

Demystifying networking
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Lecture - 82
Internet Security Products

Now, the other things that are essential for internet security are the Internet Security Products.

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The slide features a blue header with the text "Security (Internet)" and a network diagram. Below the header is a bulleted list:

- Internet security products
 - Antivirus
 - Security suites
 - Password managers

A video inset in the bottom right shows Prof. Sridhar Iyer, a man with glasses wearing a dark blue polo shirt with the IIT Bombay logo. The footer of the slide reads "Demystifying Networking | CS75".

Now, what are these? These are the anti viruses, the password managers and the security suits. So antivirus is basically to check if any file contains any malicious code that can harm your system and anti viruses get regular updates on what kind of codes that are available or known to cause certain malicious activities. So, updating your antivirus is one of the very important key points to have a secure system.

So, these days not just the antivirus, what we get our security suits. So, in security suits you by default get certain firewalls which can do some stateful packet inspection, that can check on what applications are communicating over the network and all of those things.

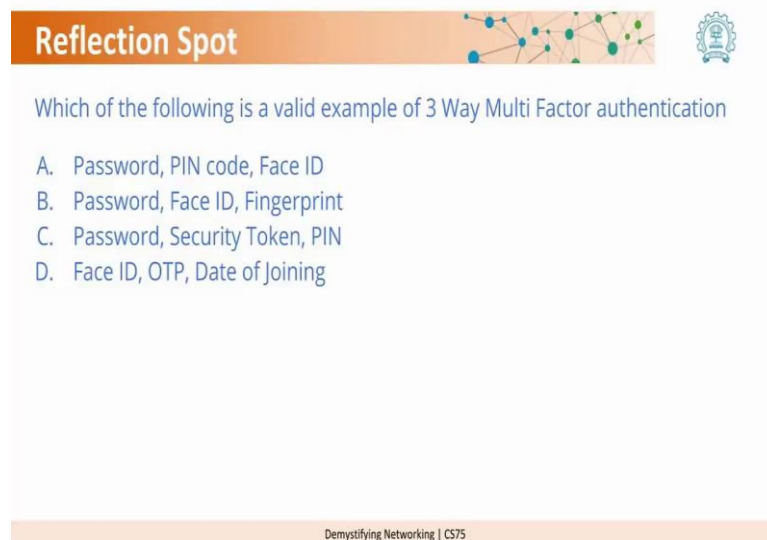
So, it can also detect any malicious activities or any malicious communications that are happening through your system over the network. So, security suit is something which is much more advanced than just the antivirus. So, antivirus is only able to check certain

files and softwares for the kind of behaviours that they perform, but a security suit can also check network activities that are happening over your system. Now we have something called password managers.

So, password managers are certain softwares, that are heavily encrypted and can manage the number of a lot of passwords and these days you have a lot of applications a lot of passwords that you use to access those applications and at times it becomes really difficult you know to remember all those different passwords and moreover organization have their own policies over having changing their or having changed your password say in a fortnight or like in 3 months, 6 months. So, it becomes difficult to manage these passwords. Hence some applications like password managers allow you to store those passwords.

Now, it is the time to come towards come to a reflection spot now what you can do is you can pause the video for some time and then try to answer the question.

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The slide features an orange header with the text "Reflection Spot" on the left, a network diagram of blue and green nodes on the right, and a small gear icon. The main content area is white with a blue question: "Which of the following is a valid example of 3 Way Multi Factor authentication". Below the question are four multiple-choice options labeled A, B, C, and D. At the bottom, there is a footer with the text "Demystifying Networking | CS75".

Reflection Spot

Which of the following is a valid example of 3 Way Multi Factor authentication

- A. Password, PIN code, Face ID
- B. Password, Face ID, Fingerprint
- C. Password, Security Token, PIN
- D. Face ID, OTP, Date of Joining

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So, the question here is, which of the following is a valid example for a 3 way multi factor authentication? Option A: password, a pin code, of face ID; option B: password, face ID or a fingerprint; option C: password, secure token, PIN and option D: face ID, OTP and date of joining. Now you can pause the video for a while and try to see which one is the right option.

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Reflection Spot

D is the correct answer as Face ID is something you inherit, OTP is received on your phone which is something you have and you Date of Joining is something you know. Other are using similar factors.

- A. Password, PIN code, Face ID
- B. Password, Face ID, Fingerprint
- C. Password, Security Token, PIN
- D. Face ID, OTP, Date of Joining

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Here D is the correct answer as face ID is something you inherit which is basically your face. OTP is received on your mobile phone that is something you have and date of joining is something that you know the others are using similar factors. Now this brings us to the last topic that we want to discuss in security, which is basically certain practices that we can follow at home to ensure a secure communication and secure network.