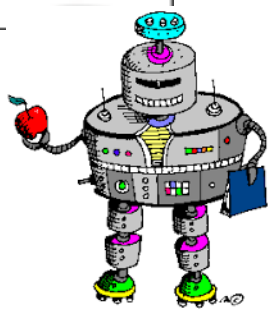
On the EDGE of Glory

EAE Learning objectives for this lesson

Review Past Continuous tenses and practice using them. Discuss new technology. Listening and reading comprehensions.



Activity One: Answer the questions with your teacher or partner.

1. How have you been storing information for your work?
2. How have you been storing information in your company?
3. How have you been storing your personal data and information?
4. Do you know where your information is stored?
5. Do you think that your information is safe?
6. What are you doing to keep it safe?

Activity Two: Read the information about the Past Continuous Tenses

The past continuous is made from **the past tense of the verb *be*** and the **–*ing* form** of a verb:

I ***was***	*work****ing***
You ***were***	*play****ing***
He ***was***	*liv****ing***
She ***was***	*talk****ing***
It ***was***	
We ***were***	etc.
You ***were***	
They ***were***	

We use the past continuous to talk about the **past**:

- for something which **happened before and after another action**:

*The managers **were running** their meeting when the internet went down.*

Compare: *The managers **ran** their meeting after the internet was down.*

- **It is used** for something that **happened before and after a specific time**:

*It was **eight o'clock**. I **was writing** a letter.t'*

Compare: *At eight o'clock I wrote* (= started writing) *some letters*.

- to show that something **continued for some time**:

*We lost our internet connection during the lesson. Everyone **was shouting**. My head **was aching**.*

- *For something that **happened again and again**:*

*I **was trying to get the internet to work** every day, I tried at least times a day.*
*Before we invested in edge computing **were always having issues with storage**.*

- with verbs which show **change or growth**:



*The servers **were filling up** quickly.*
*Her English **was improving**.*
*Technology **was changing** quickly.*

We do **not** normally use the past continuous with **stative verbs**. **Stative verbs** describe a state rather than an action. We use the **past simple** instead:

*When I got home, I really **needed** (NOT ~~was needing~~) a shower*.

Past perfect Continuous

The past perfect is made from the verb ***had*** and the **past participle** of a verb: I **had finished** the work.
She **had gone**. The past perfect **continuous** is made from ***had been*** and the **-*ing* form** of a verb:

I **had been** work**ing** there for a year.
They **had been** planning to use the cloud for storage.

The past perfect is used in the same way as the present perfect, but it refers to a time in the past, not the present. We use the past perfect:

- for something that **started in the past** and **continued up to a given time in the past**:

*When George left the company, he **had been using the new server** for two years already. We didn't want to change our storage solution. We **had learned** how to use the server.*

We also use the past perfect continuous:

- for something that **happened several times before a point in the past** and **continued after that point**:

*He was a great developer. He **had been working** with computers ever since he was a teenager.*
*He **had written** three books and he was working on another one.*

- when we are **reporting our experience up to a point in the past**:

*My first day in the job was the worst day I **had** ever **had.***
*I was pleased to meet George. I **hadn't met** him before, even though I **had met** his boss several times.*

- for something that **happened in the past** and **is important at a later time in the past**:

*I couldn't get into the office. I **had lost** my keys.*
*John wasn't in the office. He **had gone** out to a meeting.*

We often use **expressions with *for* and *since*** with the past perfect:

*I was sorry when the factory closed. I **had worked** there **for ten years**.*
*I **had been watching** that programme every week **since it started**, but I missed the last episode.*

We do **not** normally use the past perfect continuous with **stative verbs**. We use the **past perfect simple** instead:

*Up until that moment, I'**d** never **believed*** (NOT ~~been believing~~) *in astrology.*

Activity Three: Listen to the song, watch the video and answer the following questions using the past continuous.
Lady Gaga - The Edge Of Glory (Official Music Video)



1.What was happening as we first saw Lady Gaga at the start of the video clip?
2.What was she doing while she was singing?
3.What was she doing to her hair in the video?
4.Where was she lying down at one point?
5.What was she holding onto when she was standing in front of the window?
6.What was she doing while the man played the saxophone?
7.What did she say she was hanging onto?

Activity Four: Fill the gaps the sentences with the correct verbs from below:

1. While the virus attack …… we were installing a huge update.
2. He …….. a new cloud solution when he lost his job.
3. I …… to get through to the service provider for ten minutes when the internet finally started to work again.
4. They …… the available storage on our server with pointless files that were taking up the space for nothing.
5. Our service ……. really slow and so we found that we had to find a new solution.

- had been trying - was going on - were filling up - was proving to be - had been implementing -

Activity Five: Listening comprehension activity with questions.
Read the short article then;
Edge computing is the practice of capturing, storing, processing and analysing data near the client, where the data is generated, instead of in a centralised data-processing warehouse. Hence, the data is stored at intermediate points at the 'edge' of the network, rather than always at the central server or data center."

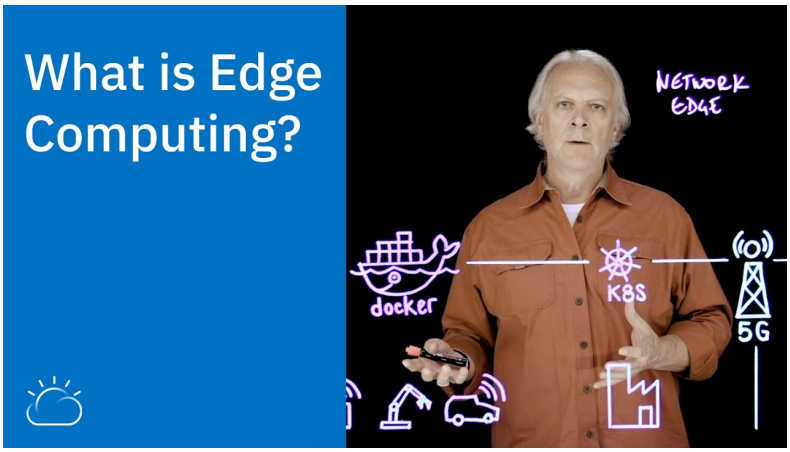


Watch the first five minutes of the video:

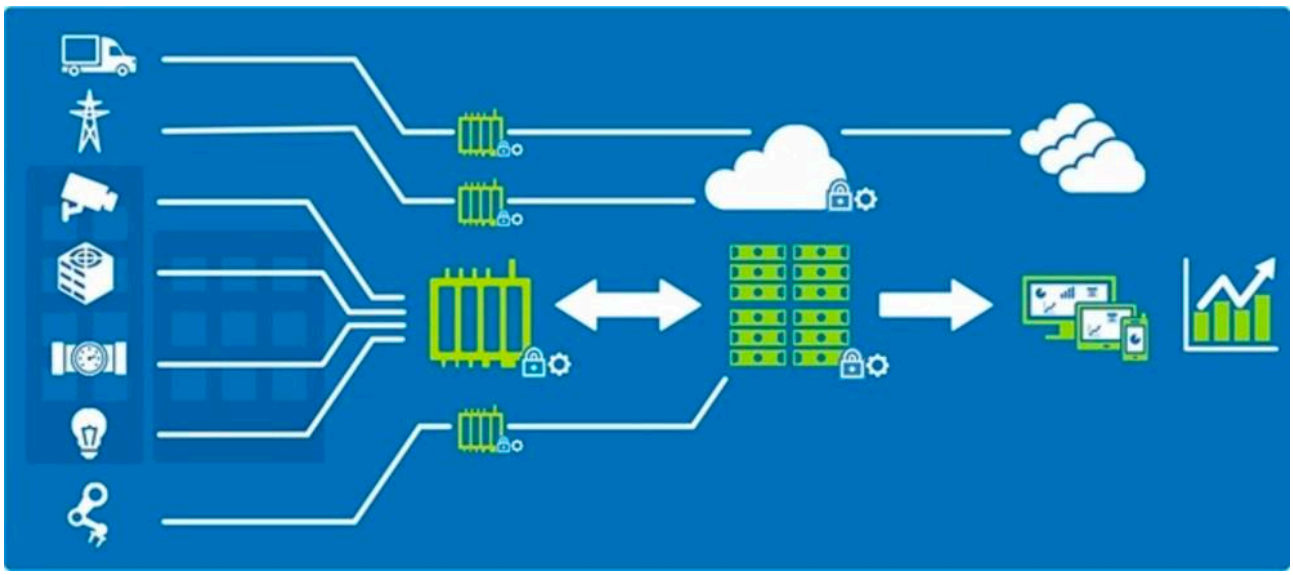
1. Where does data come from?
2. What do you have to think start by thinking about?
3. What does 5G enable us to do?
4. What are the two kinds of edge computing capabilities?
5. What were edge devices built for?
6. What have we added compute devices to?
7. What have we been deploying onto the devices?
8. So, we can do computer work on other devices, what example was given?

YouTube: What is edge computing?

(Half rack - small space in a server).



Activity Six: Explain what is happening in the diagram below.
(In a group - it's a competition to use the most conditional tenses).





Activity Seven: Read the article paying attention to your intonation and stress and then tell your teacher what you have learned from it. *(If you are in a group, Summarise the text together.)*

What is edge computing, and what does it mean for the Internet of Things?

The edge generically refers to the source of data—for example, an IoT sensor that collects temperature data is an edge. Connected assets in a digital factory are edges. Any device that's physically collecting data is an edge. Edge computing, then, simply refers to computation performed right at the source of the data.
"Edge computing is a trend to push more compute proximal to the physical world or things that are collecting data from the physical world,".

If the edge refers to the source of data, the cloud simply refers to *not* the source of data. The cloud is a remote data center that can receive and process information from the edge, but does not generate that information.

It takes time to send data from the edge to the cloud, process it and send it back from the cloud to the edge to enact some decision. For IoT applications that require low latency, this delay can be prohibitive.
If you process your data at the edge instead of sending it to the cloud, you remove this delay and can make immediate decisions for a truly real-time response.

Sending data from the edge to the cloud takes up spectral resources—there's a limit to how much information can be sent at one time. This limit will become more of a problem as more IoT data is generated. There's just not enough bandwidth to go to the cloud with all the information coming from all the things.When we get to the point where every car is producing more data per hour than a full length high-definition movie, gigabytes and terabytes of data, times all the cars in a city, times all the cars in a state, going to clouds, there's not enough bandwidth. There's just not enough bandwidth for all the big data that you want to get from the edge.

Just as there's a bandwidth cost in sending data from the edge to the cloud.

Computing at the edge provides more security than computing at the cloudWhen you send the data all over the state, all over the campus, all over the world, it's vulnerable to hostile attacks.

One advantage of cloud computing is that is doesn't take up any room, at least not anywhere you care about. If you're constrained for space, it might make sense to send data to the cloud instead of processing at the edge.
Since edge and cloud each have different advantages, a combination of the two will often be more powerful than simply choosing one or the other.

Source:https://www.engineering.com/story/seven-reasons-to-compute-at-the-edge

Activity Eight: Write some questions about edge computing. (*With your group or on your own or with a partner.) Act out a situation where you are interviewing an expert about the subject, for a video on YouTube. So ask and answer the questions.*

Activity Nine: What is happening, what was happening and what has been happening in these pictures.?

Brainstorm as many sentences as you can!

