

TOPIC: Cyber Security Threats: Misconfigured Access Rights

LEARNING OBJECTIVES:

- **What is Misconfigured Access Rights**
- **Advantages of Misconfigured Access Rights**
- **Disadvantages of Misconfigured Access Rights**

	Teacher Activity	Pupil Activity
Starter activity (5-10 mins) [individual/paired or group]	<p><i>What is Misconfigured Access Rights?</i></p> <p><i>Misconfigured Access Rights are when user accounts have incorrect permissions. The bigger problem from this could be giving people who are lower down the chain of command access to private information that managers could have.</i></p> <p><i>They could wrongly have access to employee records or customer data. This is a breach of the data protection act and the business could get in a lot of legal trouble. If the employee were to become disgruntled they could do a lot of damage to the business with this kind of access.</i></p>	<p>Discuss (individual/paired or group)</p> <p>What are the consequences of having incorrect permissions, for example:</p> <p>School Account (Pupil / Staff)</p> <p>Bank Account</p> <p>Medical Record</p> <p>Online Shopping Site</p>
Main activity one (15 mins)	<p>Advantages</p> <ul style="list-style-type: none"> • No advantages to the business but would be a big advantage for potential attackers. 	<p>Discuss (individual/paired or group)</p>
Plenary one (5-10 mins)	<p><i>Assess learning against the learning objectives</i></p> <p><i>This is an open activity whereby the teacher will decide on the best approach to do this based on the pedagogical approach your school takes on assessment.</i></p>	<p>For example:</p> <ul style="list-style-type: none"> • 5 minute timed writing exercise on what has been learned so far • Fill in class notes • Have a discussion • Answer open questions • Answer directed questions

<p>Main activity two (15 mins)</p>	<p>Disadvantages</p> <ul style="list-style-type: none"> • Leaves network vulnerable. • Breach of PCI DSS. • Breach of DPA • Hacker can traverse through network easily if they could break into the employees account with the misconfiguration. 	<p>Discuss (individual/paired or group)</p> <p>Practical Activity</p> <p>Students can draw two different diagrams; one with how a student access should work on the school network i.e. access to their own personal area where they can store work and access software such as Microsoft Word.</p> <p>The next should be a diagram of what they can access if their account was misconfigured to a teachers or head teacher account; they then draw what they could potentially have access to such as student records, teacher email, test answers, lesson plans etc.</p> <p>This will give them a good idea of the data they can access if their account if configured incorrectly.</p>
<p>Plenary two (5-10 mins)</p>	<p><i>Assess learning against the learning objectives</i></p> <p><i>This is an open activity whereby the teacher will decide on the best approach to do this based on the pedagogical approach your school takes on assessment.</i></p>	<p>For example:</p> <ul style="list-style-type: none"> • 5 minute timed writing exercise on what has been learned so far • Fill in class notes • Have a discussion • Answer open questions • Answer directed questions
<p>Homework (optional)</p>	<p><i>Teacher choice based on homework policy of school.</i></p>	

Key Terms:

Misconfigured Access Rights

Misconfigured Access Rights are when user accounts have incorrect permissions. The bigger problem from this could be giving people who are lower down the chain of command access to private information that managers could have. They could wrongly have access to employee records or customer data. This is a breach of the data protection act and the business could get in a lot of legal trouble. If the employee were to become disgruntled they could do a lot of damage to the business with this kind of access.

Advantages

- No advantages to the business but would be a big advantage for potential attackers.

Disadvantages

- Leaves network vulnerable.
- Breach of PCI DSS.
- Breach of DPA
- Hacker can traverse through network easily if they could break into the employees account with the misconfiguration.