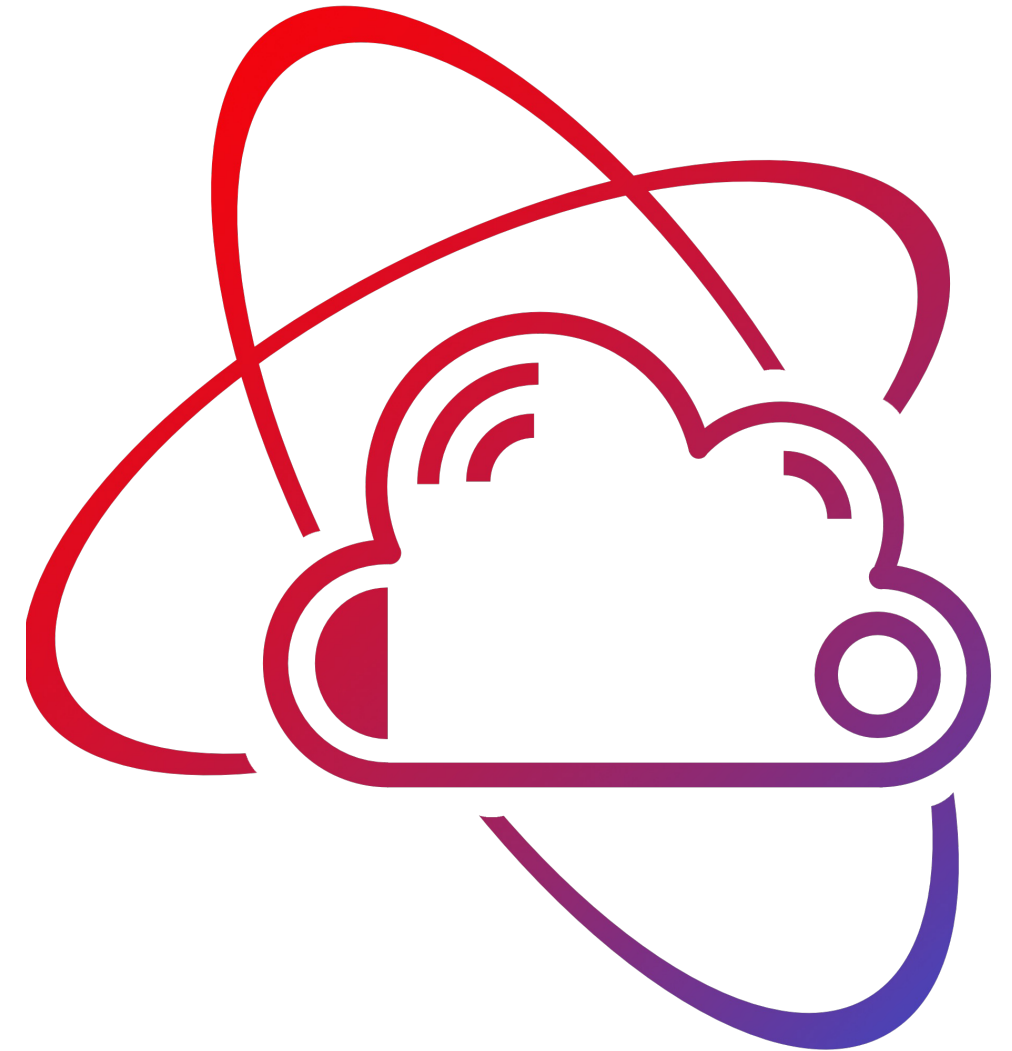
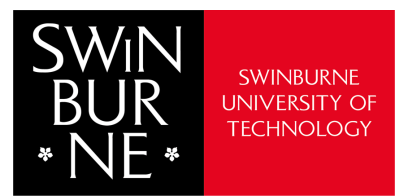


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Cloud Computing Architecture

Week 2 - Introduction



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Acknowledgement of Country

We respectfully acknowledge the Wurundjeri People of the Kulin Nation, who are the Traditional Owners of the land on which Swinburne's Australian campuses are located in Melbourne's east and outer-east, and pay our respect to their Elders past, present and emerging.

We are honoured to recognise our connection to Wurundjeri Country, history, culture, and spirituality through these locations, and strive to ensure that we operate in a manner that respects and honours the Elders and Ancestors of these lands.

We also respectfully acknowledge Swinburne's Aboriginal and Torres Strait Islander staff, students, alumni, partners and visitors.

We also acknowledge and respect the Traditional Owners of lands across Australia, their Elders, Ancestors, cultures, and heritage, and recognise the continuing sovereignties of all Aboriginal and Torres Strait Islander Nations.

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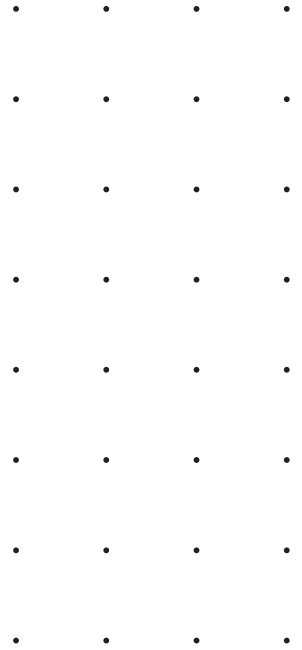
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Week 2 - Introduction

In this Presentation:

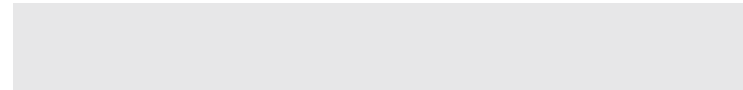
- AWS Compute Services Overview
- Introduction to AWS Canvas Labs
- Introduction to Assignment 1a



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AWS Compute Services Overview

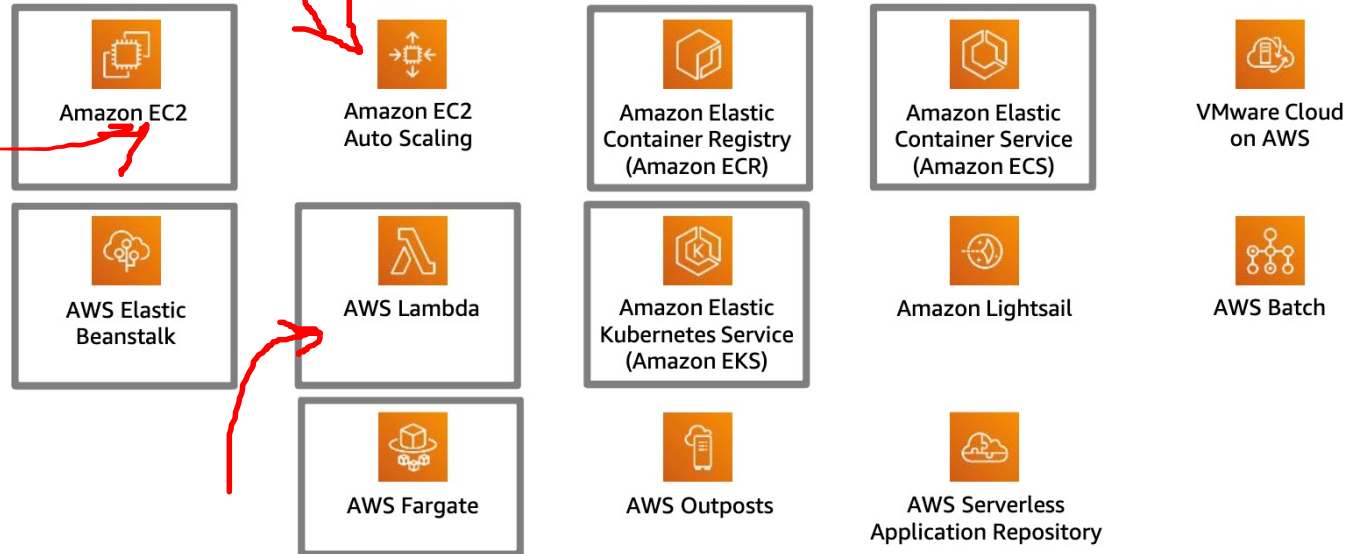
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AWS Compute Services Overview

AWS compute services

Amazon Web Services (AWS) offers many compute services. This module will discuss the highlighted services.



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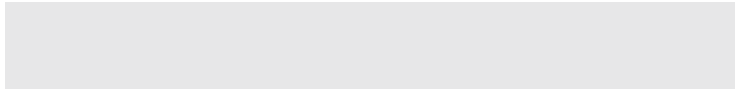
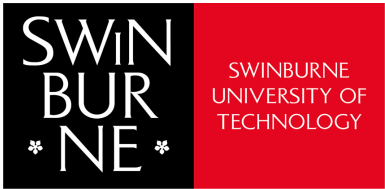
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Introduction to AWS

Canvas Labs

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Accessing Labs

SWINBURNE

2023 Semester 1

Home

Announcements

Syllabus

Modules

Assignments

Quizzes

Collaborate Ultra

Echo360 ALP

Discussions

Grades

Results Moderation

Studiosity - 24/7 online study help

People

Rubrics

Pages

Collaborations

Outcomes

Files

BigBlueButton

Settings

Week 2 - AWS - Compute Services

Lecture Overview

- Compute services
 - Virtual machines – EC2
 - Serverless computing - Lambda
 - Other compute services
- Container-based/Serverless services

Lecture recordings

- [Week 2 introduction](#)
- [Virtualization, Compute services, EC2, Cost optimization](#)
- [Container-based and serverless services](#)

Demonstration

- [Setting up an EC2 instance](#)

Lecture slides

- [Lecture 02 Computational Services.pdf](#)

Practice Quiz

- [Compute Quiz - ACF Mod 6](#)

Lab

- [ACF Lab 3: Introduction to EC2](#)

Previous

Next

aws

Account

Dashboard

Courses

Calendar

Inbox

History

Help

ACFv2EN-... > Modules > Module 6 ... > Lab 3 - Introduction to Amazon EC2

Home

Announcements

Modules

Discussions

Grades

EN_US

Lab 3: Introduction to Amazon EC2

Lab overview and objectives

Availability Zone

Security group

IIS Web Server

Amazon EC2

Details

AWS

Start Lab

End Lab

Instructions

Actions

Terminal

Source

bash

ddd_v1_w_ckq_1928868@runweb718571:~\$

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Introduction to Assignment 1a

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Assignment 1a Instructions



SWINBURNE

2023 Semester 1

Home

Announcements

Syllabus

Modules

Assignments

Quizzes

Collaborate Ultra

Echo360 ALP

Discussions

Grades

Results Moderation

Studiosity - 24/7 online study help

People

Rubrics

Pages

Collaborations

Outcomes

Files

BigBlueButton

Settings

Assignment 1a

Publish

Edit

Assignment Specification

No submission required. Assessment by demonstration in your tutorial Week 4.

Contribution to final assessment: 5%, graded as pass/fail.

Note:

 All AWS resources in assignments are to be implemented in a Lab environment accessible through AWS canvas (AWS Academy Learner Lab). Please note that this classroom is NOT the same as the sandbox in ACA/ACF courses that you use to do your weekly labs.
This classroom comes with a \$100 credit, use it carefully (turn off resources when not in use to save costs, etc.)

Objectives:

1.

 Get familiar with the AWS management console.

2.

 Launch your own EC2 instance.

3.

 Deploy your first PHP web page (PhotoAlbum) on Apache web server on your EC2 instance.

Note:

 In this introductory assignment you will create an EC2 Web server in the default VPC. In general, the default VPC is suitable only for experimental / toy deployments, and its use is considered bad practice for production resources. In the next assignments, you will create your own secure VPC.

Supporting materials:

Auto Setup EC2 with script tutorial: [Auto Setup EC2 with script.pdf](#)

EC2 setup bash script: [EC2 setup script.txt](#)

Remote access to an EC2 instance tutorial: [Remote Access to an EC2.pdf](#)

Related items



Week 2 – Introduction: Introducing Assignment 1a

AWS Learner Lab

The screenshot displays the AWS Learner Lab interface. On the left, a vertical sidebar contains navigation links: Home, Modules, Discussions, Courses, Calendar, Inbox, History, and Help. The main content area is divided into two sections. The top section, titled 'ALLv1-37505 > Modules > Learner Lab > Learner Lab', features a header with 'AWS' (highlighted with a red box), 'Used \$1.9 of \$100' (highlighted with a red box), a timer at '00:00' (highlighted with a red box), and buttons for 'Start Lab' and 'End Lab' (both highlighted with red boxes). Below this header is a large terminal window showing the command prompt 'ddd_v1_w_jXD_1918898@runweb71865:~\$'. The bottom section, titled 'Learner Lab', contains a list of links: 'Environment Overview', 'Environment Navigation', 'Access the AWS Management Console', 'Region restriction', 'Service usage and other restrictions', 'Using the terminal in the browser', 'Running AWS CLI commands', 'Using the AWS SDK for Python', 'Preserving your budget', 'Accessing EC2 Instances', 'SSH Access to EC2 Instances', 'SSH Access from Windows', and 'SSH Access from a Mac'. An orange arrow points from the 'Learner Lab' link in the sidebar to the terminal window. The right sidebar contains a section titled 'Learner Lab' with the same list of links, and a section titled 'Environment Overview' with the text 'This Learner Lab provides a sandbox environment for ad hoc evaluation of'.