

2.C: Does the WWS require unique and separate credentials for users to access OT and IT networks?

Recommendation: Require a single user to have two different usernames and passwords; one account to access the IT network, and the other account to access the OT network to reduce the risk of an attacker being able to move between both networks using a single login.

Why is this control important?

If an attacker can determine a user's login on one network, they will use that login information to try to access other accounts or networks. Bad actors can also use the password recovery feature on an account to access any account that uses the same email address. Using separate usernames and passwords for users of the OT and IT networks is an integral part of a defense-in-depth strategy.

Implementation Tips

Develop a policy that requires individuals to use separate accounts for OT and IT. If your WWS has a single Windows Domain that covers OT and IT systems, then evaluate splitting that Domain into two to stop users from sharing accounts across system types. Where users already have separate accounts for OT and IT, encourage them to not use a common password for these accounts.

The two most common operating systems are Microsoft Windows and Linux. Both systems allow a System Administrator the ability to manage accounts and account credentials for each end user. The resources below provide details on how to manage user accounts for each system.

Resources

Improving Industrial Control System Cybersecurity with Defense-in-Depth Strategies:

Page 25 provides OT network account management information. Note: CISA uses the term industrial control system (ICS) to refer to an OT network.

https://www.cisa.gov/uscert/sites/default/files/recommended_practices/NCCIC_ICS-CERT_Defense_in_Depth_2016_S508C.pdf

Managing User Accounts on Windows: Provides more information on how to manage user accounts on Windows. <https://learn.microsoft.com/en-us/windows-server-essentials/manage/manage-user-accounts-in-windows-server-essentials>

Additional Guidance

- ✓ Where feasible, never allow multiple users to share a single login or a single user to use the same login for both the OT and IT networks.

Managing User Accounts on Linux: Provides more information on how to manage user accounts on Linux. <https://www.makeuseof.com/user-management-linux-guide/>