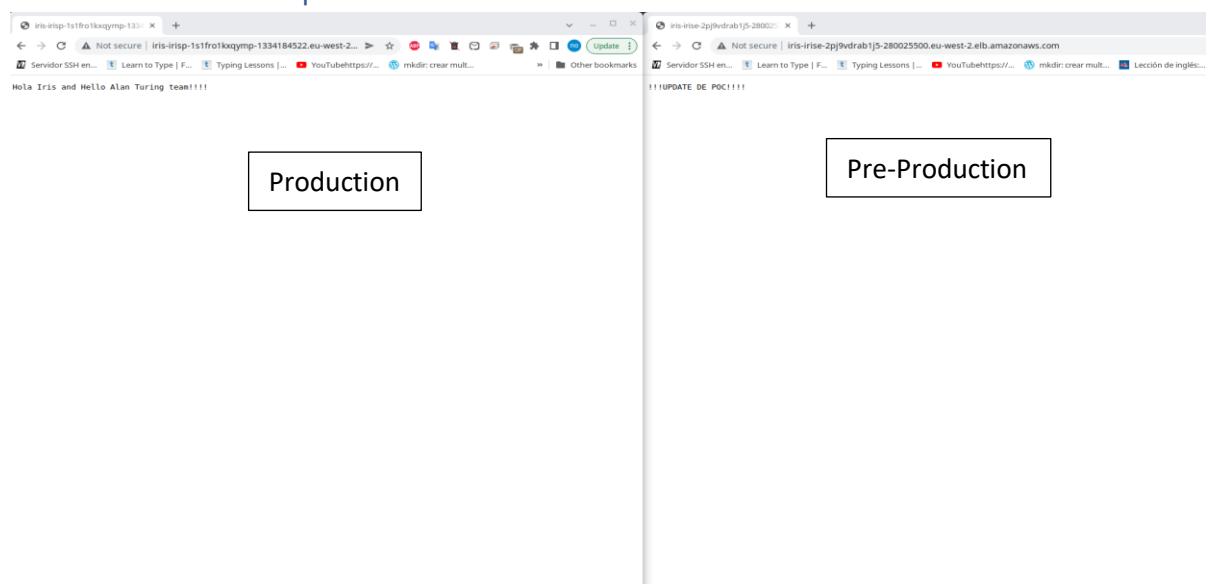
Feedback Looking for language selection? Find it in the new Unified Settings.

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Manual Approval

The screenshot shows the AWS CodePipeline console with a pipeline named 'iris'. The pipeline consists of three stages: 'Source' (CodeCommit), 'Build' (CodeBuild), and 'Deploy' (CodeDeploy). The 'Deploy' stage has two actions: 'Approve-Prod-Deploy' and 'DeployECS'. The 'Approve-Prod-Deploy' action is currently pending manual approval. A large green button labeled 'Review' is visible. To the right of the pipeline, there is a vertical sidebar with several green checkmark icons, indicating successful steps or approvals.

Web validation update



Pipeline Manual Approved

The screenshot shows the AWS CodePipeline console after the manual approval step has been completed. The 'Approve-Prod-Deploy' action now has a green checkmark icon next to it, indicating it has been approved. The status of the 'Deploy-Prod' stage is now 'In progress'. The pipeline execution ID is listed as '30bc99fb-0d1a-405f-84dc-e9a762e71873'. The rest of the pipeline structure remains the same as in the previous screenshot.

Full Update

The screenshot shows a browser window with several tabs open. The central content area displays a CI/CD pipeline interface.

Pipeline Stages:

- Deploy-NonProd**: Succeeded. Pipeline execution ID: 30bc99f8-0d1a-405f-84dc-e9a762e71873. Contains a DeployECS step for Amazon ECS, which succeeded 6 hours ago.
- Deploy-Prod**: Succeeded. Pipeline execution ID: 30bc99f8-0d1a-405f-84dc-e9a762e71873. Contains an Approve-Prod-Deploy step (Manual approval) and a DeployECS step for Amazon ECS, both of which succeeded 6 hours ago.
- Deploy-NonProd**: Succeeded. Pipeline execution ID: e3437430. Contains a DeployECS step for Amazon ECS, which succeeded 5 hours ago.

Actions: Two "Disable transition" buttons are visible above the stages.

Some Metrics

The screenshot shows the AWS CloudWatch Metrics interface.

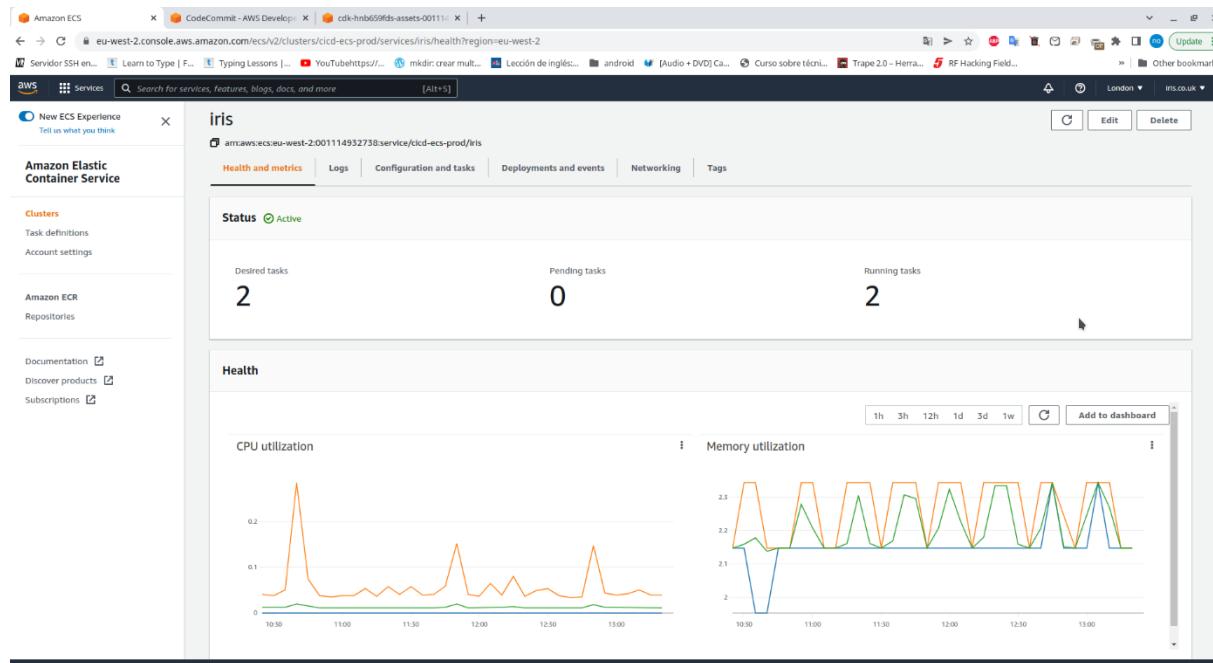
Deployments (1):

Start date	Status	Tasks	Version	Task definition	Revision	Rollout status	Deployment ID	
9 minutes ago	Primary	100%	2/2	1.4.0	irisclustack@irispodesfargatedTaskDef7A2D1667	7	Completed	ecs-svc/4792142430905138067

Events (40):

Started at	Message	Event ID
16/06/2022, 09:21:35	service iris has reached a steady state.	e219beb3-76c1-46a6-b75d-7a3d1d10e82c
16/06/2022, 09:21:35	service iris deployment ecs-svc/4792142430905138067 deployment completed.	cf67fa51-6764-495a-995e-3cd9a2a5ef7f
16/06/2022, 09:20:17	service iris has stopped 1 running tasks: task 4488f5662244d3a85ab180cc107c1cc .	c4ce2460-c61f-4b37-bf01-8f5c71309c46
16/06/2022, 09:18:57	service iris has stopped 1 running tasks: task 097515d40b40486db2b045a1c7a7e7f15 .	2d980004-e2fa-4124-b159-081f387b7975
16/06/2022, 09:15:11	service iris has begun draining connections on 1 tasks.	a663805-84c9-4ffd-beeb-a05d0d0552a2
16/06/2022, 09:15:11	service iris deregistered 1 targets in target-group iris-irsp-D7AB6JOKV5V .	f68f79ef-8ba7-44f7-9050-e5c16fc1288
16/06/2022, 09:14:31	service iris registered 2 targets in target-group iris-irsp-D7AB6JOKV5V .	4835ea68-193f-4811-8075-b175af97fe7f
16/06/2022, 09:13:51	service iris has started 2 tasks: task 0a315d0c34dc74655ae7d1a7514726430 task ed00d9558a4941d6b4e38bfac071016 .	aaaabb7e-a97c-4bd8-a248-91ffe7f23a3d9
16/06/2022, 09:13:50	service iris has begun draining connections on 1 tasks.	cfa44095-5a9c-4d96-bad5-0c6d0216002a
16/06/2022, 09:13:50	service iris deregistered 1 targets in target-group iris-irsp-D7AB6JOKV5V .	2823c0ef-83be-4c42-aa21-c6e27db2c637

Container metrics



Resource:

https://docs.aws.amazon.com/es_es/prescriptive-guidance/latest/patterns/automatically-build-ci-cd-pipelines-and-amazon-ecs-clusters-for-microservices-using-aws-cdk.html