Password Safe 21.3
Getting Started Guide

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Password Safe Getting Started Guide

This document is designed to help you with understanding the flow of a typical Password Safe implementation and to get you started with using Password Safe by walking you through common use case examples.

Password Safe is your privileged access management solution to ensure your resources are protected from insider threats. It combines privileged password and session management to discover, manage, and audit all privileged credential activity.

Password Safe creates and secures privileged accounts through automated password management, encryption, secure storage of credentials, and a sealed operating system.

More specifically, you can use Password Safe to accomplish the following:

1. Scan, identify, and profile all assets for automated Password Safe management, ensuring no credentials are left unmanaged.
2. Control privileged user accounts, applications, SSH keys, cloud admin accounts, RPA accounts, and more.
3. Use adaptive access control for automated evaluation of just-in-time context for authorization access requests.
4. Monitor and record live sessions in real time and pause or terminate suspicious sessions.
5. Enable a searchable audit trail for compliance and forensics, and achieve complete control and accountability over privileged accounts.
6. Restrict access to critical systems, including assets and applications, keeping them safe from potential inside threat risks.

Workflow to Add Systems and Accounts to Password Safe Management

There are three ways to add systems and accounts to Password Safe:

- Add the asset manually.
- Run a Discovery Scan and then import the assets using an address group or directory query.
- Use API scripts.

The following is a high-level overview of the steps required to add systems and accounts to be managed in Password Safe.

1. **Add the functional account:** A functional account is one that can access the system with the privileges required to manage and change passwords for shared accounts on the system.
2. **Add the managed system:** A managed system is a computer or device where one or more account passwords are to be maintained by Password Safe. Managed systems can be Windows machines, Unix/Linux machines, network devices, databases, firewalls, routers, iLO machines, and LDAP or Active Directory domains.
3. **Add the managed account:** A managed account is an account on the managed system whose password is being stored and maintained through Password Safe. Typically, managed accounts are privileged accounts that can perform administrative tasks on the managed system.
4. **Configure managed system settings:** After a system is added to Password Safe, configure settings that apply to the managed system.
5. **Set up role based access:** Create user groups that permit users to:

   - Log in to the Password Safe web portal.
   - Assign Password Safe roles, such as **Requester** or **Approver**.
   - Create access policies to permit accounts to access the systems, applications, and sessions, and to request password releases.

Use Case Preparation

The use cases provided in this document use Smart Groups to accomplish the following:

- Discover assets and accounts using a Discovery Scan.
- Add assets and accounts into Password Safe management.
- Assign permissions and roles to user groups.

Required Service Accounts

Password Safe uses the following three types of service accounts that you must create in BeyondInsight prior to implementing the use cases in this guide:

Credentials for Discovery Scans: Detailed and advanced Discovery Scans require a credential that has privileges to discover the details for services, tasks, systems, devices, users, and databases from Active Directory or LDAP. To implement the use cases in this guide, you must create a credential that has sufficient privileges to retrieve this information from your directory. You can create credentials from the BeyondInsight Console, by navigating to **Configuration > Discovery and Vulnerability Management > Credentials**.

Functional Accounts: Smart Groups for adding assets into Password Safe management require a functional account that can access the assets with the privileges required to manage and change passwords on the accounts associated with those assets. To implement the use cases in this guide, you must create a functional account for each of the following:

- Windows servers
- Linux servers
- Network devices

Directory Credentials: Smart Groups for discovering Windows servers and directory accounts use a directory query for the Discovery Scan to pull details from Active Directory or LDAP and populate the Smart Group. A directory query requires a directory credential that has privileges to access the directory and request this information. To implement the use cases in this guide, you must create a directory credential for each of the following:

- Windows servers
- Windows directory accounts
- Linux directory accounts

Preparation for Smart Groups

A Smart Group provides a way of grouping systems and accounts using filter conditions and actions called *Smart Rules*.

The following items must be configured in BeyondInsight prior to creating the smart groups for each use case:

- **Directory Query**: Smart Groups for discovering Windows servers and directory accounts use a directory query for the Discovery Scan to pull details from Active Directory or LDAP and populate the Smart Group. You must create a directory query for each of the following:
    - Windows servers
    - Windows directory accounts
    - Linux directory accounts
- **Address Group**: Smart Groups for discovering Linux servers and network devices use address groups for the Discovery Scan to discover and pull details for these assets from Active Directory or LDAP and populate the Smart Group.You need to create an address group for each of the following:

- ○ Linux servers
- ○ Network devices

- **Access Policy**: An access policy to allow approved RDP and SSH sessions must be configured so it can be assigned to user groups when assigning roles and permissions for each of the use cases.

ℹ️ *For more information on creating credentials, Smart Rules, functional accounts, address groups, access policies, directory credentials, and directory queries, please see the following:*
  - *"Add Credentials for Use in Scans, Use Smart Rules to Organize Assets, Create and Edit Directory Credentials, Create a Directory Query" in the BeyondInsight User Guide at https://www.beyondtrust.com/docs/beyondinsight-password-safe/bi/user/index.htm*
  - *"Work with Smart Rules, Create a Functional Account, Create an Address Group, Configure Access Policies" in the Password Safe Admin Guide at https://www.beyondtrust.com/docs/beyondinsight-password-safe/ps/admin/index.htm*

Use Case 1: Add Local Admin Accounts for Windows Servers

This use case walks through configuring the Smart Groups and user group roles and permissions required to enable automatic password rotation for local admin accounts on Windows servers with auto-approval for RDP sessions enabled.

The shared local administrative account that exists on all Windows servers needs to be controlled, audited, and rotated on a regular schedule. For this use case, you will bring in all Windows domain joined servers and manage the local built-in administrator account. You will also grant permissions to a specific set of users who need access to all Windows servers. As you do not know if there are additional local administrator accounts, you will configure a Smart Group to find them. You will also configure a Smart Group to ensure new servers are added dynamically as they are joined to the domain on a recurring basis.

To accomplish all of the above, you must create the following Smart Groups in the BeyondInsight Console:
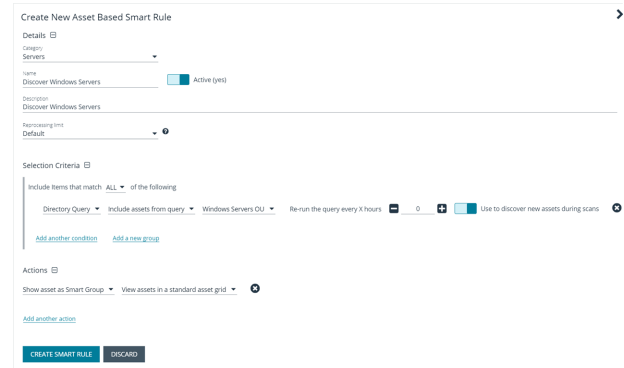
- An asset Smart Group for discovering the Windows servers
- An asset Smart Group for adding the Windows servers to Password Safe management
- A managed system Smart Group for granting system access to user groups
- A managed account Smart Group to add the local admin accounts to Password Safe management

You must also associate the managed account Smart Group to user groups, and then assign roles and permissions to the associated managed account Smart Group.

Create Asset Based Smart Group to Discover Windows Servers

1. From the left menu in the BeyondInsight Console, click **Smart Rules**.
2. Click **Create Smart Rule**.
3. Select the **Category** and enter a meaningful **Name** and **Description** for the Smart Rule.

4. Set **Selection Criteria** as:

   - **Directory Query**, **Include assets from query**, **<query name>**, **Use to discover new assets during scans (enabled)**
   - Enter the interval in hours to rerun the query to ensure new servers that have joined the domain are automatically captured

5. Set **Actions** as:

   - **Show asset as Smart Group**, **View assets in a standard asset grid**
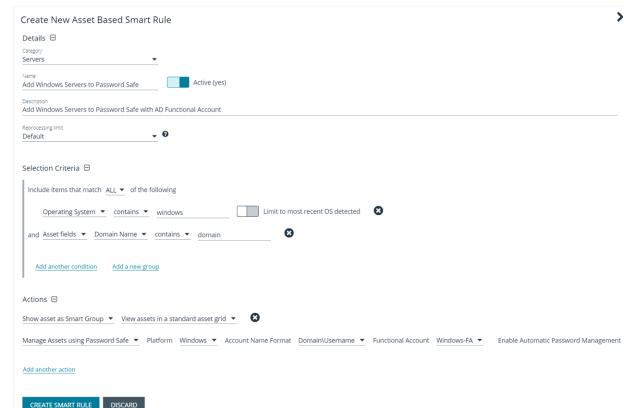
6. Click **Create Smart Rule**.

You can now run a Discovery Scan against this Smart Group. In order to pull details, including local accounts, from each asset into BeyondInsight, execute a scan with appropriate credentials.

You can initiate a scan from the **More Options** (ellipsis) menu for the Smart Group on the **Smart Rules** page in BeyondInsight. You can also schedule a recurring scan to pull in new assets and confirm the local accounts and services have not changed on the existing assets. This is key to a dynamic onboarding process.

> ℹ️ *For more information on configuring a Discovery Scan, please see Run Discovery Scans in the BeyondInsight User Guide at https://www.beyondtrust.com/docs/beyondinsight-password-safe/bi/user/discovery.htm.*

Create Asset Based Smart Group to Add Windows Servers to Password Safe Management

1. From the left menu in the BeyondInsight Console, click **Smart Rules**.

2. Click **Create Smart Rule**.

3. Select the **Category** and enter a meaningful **Name** and **Description** for the Smart Rule.

4. Set **Selection Criteria** as:

   - **Operating System**, **contains**, **windows**
   - **Asset fields**, **Domain Name**, **contains**, **domain**

> 📌 *Note: The **Operating System** criteria is used to query servers that have the same functional account. The action associates the functional account with the system.*

4. Set **Actions** as:

   - **Show asset as Smart Group**, **View assets in a standard asset grid**
   - **Manage Assets using Password Safe**, **Platform: Windows**, **Account Name Format: Domain\Username**, **Functional Account: <functional account name>**
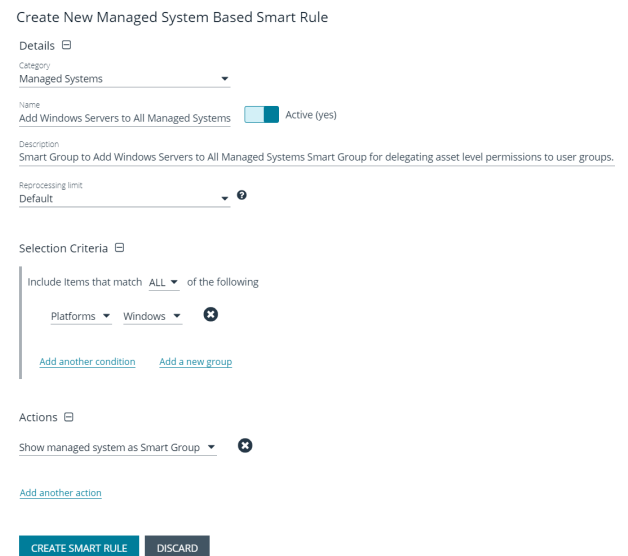
5. Click **Create Smart Rule**.

> 📌 **Note:** *To ensure new servers are automatically added to Password Safe management, this Smart Group must be repeatedly processed, especially after the last scan completes.*

Create Managed System Smart Group for Granting System Access to User Groups

Creating this managed system Smart Group is not always required but it helps you to group systems that have specific managed accounts associated with them and to assign asset level permissions to user groups. As the assets are added to Password Safe management, they automatically populate within the **All Managed Systems** Smart Group.

This smart group specifically looks for all Windows servers that are managed by Password Safe.

1. From the left menu in the BeyondInsight Console, click **Smart Rules**.
2. Select **Managed System** from the **Smart Rule Type filter** list.
3. Click **Create Smart Rule**.
4. Select **Managed Systems** from the **Category** list.
5. Enter a meaningful **Name** and **Description** for the Smart Rule.
6. Set **Selection Criteria** as:
    - **Platforms**, **Windows**
7. Set **Actions** as:
    - **Show managed system as Smart Group**
8. Click **Create Smart Rule**.

Create New Managed System Based Smart Rule

Details ⊟
Category
Managed Systems ▾
Name
Add Windows Servers to All Managed Systems   ⬤ Active (yes)
Description
Smart Group to Add Windows Servers to All Managed Systems Smart Group for delegating asset level permissions to user groups.
Reprocessing limit
Default ▾ ❓

Selection Criteria ⊟

Include Items that match   ALL ▾   of the following

    Platforms ▾   Windows ▾   ❌

    Add another condition   Add a new group

Actions ⊟

Show managed system as Smart Group ▾   ❌

Add another action

[CREATE SMART RULE] [DISCARD]

Create Managed Account Smart Group to Add Accounts to Password Safe Management

The initial creation of this Smart Group only has the one account name of the built-in Administrator account. After researching and reviewing reports, additional privileged account names may be added to this Smart Group.
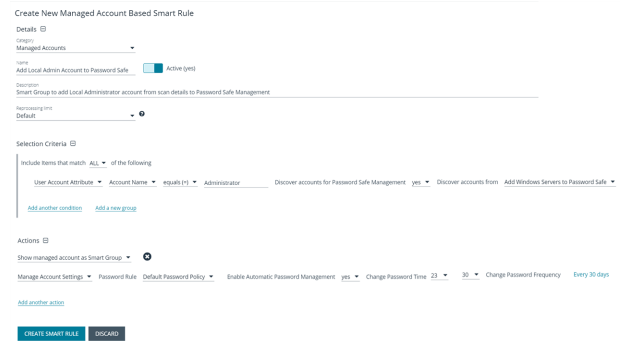
1. From the left menu in the BeyondInsight Console, click **Smart Rules**.
2. Select **Managed Account** from the **Smart Rule Type filter** list.
3. Click **Create Smart Rule**.

4. Select **Managed Accounts** from the **Category** list.

5. Enter a meaningful **Name** and **Description** for the Smart Rule.

6. Set **Selection Criteria** as:

   - **User Account Attribute**, **Account Name**, **equals**, **<Administrator>**, **Discover Accounts for Password Safe Management: yes**, **Discover accounts from: <Smart Group for adding Windows servers>**

7. Set **Actions** as:

   - **Show managed account as Smart Group**
   - **Manage Account Settings**, **Password Rule: <password policy>**, **Enable Automatic Password Management: yes**, **Change Password Time: <desired time>**, **Change Password Frequency: <desired frequency>**

> 📌 ***Note:*** *The **Manage Account Settings** action onboards the specific account, if found in the system's scan results. This action also dictates whether the account is rotated immediately or not.*

8. Click **Create Smart Rule**.

Assign User Group Permissions and Roles for Account Access

Associate a user group to the Smart Group that you created for adding accounts to Password Safe management, and then assign permissions, roles, and an access policy to the Smart Group. In this use case, the Password Safe users are **Requestors** with an access policy to allow auto-approved RDP sessions.

1. From the left navigation in the BeyondInsight Console, click **Configuration**.

2. Under **Role Based Access**, click **User Management**.

3. Locate the user group in the grid, and then click the **More Options** (ellipsis) button for that group.

4. Select **View Group Details**.

5. From the **Group Details** pane, select **Smart Groups**.

6. In the **Smart Groups Permissions** grid, select the Smart Group you created for adding Windows servers to Password Safe, and then click **Assign Permissions** above the grid.

7. Select **Assign Permissions Read Only**.

8. Click the **More Options** (ellipsis) button for the Smart Group, and then select **Edit Password Safe Roles**.

9. Select the **Requestor** role, and then select the **Access Policy**.
10. Click **Save Roles**.

Add Local Admin Account To
Password Safe Password Safe
Roles

A role is the connection between a Password Safe
user account and a managed system. A role
defines what the user or group can do with
respect to that managed system.

☑ Requestor

Access Policy for Requestor
24x7 - No Approval

☐ Approver

☐ Credentials Manager

☐ Recorded session reviewer

☐ Active session reviewer

SAVE ROLES   DISCARD CHANGES

Use Case 2: Add Local Root Accounts for Linux Servers

This use case walks through configuring automatic password rotation for local admin accounts on Linux servers with auto-approval for SSH sessions enabled.

Root level accounts on all Linux servers should be controlled, audited, and rotated on a regular schedule. For this use case, you will bring in all Linux and Unix servers and manage the local root account. You will also grant permissions to a specific set of users who need access to all Linux servers.

To accomplish all of the above, you must create the following smart groups in the BeyondInsight Console:
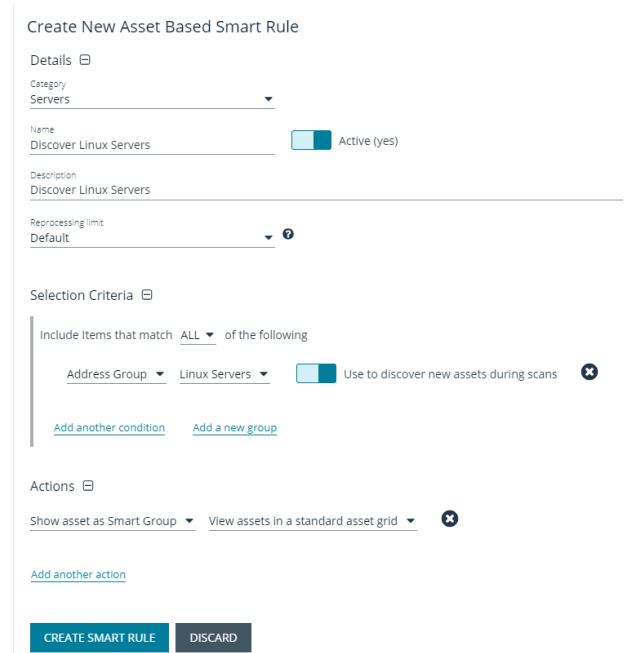
- An asset Smart Group for discovering the Linux servers
- An asset Smart Group for adding the Linux servers to Password Safe management
- A managed system Smart Group for granting system access to user groups
- A managed account Smart Group to add the local admin accounts to Password Safe management

You must also associate the managed account Smart Group to user groups, and then assign roles and permissions to the associated managed account Smart Group.

Create Asset Based Smart Group to Discover Linux Servers

1. From the left menu in the BeyondInsight Console, click **Smart Rules**.

2. Click **Create Smart Rule**.

3. Select the **Category** and enter a meaningful **Name** and **Description** for the Smart Rule.

4. Set **Selection Criteria** as:

   - **Address Group**, **<address group name>**, **Use to discover new assets during scans (enabled)**

   - Enter the interval in hours to rerun the query to ensure new servers that have joined the domain are automatically captured

5. Set **Actions** as:

   - **Show asset as Smart Group**, **View assets in a standard asset grid**

6. Click **Create Smart Rule**.

You can now run a Discovery Scan against this Smart Group. In order to pull details, including local accounts, from each asset into BeyondInsight, execute a scan with appropriate credentials.

You can initiate a scan from the **More Options** (ellipsis) menu for the Smart Group on the **Smart Rules** page in BeyondInsight. You can also schedule a recurring scan to pull in new assets and confirm the local accounts and services have not changed on the existing assets. This is key to a dynamic onboarding process.

> 📌 *Note: Since an address group is a static list of hosts, this Smart Group doesn't need to reprocess often -- only when known changes to the address group have been made.*

> ℹ️ *For more information on configuring a Discovery Scan, please see Run Discovery Scans in the BeyondInsight User Guide at https://www.beyondtrust.com/docs/beyondinsight-password-safe/bi/user/discovery.htm.*

Create Asset Based Smart Group to Add Linux Servers to Password Safe Management

1. From the left menu in the BeyondInsight Console, click **Smart Rules**.

2. Click **Create Smart Rule**.

3. Select the **Category** and enter a meaningful **Name** and **Description** for the Smart Rule.

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4. Set **Selection Criteria** as:

- **Operating System**, **contains**, **linux**

> 📌 **Note:** The **Operating System** criteria is used to query servers that have the same functional account. The action associates the functional account with the system.
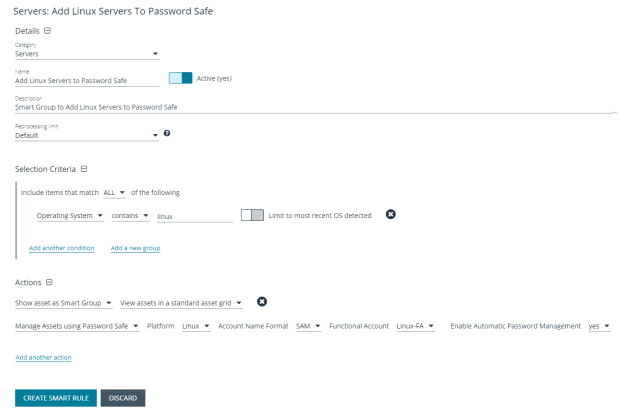
4. Set **Actions** as:

- **Show asset as Smart Group**, **View assets in a standard asset grid**
- **Manage Assets using Password Safe**, **Platform: Linux**, **Account Name Format: SAM**, **Functional Account: <functional account name>**

5. Click **Create Smart Rule**.

> 📌 **Note:** To ensure new servers are automatically added to Password Safe management, this Smart Group must be repeatedly processed, especially after the last scan completes.

Create Managed System Smart Group for Granting System Access to User Groups

Creating this managed system Smart Group is not always required but it helps you to group systems that have specific managed accounts associated with them and to assign asset level permissions to user groups. As the assets are added to Password Safe management, they automatically populate within the **All Managed Systems** Smart Group.

This smart group specifically looks for all Linux servers that are managed by Password Safe.

1. From the left menu in the BeyondInsight Console, click **Smart Rules**.
2. Select **Managed System** from the **Smart Rule Type filter** list.
3. Click **Create Smart Rule**.

4. Select **Managed Systems** from the **Category** list.

5. Enter a meaningful **Name** and **Description** for the Smart Rule.

6. Set **Selection Criteria** as:

    • **Platforms**, **Linux**

7. Set **Actions** as:

    • **Show managed system as Smart Group**

8. Click **Create Smart Rule**.

Create Managed Account Smart Group to Add Accounts to Password Safe Management

The initial creation of this Smart Group only has the one account name of the root account. After researching and reviewing reports, additional privileged account names may be added to this Smart Group.

1. From the left menu in the BeyondInsight Console, click **Smart Rules**.

2. Select **Managed Account** from the **Smart Rule Type filter** list.

3. Click **Create Smart Rule**.

4. Select **Managed Accounts** from the **Category** list.

5. Enter a meaningful **Name** and **Description** for the Smart Rule.

6. Set **Selection Criteria** as:

    • **User Account Attribute**, **Account Name**, **equals**, **root**, **Discover Accounts for Password Safe Management: yes**, **Discover accounts from: <Smart Group for adding Linux servers>**

7. Set **Actions**as:

    • **Show managed account as Smart Group**

    • **Manage Account Settings**, **Password Rule: <password policy>**, **Enable Automatic Password Management: yes**, **Change Password Time: <desired time>**, **Change Password Frequency: <desired frequency>**
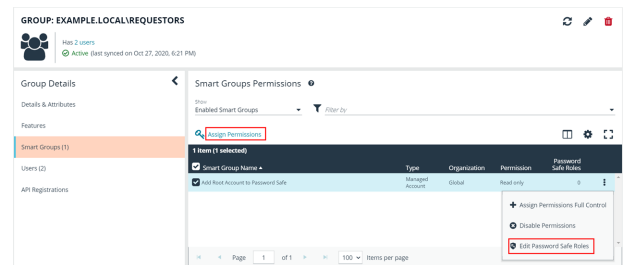
> 📌 *Note: The **Manage Account Settings** action onboards the specific account, if found in the system's scan results. This action also dictates whether the account is rotated immediately or not.*

8. Click **Create Smart Rule**.

Assign User Group Permissions and Roles for Account Access

Associate a user group to the Smart Group that you created for adding accounts to Password Safe management, and then assign permissions, roles, and an access policy to the Smart Group. In this use case, the Password Safe users are **Requestors** with an access policy to allow auto-approved SSH sessions.

1. From the left navigation in the BeyondInsight console, click **Configuration**.
2. Under **Role Based Access**, click **User Management**.
3. Locate the user group in the grid, and then click the **More Options** (ellipsis) button for that group.
4. Select **View Group Details**.
5. From the **Group Details** pane, select **Smart Groups**.
6. In the **Smart Groups Permissions** grid, select the Smart Group you created for adding Linux servers to Password Safe, and then click **Assign Permissions** above the grid.
7. Select **Assign Permissions Read Only**.
8. Click the **More Options** (ellipsis) button for the Smart Group, and then select **Edit Password Safe Roles**.
9. Select the **Requestor** role, and then select the **Access Policy**.
10. Click **Save Roles**.

Use Case 3: Add Local Admin Accounts for Network Devices

This use case walks through configuring automatic password rotation for local admin accounts on network devices with auto-approval for SSH sessions enabled.

Admin level accounts exist on all network devices that need to be controlled, audited, and rotated on a regular schedule. For this use case, you will import all Cisco switches (or network devices from other vendors that allow administration via SSH) and manage the local admin account. You will also grant permissions to a specific set of users who need access to all network devices.

To accomplish all of the above, you must create the following Smart Groups in the BeyondInsight console:

- An asset Smart Group for discovering the devices
- An asset Smart Group for adding the devices to Password Safe management
- A managed system Smart Group for granting system access to user groups
- A managed account Smart Group to add the local admin accounts to Password Safe management

You must also associate the managed account Smart Group with user groups, and then assign roles and permissions to the associated managed account Smart Group.

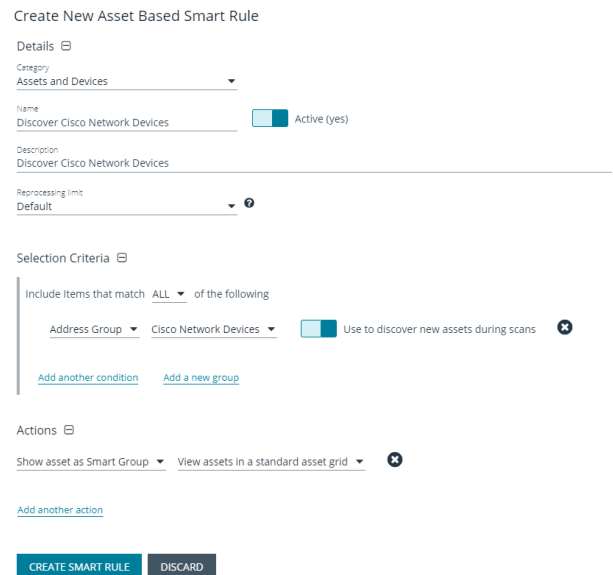## Create Asset Based Smart Group to Discover Network Devices

1. From the left menu in the BeyondInsight Console, click **Smart Rules**.
2. Click **Create Smart Rule**.
3. Select the **Category** and enter a meaningful **Name** and **Description** for the Smart Rule.
4. Set **Selection Criteria** as:
   - **Address Group**, **<address group name>**, **Use to discover new assets during scans (enabled)**
   - Enter the interval in hours to rerun the query to ensure new servers that have joined the domain are automatically captured
5. Set **Actions** as:
   - **Show asset as Smart Group**, **View assets in a standard asset grid**
6. Click **Create Smart Rule**.

You can now run a Discovery Scan against this Smart Group. In order to pull details, including local accounts, from each asset into BeyondInsight, execute a scan with appropriate credentials.

You can initiate a scan from the **More Options** (ellipsis) menu for the Smart Group on the **Smart Rules** page in BeyondInsight. You can also schedule a recurring scan to pull in new assets and confirm the local accounts and services have not changed on the existing assets. This is key to a dynamic onboarding process.

Note: Since an address group is a static list of hosts, this Smart Group doesn't need to reprocess often -- only when known changes to the address group have been made.

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> ℹ️ *For more information on configuring a Discovery Scan, please see Run Discovery Scans in the* [BeyondInsight User Guide](https://www.beyondtrust.com/docs/beyondinsight-password-safe/bi/user/discovery.htm) *at* https://www.beyondtrust.com/docs/beyondinsight-password-safe/bi/user/discovery.htm.

Create Asset Based Smart Group to Add Network Devices to Password Safe Management

1. From the left menu in the BeyondInsight Console, click **Smart Rules**.
2. Click **Create Smart Rule**.
3. Select the **Category** and enter a meaningful **Name** and **Description** for the Smart Rule.
4. Set **Selection Criteria** as:

   - **Operating System**, **contains**, **cisco**

   > 📌 *Note: The **Operating System** criteria is used to query servers that have the same functional account. The action associates the functional account with the system.*

4. Set **Actions** as:

   - **Show asset as Smart Group**, **View assets in a standard asset grid**
   - **Manage Assets using Password Safe**, **Platform: Cisco**, **Account Name Format: SAM**, **Functional Account: <functional account name>**

5. Click **Create Smart Rule**.

> 📌 *Note: To ensure new servers are automatically added to Password Safe management, this Smart Group must be repeatedly processed, especially after the last scan completes.*
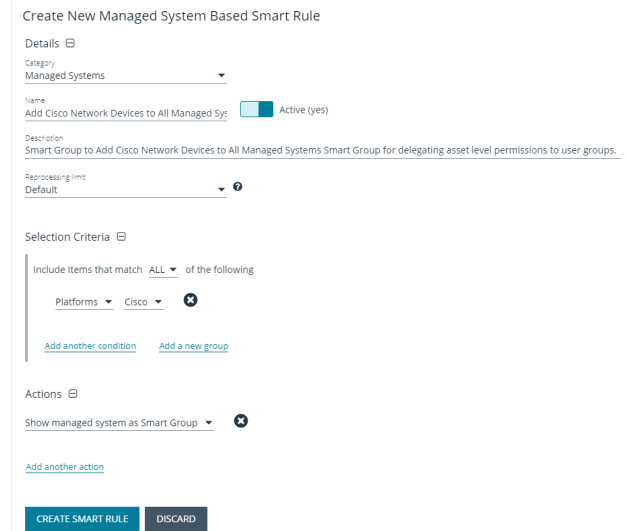
Create Managed System Smart Group for Granting System Access to User Groups

Creating this managed system Smart Group is not always required but it helps you to group systems that have specific managed accounts associated with them and to assign asset level permissions to user groups. As the assets are added to Password Safe management, they automatically populate within the **All Managed Systems** Smart Group.

This Smart Group specifically looks for all network devices that are managed by Password Safe.

1. From the left menu in the BeyondInsight Console, click **Smart Rules**.
2. Select **Managed System** from the **Smart Rule Type filter** list.
3. Click **Create Smart Rule**.

4. Select **Managed Systems** from the **Category** list.

5. Enter a meaningful **Name** and **Description** for the Smart Rule.

6. Set **Selection Criteria** as:

    - **Platforms**, **Cisco**

7. Set **Actions** as:

    - **Show managed system as Smart Group**
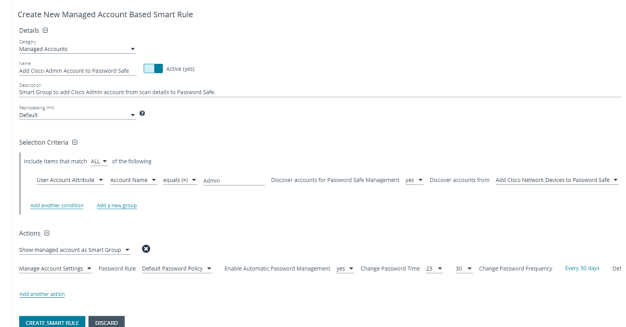
8. Click **Create Smart Rule**.

Create Managed Account Smart Group to Add Accounts to Password Safe Management

The initial creation of this Smart Group only has the one account name of the local admin account. After researching and reviewing reports, additional privileged account names may be added to this Smart Group.

1. From the left menu in the BeyondInsight Console, click **Smart Rules**.

2. Select **Managed Account** from the **Smart Rule Type filter** list.

3. Click **Create Smart Rule**.

4. Select **Managed Accounts** from the **Category** list.

5. Enter a meaningful **Name** and **Description** for the Smart Rule.

6. Set **Selection Criteria** as:

    - **User Account Attribute**, **Account Name**, **equals**, **<Admin>**, **Discover Accounts for Password Safe Management: yes**, **Discover accounts from: <Smart Group for adding network devices>**

7. Set **Actions**as:

    - **Show managed account as Smart Group**

    - **Manage Account Settings**, **Password Rule: <password policy>**, **Enable Automatic Password Management: yes**, **Change Password Time: <desired time>**, **Change Password Frequency: <desired frequency>**
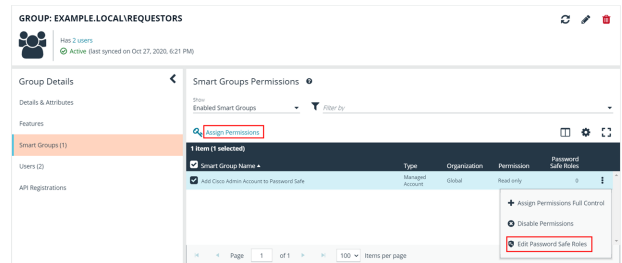
> 📌 *Note: The **Manage Account Settings** action onboards the specific account, if found in the system's scan results. This action also dictates whether the account is rotated immediately or not.*

8. Click **Create Smart Rule**.

Assign User Group Permissions and Roles for Account Access

Associate a user group with the Smart Group that you created for adding accounts to Password Safe management, and then assign permissions, roles, and an access policy to the Smart Group. In this use case, the Password Safe users are **Requestors** with an access policy to allow auto-approved RDP sessions.

1. From the left navigation in the BeyondInsight console, click **Configuration**.
2. Under **Role Based Access**, click **User Management**.
3. Locate the user group in the grid, and then click the **More Options** (ellipsis) button for that group.
4. Select **View Group Details**.
5. From the **Group Details** pane, select **Smart Groups**.
6. In the **Smart Groups Permissions** grid, select the Smart Group you created for adding Windows servers to Password Safe, and then click **Assign Permissions** above the grid.
7. Select **Assign Permissions Read Only**.
8. Click the **More Options** (ellipsis) button for the Smart Group, and then select **Edit Password Safe Roles**.

9. Select the **Requestor** role, and then select the **Access Policy**.
10. Click **Save Roles**.

Use Case 4: Add Directory Admin Accounts for Windows Servers

This use case walks through configuring automatic password rotation for directory admin accounts on Windows servers with auto-approval for RDP sessions enabled.

Directory accounts that have elevated (privileged) access exist within Active Directory. These accounts have permissions to all domain joined Windows servers and should be controlled, audited, and rotated on a regular schedule. For this use case, Password Safe is already managing all Windows domain joined servers by implementing *Use Case 1* and a specific set of users are allowed to use these shared accounts.

Since you have already configured asset Smart Groups for discovering assets, asset Smart Groups for adding systems to Password Safe management, and managed systems Smart Groups for granting system access from previous use cases, you do not need to create any additional Smart Groups for these purposes.

If you need to add additional servers to Password Safe, you can create new Smart Groups using different address groups or directory queries as applicable, and run new scans as applicable, following the steps outlined in previous use cases.

Additionally, if you require only a subset of systems to be allowed to use these directory accounts, you can create a new managed system Smart Group using more specific selection criteria to provide access to a smaller selection of systems.

For this use case, you will create a managed account Smart Group to add the directory accounts to Password Safe and to link the directory accounts to managed systems.

You must also associate the managed account Smart Group with user groups, and then assign roles and permissions to the associated managed account Smart Group.
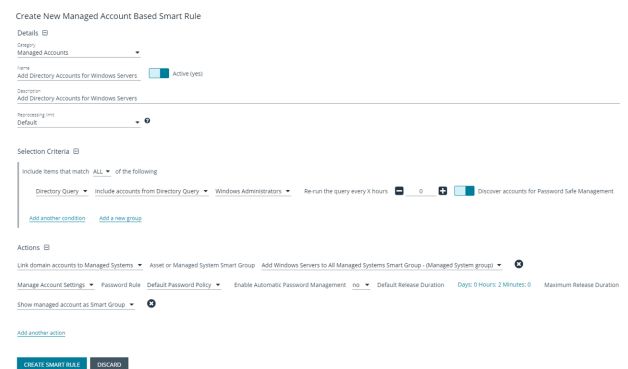
> ℹ️ For more information, please see *"Use Case 1: Add Local Admin Accounts for Windows Servers" on page 6*.

Create Managed Account Smart Group to Add Directory Accounts to Password Safe and Configure Account Linking

1. From the left menu in the BeyondInsight Console, click **Smart Rules**.
2. Select **Managed Account** from the **Smart Rule Type filter** list.
3. Click **Create Smart Rule**.
4. Select **Managed Accounts** from the **Category** list.
5. Enter a meaningful **Name** and **Description** for the Smart Rule.
6. Set **Selection Criteria** as:

   - **Directory Query**, **Include Accounts from Directory Query**, **<query name>**, **Discover Accounts for Password Safe Management: enabled**

> 💡 **Tip:** If Password Safe already manages the privileged accounts, you can use criteria of **Managed Account Fields > Account Name** in the Smart Rule instead of using a directory query. For an example of this option, please see *"Use Case 6: Add Directory Admin Accounts for Network Devices" on page 23*.

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7. Set **Actions**

    - **Link domain accounts to Managed Systems**, **Asset or Managed System Smart Group: <Smart Group that contains Windows servers that the accounts will be associated to for session management>**
    - **Manage Account Settings**, **Password Rule: <password policy>**, **Enable Automatic Password Management: no**
    - **Show managed account as Smart Group**

> **Note:** The **Manage Account Settings** action onboards the specific account, if found in the system's scan results. This action also dictates whether the account is rotated immediately or not.

> **Tip:** These actions can be separated into multiple managed account Smart Groups with criteria of child Smart Rules or other specific criteria for the linking rule action, if desired.

8. Click **Create Smart Rule**.

Assign User Group Permissions and Roles for Account Access

Associate a user group to the Smart Group that you created for adding accounts to Password Safe management, and then assign permissions, roles, and an access policy to the Smart Group. In this use case, the Password Safe users are **Requestors** with an access policy to allow auto-approved RDP sessions.

1. From the left navigation in the BeyondInsight Console, click **Configuration**.
2. Under **Role Based Access**, click **User Management**.
3. Locate the user group in the grid, and then click the **More Options** (ellipsis) button for that group.
4. Select **View Group Details**.
5. From the **Group Details** pane, select **Smart Groups**.
6. In the **Smart Groups Permissions** grid, select the Smart Group you created for adding Windows servers to Password Safe, and then click **Assign Permissions** above the grid.
7. Select **Assign Permissions Read Only**.
8. Click the **More Options** (ellipsis) button for the Smart Group, and then select **Edit Password Safe Roles**.

9. Select the **Requestor** role, and then select the **Access Policy**.
10. Click **Save Roles**.

Add Directory Accounts For Windows Servers Password Safe Roles

A role is the connection between a Password Safe user account and a managed system. A role defines what the user or group can do with respect to that managed system.

☑ Requestor
Access Policy for Requestor
24x7 - No Approval ▾

☐ Approver

☐ Credentials Manager

☐ Recorded session reviewer

☐ Active session reviewer

SAVE ROLES   DISCARD CHANGES

Use Case 5: Add Directory Admin Accounts for Linux Servers

This use case walks through configuring automatic password rotation for directory admin accounts on Linux servers with auto-approval for SSH sessions enabled.

Directory accounts that have elevated (privileged) access exist within Active Directory. These accounts have permissions to all domain joined Windows servers and should be controlled, audited, and rotated on a regular schedule. For this use case, Password Safe is already managing all Linux domain joined servers by implementing *Use Case 2*, and a specific set of users are allowed to use these shared accounts.

Since you have already configured asset Smart Groups for discovering assets, asset Smart Groups for adding systems to Password Safe management, and managed systems Smart Groups for granting system access from previous use cases, you do not need to create any additional Smart Groups for these purposes.

If you need to add additional servers to Password Safe, you can create new Smart Groups using different address groups or directory queries as applicable, and run new scans as applicable, following the steps outlined in previous use cases.

Additionally, if you require only a subset of systems to be allowed to use these directory accounts, you can create a new managed system Smart Group using more specific selection criteria to provide access to a smaller selection of systems.
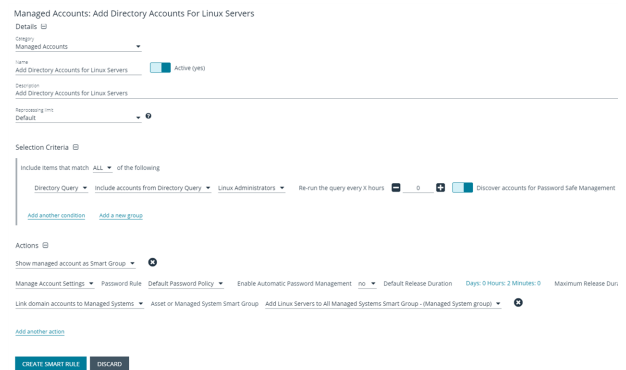
For this use case, you will create a managed account Smart Group to add the directory accounts to Password Safe and to link the directory accounts to managed systems.

You must also associate the managed account Smart Group with user groups, and then assign roles and permissions to the associated managed account Smart Group.

> **i**   *For more information, please see "Use Case 2: Add Local Root Accounts for Linux Servers" on page 10.*

Create Managed Account Smart Group to Add Directory Accounts to Password Safe and Configure Account Linking

1. From the left menu in the BeyondInsight Console, click **Smart Rules**.
2. Select **Managed Account** from the **Smart Rule Type filter** list.
3. Click **Create Smart Rule**.
4. Select **Managed Accounts** from the **Category** list.
5. Enter a meaningful **Name** and **Description** for the Smart Rule.
6. Set **Selection Criteria** as:

   - **Directory Query**, **Include Accounts from Directory Query**, **<query name>**, **Discover Accounts for Password Safe Management: enabled**

> **Tip:** *If Password Safe already manages the privileged accounts, you can use criteria of* **Managed Account Fields > Account Name** *in the Smart Rule instead of using a directory query. For an example of this option, please see "Use Case 6: Add Directory Admin Accounts for Network Devices" on page 23.*

7. Set **Actions**

   - **Link domain accounts to Managed Systems**, **Asset or Managed System Smart Group: <Smart Group that contains Linux servers that the accounts will be associated to for session management>**
   - **Manage Account Settings**, **Password Rule: <password policy>**, **Enable Automatic Password Management: no**
   - **Show managed account as Smart Group**

> 📌 **Note:** *The* **Manage Account Settings** *action onboards the specific account, if found in the system's scan results. This action also dictates whether the account is rotated immediately or not.*
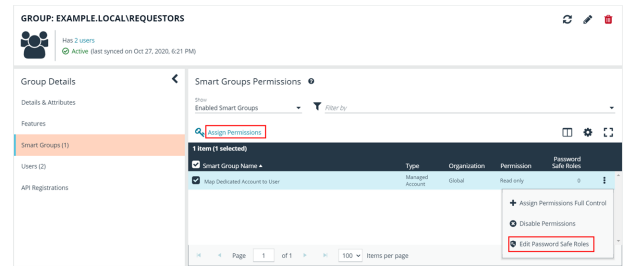
> **Tip:** *These actions can be separated into multiple managed account Smart Groups with criteria of child Smart Rules or other specific criteria for the linking rule action, if desired.*

8. Click **Create Smart Rule**.

Assign User Group Permissions and Roles for Account Access

Associate a user group with the Smart Group that you created for adding accounts to Password Safe management, and then assign permissions, roles, and an access policy to the Smart Group. In this use case, the Password Safe users are **Requestors** with an access policy to allow auto-approved RDP sessions.

1. From the left navigation in the BeyondInsight console, click **Configuration**.

2. Under **Role Based Access**, click **User Management**.

3. Locate the user group in the grid, and then click the **More Options** (ellipsis) button for that group.

4. Select **View Group Details**.

5. From the **Group Details** pane, select **Smart Groups**.

6. In the **Smart Groups Permissions** grid, select the Smart Group you created for adding Windows servers to Password Safe, and then click **Assign Permissions** above the grid.

7. Select **Assign Permissions Read Only**.

8. Click the **More Options** (ellipsis) button for the Smart Group, and then select **Edit Password Safe Roles**.

9. Select the **Requestor** role, and then select the **Access Policy**.

10. Click **Save Roles**.

Use Case 6: Add Directory Admin Accounts for Network Devices

This use case walks through configuring automatic password rotation for local admin accounts on network devices with auto-approval for RDP sessions enabled.

Directory accounts that have elevated (privileged) access exist within Active Directory. These accounts have permissions to all network devices and need to be controlled, audited, and rotated on a regular schedule. For this use case, Password Safe is already managing network devices by implementing *Use Case 3*, and a specific set of users are allowed to use these shared accounts.

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Since you have already configured asset Smart Groups for discovering assets, asset Smart Groups for adding devices to Password Safe management, and managed systems Smart Groups for granting system access from previous use cases, you do not need to create any additional Smart Groups for these purposes.

If you need to add additional devices to Password Safe, you can create new Smart Groups using different address groups and run new scans following the steps outlined in previous use cases.

Additionally, if you require only a subset of systems to be allowed to use these directory accounts, you can create a new managed system Smart Group using more specific selection criteria to provide access to a smaller selection of devices.

For this use case, you will create a managed account Smart Group to link the directory accounts to the managed systems using the **Managed Account Fields > Account Name** criteria.
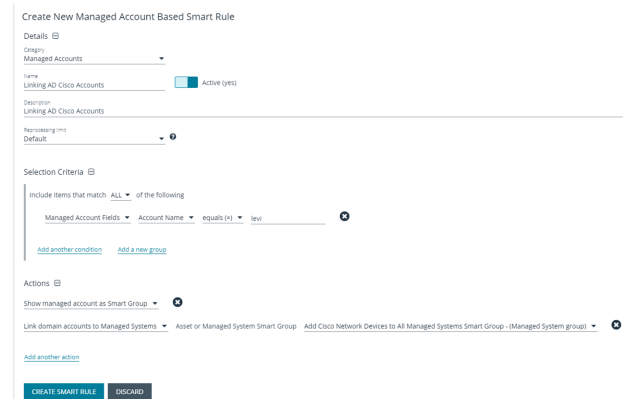
You must also associate the managed account Smart Group to user groups, and then assign roles and permissions to the associated managed account Smart Group.

> ℹ️ *For more information, please see "Use Case 3: Add Local Admin Accounts for Network Devices" on page 14.*

Create Managed Account Smart Group to Link Directory Accounts to Managed System

1. From the left menu in the BeyondInsight Console, click **Smart Rules**.
2. Select **Managed Account** from the **Smart Rule Type filter** list.
3. Click **Create Smart Rule**.
4. Select **Managed Accounts** from the **Category** list.
5. Enter a meaningful **Name** and **Description** for the Smart Rule.
6. Set **Selection Criteria** as:
   - **Managed Account Fields**, **Account Name**, **equals**, **<name>**
7. Set **Actions**
   - **Show managed account as Smart Group**
   - **Link domain accounts to Managed Systems**, **Asset or Managed System Smart Group: <Smart Group that contains network devices that the accounts will be associated to for session management>**
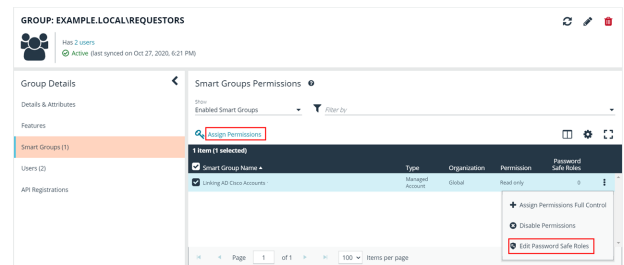
> 💡 *Tip: These actions can be separated into multiple managed account Smart Groups with criteria of child Smart Rules or other specific criteria for the linking rule action, if desired.*

8. Click **Create Smart Rule**.

Assign User Group Permissions and Roles for Account Access

Associate a user group with the Smart Group that you created for adding accounts to Password Safe management, and then assign permissions, roles, and an access policy to the Smart Group. In this use case, the Password Safe users are **Requestors** with an access policy to allow auto-approved RDP sessions.

1. From the left navigation in the BeyondInsight console, click **Configuration**.

2. Under **Role Based Access**, click **User Management**.

3. Locate the user group in the grid, and then click the **More Options** (ellipsis) button for that group.

4. Select **View Group Details**.

5. From the **Group Details** pane, select **Smart Groups**.

6. In the **Smart Groups Permissions** grid, select the Smart Group you created for adding Windows servers to Password Safe, and then click **Assign Permissions** above the grid.

7. Select **Assign Permissions Read Only**.

8. Click the **More Options** (ellipsis) button for the Smart Group, and then select **Edit Password Safe Roles**.

9. Select the **Requestor** role, and then select the **Access Policy**.

10. Click **Save Roles**.

Use Case 7: Add Dedicated Directory Accounts for Windows Servers

This use case walks through configuring automatic password rotation for dedicated directory accounts on Windows servers.

Individual administrative accounts that exist within Active Directory have permissions to all domain joined Windows servers and should be controlled, audited, and rotated on a regular schedule. For this use case, Password Safe is already managing all Windows domain joined servers by implementing Use Case 1. You have a specific set of users have a corresponding privileged account within Active Directory that need to be accessible via Password Safe, but still restricted to only being used by that individual. This is considered to be a dedicated account in Password Safe.

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If, in previous use cases, you already implemented asset Smart Groups for discovering assets and adding systems to Password Safe management, as well as managed systems Smart Groups for granting system access to user groups, you do not need to create any additional Smart Groups for these purposes. However, if you want to discover specific domain controllers, you can create a new Smart Group for that purpose. It is the same concept as documented in *Use Case 1*, except you need to create a directory query to pull in domain controllers instead of the Windows OU.

If you need to add additional servers to Password Safe, you can create new Smart Groups, using different address groups and directory queries as applicable, and run new scans as applicable, following the steps outlined in previous use cases.

Additionally, if you require only a subset of systems to be allowed to use these directory accounts, you can create a new managed system Smart Group using more specific selection criteria to provide access to a smaller selection of systems.

For this use case, you must create two managed account Smart Groups. The first will be the managed account Smart Group for adding accounts to Password Safe management and to link accounts to managed systems. The second Smart Group maps dedicated accounts to users.

> **i** *For more information, please see "Use Case 1: Add Local Admin Accounts for Windows Servers" on page 6.*
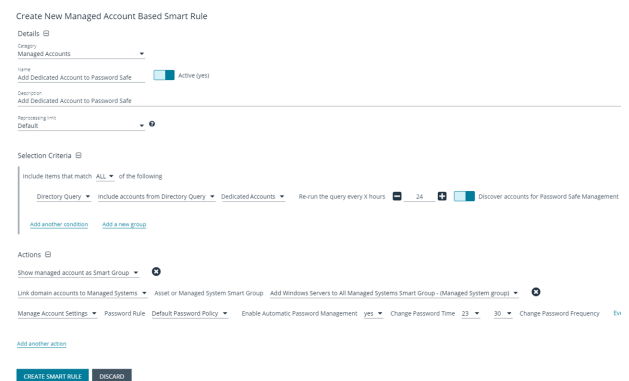
Create Managed Account Smart Group to Add Dedicated Accounts to Password Safe and Configure Account Linking

1. From the left menu in the BeyondInsight Console, click **Smart Rules**.
2. Select **Managed Account** from the **Smart Rule Type filter** list.
3. Click **Create Smart Rule**.
4. Select **Managed Accounts** from the **Category** list.
5. Enter a meaningful **Name** and **Description** for the Smart Rule.
6. Set **Selection Criteria** as:

   - **Directory Query**, **Include Accounts from Directory Query**, **<query name>**, **Discover Accounts for Password Safe Management: enabled**

7. Set **Actions**

   - **Link domain accounts to Managed Systems**, **Asset or Managed System Smart Group: <Smart Group that contains Linux servers that the accounts will be associated to for session management>**
   - **Manage Account Settings**, **Password Rule: <password policy>**, **Enable Automatic Password Management: no**
   - **Show managed account as Smart Group**

> 📌 *Note: The **Manage Account Settings** action onboards the specific account, if found in the system's scan results. This action also dictates whether the account is rotated immediately or not.*

> 💡 *Tip: These actions can be separated into multiple managed account Smart Groups with criteria of child Smart Rules or other specific criteria for the linking rule action, if desired.*

8. Click **Create Smart Rule**.

Create Managed Account Smart Group to Map Dedicated Accounts to Password Safe Users

📌 **Note:** *This managed account Smart Group restricts the access to the individual correlating user by filtering the account name with a suffix or prefix, and then mapping the dedicated account to a user group. The user group must exist in BeyondInsight already to complete the rule action for this Smart Group.*

⚠ **IMPORTANT!**

The privileged directory account and the unprivileged account you are mapping to must match. You must have a preconfigured naming convention to allow for the match. If the prefix or suffix does not exist, the mapping action in the Smart Rule will not be successful.

1. From the left menu in the BeyondInsight Console, click **Smart Rules**.
2. Select **Managed Account** from the **Smart Rule Type filter** list.
3. Click **Create Smart Rule**.
4. Select **Managed Accounts** from the **Category** list.
5. Enter a meaningful **Name** and **Description** for the Smart Rule.
6. Set **Selection Criteria** as:
   - **Dedicated Account**, **Account Name**, **with Suffix**, **<applicable suffix>**
7. Set **Actions**
   - **Map Dedicated Accounts to**, **User Group**, **<user group name>**
   - **Show managed account as Smart Group**
8. Click **Create Smart Rule**.

Create New Managed Account Based Smart Rule

Details ⊖

Category
Managed Accounts

Name
Map Dedicated Account to User   Active (yes)

Description
Smart Group for mapping dedicated account to users

Reprocessing limit
Default

Selection Criteria ⊖

Include Items that match ALL ▾ of the following

Dedicated Account ▾   Account Name ▾   with suffix ▾   .da   ✕

Add another condition   Add a new group

Actions ⊖

Map Dedicated Accounts To ▾   User Group   E_____L\Requestors ▾   ✕

Show managed account as Smart Group ▾   ✕

Add another action

CREATE SMART RULE   DISCARD

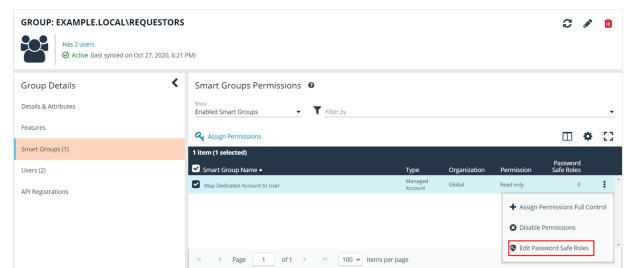## Assign User Group Permissions and Roles for Account Access

Associate a user group to the Smart Group that you created for adding accounts to Password Safe management, and then assign permissions, roles, and an access policy to the Smart Group. In this use case, the Password Safe users are **Requestors** with an access policy to allow auto-approved RDP sessions.

The user group has a read permission assigned to the Smart Group that was created for mapping the dedicated account. Next you must assign the Password Safe role to it. Even though the entire user group is assigned to the managed account Smart Group because of the dedicated account criteria, only the user with the matching name sees the privileged account within Password Safe.

> **Note:** *If there are privileged accounts that do not have a corresponding user to match with, they are treated as shared accounts and seen by all users in that same user group, similar to use cases 1 and 4.*

1. From the left navigation in the BeyondInsight console, click **Configuration**.
2. Under **Role Based Access**, click **User Management**.
3. Locate the user group in the grid, and then click the **More Options** (ellipsis) button for that group.
4. Select **View Group Details**.
5. From the **Group Details** pane, select **Smart Groups**.
6. In the **Smart Groups Permissions** grid, select the Smart Group you created for adding dedicated accounts, and then click the **More Options** (ellipsis) button.
7. Select **Edit Password Safe Roles**.

8. Select the **Requestor** role, and then select the **Access Policy**.
9. Click **Save Roles**.