1. ICT System File Management

System software provides features to manage files and folders on an ICT system efficiently. Here are some key functionalities:

File Organization: Allows creating, naming, organizing, and searching for files and folders based on user needs.

Access Control: Defines user permissions and access levels for specific files and folders, ensuring data security.

File Permissions: Grants specific actions like read, write, or execute permissions on files and folders for authorized users.

Disk Management: Provides tools for formatting, partitioning, and defragmenting storage drives to optimize storage utilization and performance.

File Compression: Offers functionalities to compress files to save storage space and facilitate faster transmission.

2. ICT System Security Management

System software plays a vital role in protecting ICT systems from unauthorized access, data breaches, and malicious attacks. Key functionalities include:

User Authentication: Implements mechanisms like passwords, multi-factor authentication, and biometrics to verify user identities before granting access to the system.

Account Management: Allows creating, managing, and disabling user accounts, ensuring only authorized individuals can access the system.

Encryption: Provides functionalities to encrypt data at rest and in transit, safeguarding sensitive information even if intercepted.

Firewalls: Acts as a barrier between internal networks and external connections, filtering incoming and outgoing traffic based on security policies.

Antivirus and Anti-malware Protection: Scans for and removes malicious software that can harm the system or steal data.

Logging and Auditing: Tracks system activity, user logins, and access attempts, allowing administrators to monitor system security and identify potential threats.

3. ICT System Backup

System software can facilitate creating backups of critical data and system configurations to ensure quick recovery in case of data loss or system failures. Here are some key functionalities:

Backup Scheduling: Allows setting automatic schedules for creating regular backups of data and system files.

Backup Types: Provides options for full backups (copying all data) or incremental backups (copying only modified data since the last backup).

Backup Destinations: Offers functionalities to back up data to various locations like local storage devices, external hard drives, or cloud storage services.

Data Compression: Compresses backup files to minimize storage space requirements on backup destinations.

Backup Verification: Allows verifying the integrity of backups to ensure they can be restored successfully if needed.

4. ICT System Restore

System software should offer functionalities to restore data and system configurations from backups in case of system failures, data loss, or other incidents. Here are some key functionalities:

Restore Options: Provides options for restoring entire systems, individual files, or specific system configurations.

Granular Restore: Allows restoring specific versions of files or configurations, enabling recovery to a previous point in time.

Disaster Recovery: Supports functionalities for comprehensive system recovery in case of major disasters or system failures.

Boot Recovery Tools: Offers functionalities to repair or rebuild corrupted system files, allowing the system to boot up again.

Choosing the Right System Software

The specific functionalities offered by system software will vary depending on the operating system, vendor, and software version.

When choosing system software, consider factors like the size and complexity of your ICT system, your specific security needs, and the desired level of automation for file management and backup/restore operations.