Configuration Management with Ansible for Dunder Mifflin Network

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This project implements **Ansible** for centralized configuration management across the Dunder Mifflin network to streamline administrative tasks, ensure consistency, and reduce maintenance overhead. Machine E is configured as the control node, enabling the sysadmin to manage the DMZ servers efficiently.

Key Features

1. **Password-less SSH Setup**:
    - Configured password-less login for the sysadmin from Machine E to all other machines (A, B, C, D, F) to allow seamless Ansible operations with elevated privileges using sudo.
2. **Ansible Installation and Configuration**:
    - Installed **Ansible** on Machine E using the dnf package manager from the Rocky Linux repository.
    - Configured an Ansible inventory group named saclass, containing the IP addresses of Machines A, B, C, D, and F.
3. **Automated User Management**:
    - Developed a script named mkdmuserplay that:
        - Reads user, group, and password information from /etc/passwd, /etc/shadow, and /etc/group.
        - Generates an Ansible playbook (dmusers.yaml) to synchronize user accounts, groups, and settings (UID, GID, shell, password hash, etc.) across all machines.
    - Ensured the playbook is generic, allowing additional sysadmins to use it without modification.
4. **Umask Configuration**:
    - Renamed the umask configuration file to /etc/profile.d/umask.sh on all machines.
    - Created a playbook (umask.yaml) to deploy and enforce consistent umask settings across the network with the correct ownership (root:root) and permissions (644).
5. **Web Server Management** :
    - Developed a playbook (webcheck.yaml) to:
        - Ensure the web servers on Machines C and D are updated to the latest version.
        - Verify that the web servers are running and configured to start automatically on boot.

This project showcases the power of Ansible in simplifying configuration management, enhancing consistency, and ensuring operational efficiency across a distributed network.