Standard Operating Procedure (SOP)

# Deployment of [Agent Name] on Windows Servers via Ansible

## 1. Purpose

To provide a standardized procedure for deploying the [Agent Name] on Windows Servers using Ansible Automation Platform, ensuring consistency, reliability, and traceability across environments.

## 2. Scope

This procedure applies to all Windows servers managed by [Organization/Team Name] where the [Agent Name] must be deployed using the Ansible Automation Platform.

## 3. Prerequisites

- Ansible Automation Platform is installed and accessible.  
- Windows servers are reachable and configured for WinRM access.  
- The required agent installer is downloaded from the Nexsus repository.  
- Administrative credentials or service account access to target Windows servers.  
- Required inventory files and Ansible variables are defined.

## 4. Roles and Responsibilities

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| --- | --- |
| Role | Responsibility |
| System Engineer | Prepare and execute the deployment |
| QA/Operations | Validate post-deployment success |
| Ansible Administrator | Maintain playbooks, roles, and credentials |

## 5. Definitions and References

- Nexsus Repository: Internal artifact repository hosting agent binaries.  
- Ansible Inventory: List of target Windows servers grouped for deployment.  
- Distribution Point: Server or shared path where the agent binary is placed before deployment.

## 6. Tools and Resources Required

- Ansible Tower / AAP (Automation Controller)  
- Access to Nexsus repository  
- Valid Ansible playbook and roles  
- Access to distribution point folder (e.g., \\distserver\packages\agent)

## 7. Procedure

### 7.1. Prepare the Deployment Package

1. Download the latest version of the [Agent Name] from the Nexsus repository.  
2. Place the installer in the designated distribution folder:  
 \\<DistributionServer>\packages\<AgentName>\<Version>\

### 7.2. Validate Server Access

1. Confirm WinRM connectivity to all target Windows servers using Ansible ping module:  
 ansible windows\_group -m win\_ping

### 7.3. Run the Deployment Playbook

1. Launch the deployment from the Ansible Automation Platform.  
2. Use the correct job template and inventory.  
3. Monitor output logs for success/failure.  
  
 Sample command for CLI:  
 ansible-playbook deploy\_agent.yml -i inventory/windows.ini

### 7.4. Post-Deployment Validation

1. Ensure the agent service is installed and running:  
 - name: Ensure agent is running  
 win\_service:  
 name: "<AgentServiceName>"  
 state: started  
2. Verify successful registration (if applicable) or connectivity to central system.

## 8. Rollback Procedure

If deployment fails:  
1. Review logs in Ansible and correct issues.  
2. If rollback is required, uninstall the agent using:  
 - name: Uninstall agent  
 win\_package:  
 path: "C:\Program Files\<AgentName>\uninstall.exe"  
 arguments: "/quiet"  
 state: absent

## 9. Troubleshooting

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| --- | --- |
| Issue | Solution |
| WinRM unreachable | Check firewall, WinRM service, or authentication issues |
| Agent fails to install | Validate package integrity and permissions |
| Agent service not starting | Check system requirements and dependencies |

## 10. Audit and Logging

- All job runs are logged in the Ansible Automation Platform dashboard.  
- Store execution logs in central logging system if configured.  
- Maintain a deployment log entry in the change management system.

## 11. Document History

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| --- | --- | --- | --- |
| Version | Date | Author | Description |
|  |  |  |  |
| 1.0 | YYYY-MM-DD | Your Name | Initial SOP creation |