

Research Assignment: Remote Desktop Services

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Introduction

Windows Server 2019 remote desktop services (RDS), enables users to log into a remote desktop and run applications and desktops on a central server. In terms of challenges in remote desktop services One significant issue is maintaining a uniform user experience when users connect to a variety of session hosts within an RDS farm. Course materials indicate that User Profile Disks (UPDs) address some of these issues through the ability to store user profiles in a virtual VHDX file that will follow the user across each remote session (course materials, 2026). Additionally, the use of UPDs improves consistency; simplifies administrative processes; and provides users with a more customized remote desktop experience.

How UPDs Improve User Experience in Remote Desktop Services

User profiles disks (UPDs) provide improved user experience by allowing users to retain their original desktop settings, preferences for applications and browsers, favorite web sites, and all of their files whether they are connecting to a new server or simply switching to a different server within an RDS environment. According to course materials, once a user connects to a remote desktop session, their user profile disk (upd) is connected to the session host server and their settings are automatically loaded into the environment (course materials, 2026). Once the user has logged out, any changes made during the session will be written back to the upd so that the next time they access the environment their profile will be preserved. Additionally, User Profile Disks provide increased flexibility for users in load balanced RDS environments where users can switch to a new server while retaining their personalization settings. Finally, the use of UPDs reduces the complexity of managing user profiles for administrators as all user profiles are

managed at the center of the organization instead of having to be maintained separately across various servers.

Important Management Considerations & Best Practice Recommendations for Security

While User Profile Disks provide many benefits, it is essential to consider other management and security best practices when implementing them. A primary consideration when utilizing UPDs is storage. Since UPDs are stored as VHDX files, organizations must have adequate storage space and sufficient performance to support numerous users. Poor performance of storage may result in longer login times and decreased overall user experience. A second key consideration is controlling who has access to a user's upd. As stated in the course materials, you must strictly configure permissions such that only authorized users and administrators have access to an individual's upd (course materials, 2026). If not properly configured, you may allow unauthorized users to access your organization's sensitive user data and potentially compromise your security posture.

Protecting Data

It is also very important to protect data stored in UPDs. Organizations must utilize encryption to protect data contained in UPDs and develop a backup plan that will ensure quick restoration if needed due to loss of service or breach. Continuous monitoring and audit of activities is also required to quickly identify potential breaches or malicious behavior. Finding a balance between avoiding needless restrictions that lower productivity or the overall user experience and safeguarding user data is equally crucial.

Conclusion

By offering a consistent and customized profile across several session hosts, User Profile Disks (UPDs) generally enhance the Windows Server 2019 remote desktop service user experience. They provide flexibility for scaled remote desktop services and simplify administration. However, to maintain secure and stable remote desktop services, organizations need to effectively manage storage; establish appropriate permissions for access; encrypt data; perform regular backups; monitor systems continuously and conduct audits.

References

Course materials. (2026). Remote desktop services and User Profile Disks. Cyse 608 course materials.

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