Configure Advanced Options for BGP on FTD

Contents

Introduction

Prerequisites

- Requirements
- Components Used

Configure BGP AS Path Prepend

- Procedure

Configure BGP Local Preference

- Procedure

Configure BGP Weight

- Procedure

BGP AS Path Filter

- Procedure

Introduction

This document describes how to use the Border Gateway Protocol (BGP) to manipulate Path Selection when multiple routes exist for the same destination.

Prerequisites

Requirements

There are no specific requirements for this document.

Components Used

This document is not restricted to specific hardware and software versions.

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

Configure BGP AS Path Prepend

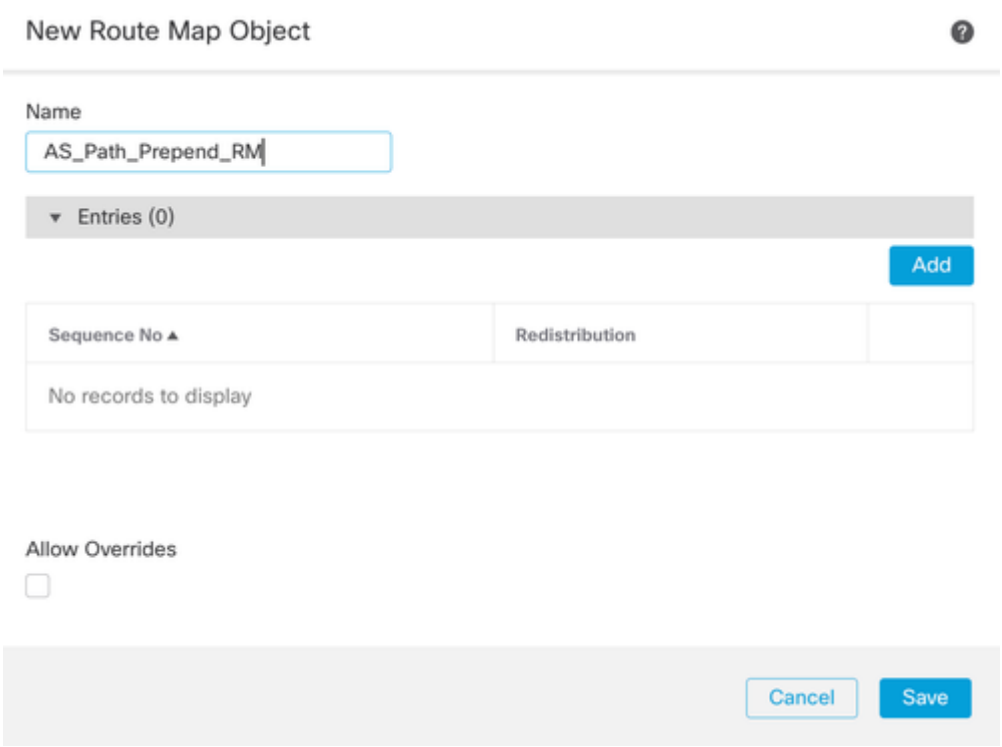
You can use AS Path Prepend to manipulate the path selection. Refer to the BGP Path Selectiondocumentation for more information.

Procedure

Step 1. Click **Objects >Route Map**.

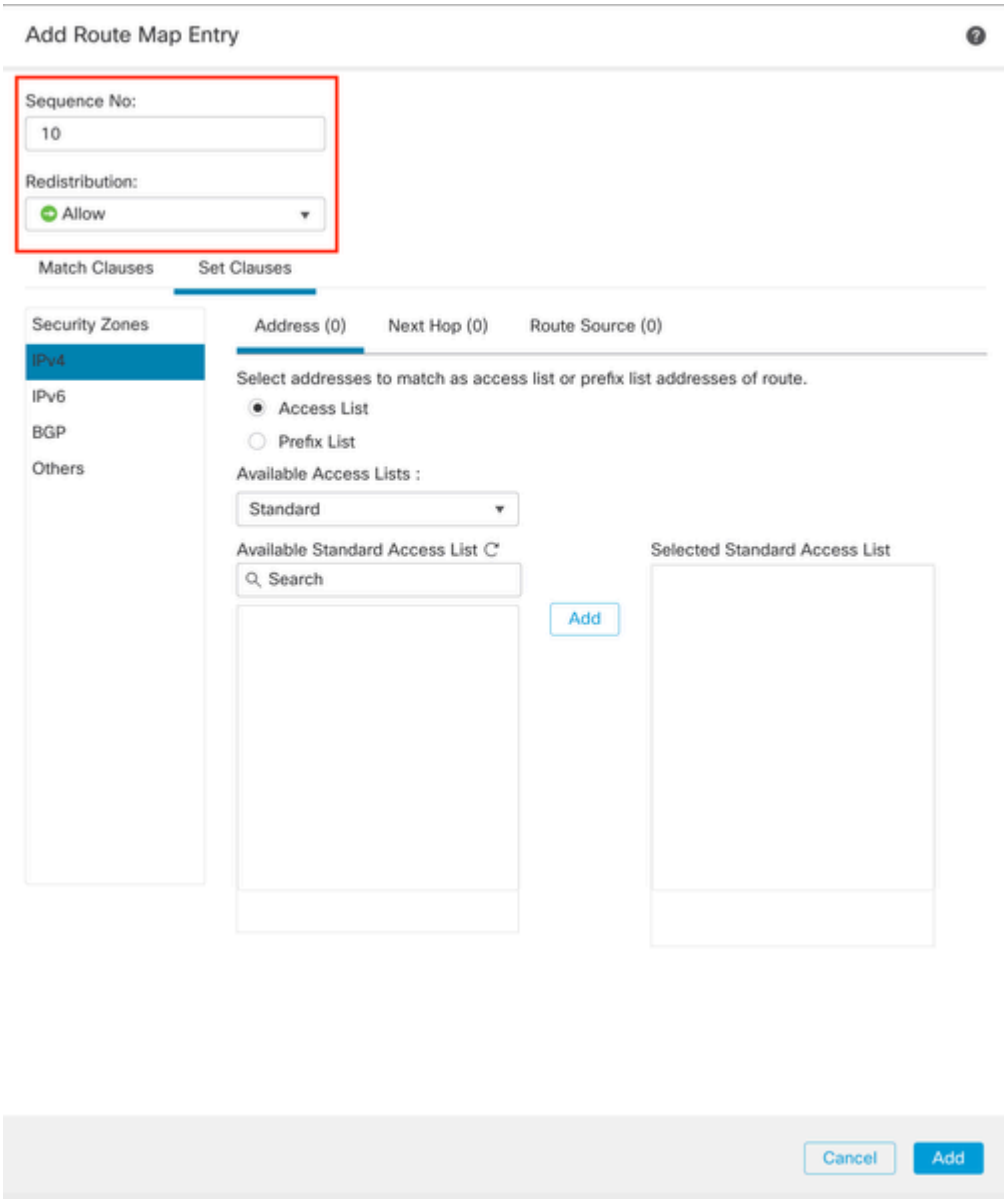
Step 2. Select the **Route Map** you have assigned to the BGP peer where you must apply the AS Path Prepend or add a new **Route Map** by clicking **Add Route Map**.

Step 3. Configure the **name** of the Route Map, then click **Add** under the **Entries** section.



Step 4. Configure at least the next basic settings:

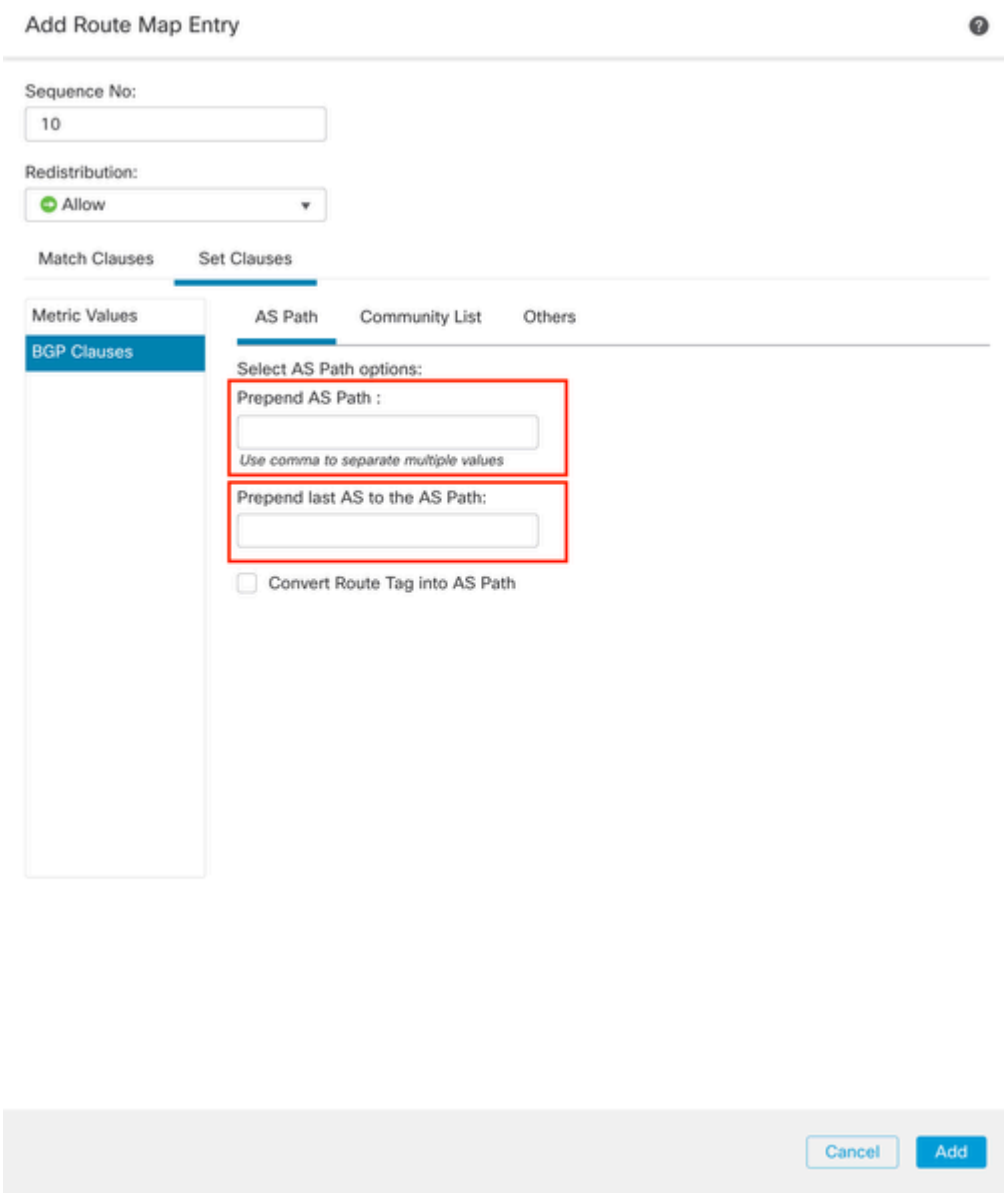
- Sequence No. - Select the **number** of the sequence.
- Redistribution - Select **Allow**.



Step 5. **Optional**: You can specify multiple variables like Prefix-List and Access lists in the **Match Classes** section.

Step 6.Click **Set Clauses> BGP Clauses> AS Path**. Configure the **Prepend** option based on the next options:

- Prepend AS Path - Add the **AS** you want to add to the **Path**, separated by commas.
- Prepend last AS to the AS Path - Select the **number of times** you want to add the **last AS** to the **AS path** (you can add the AS up to 10 times).

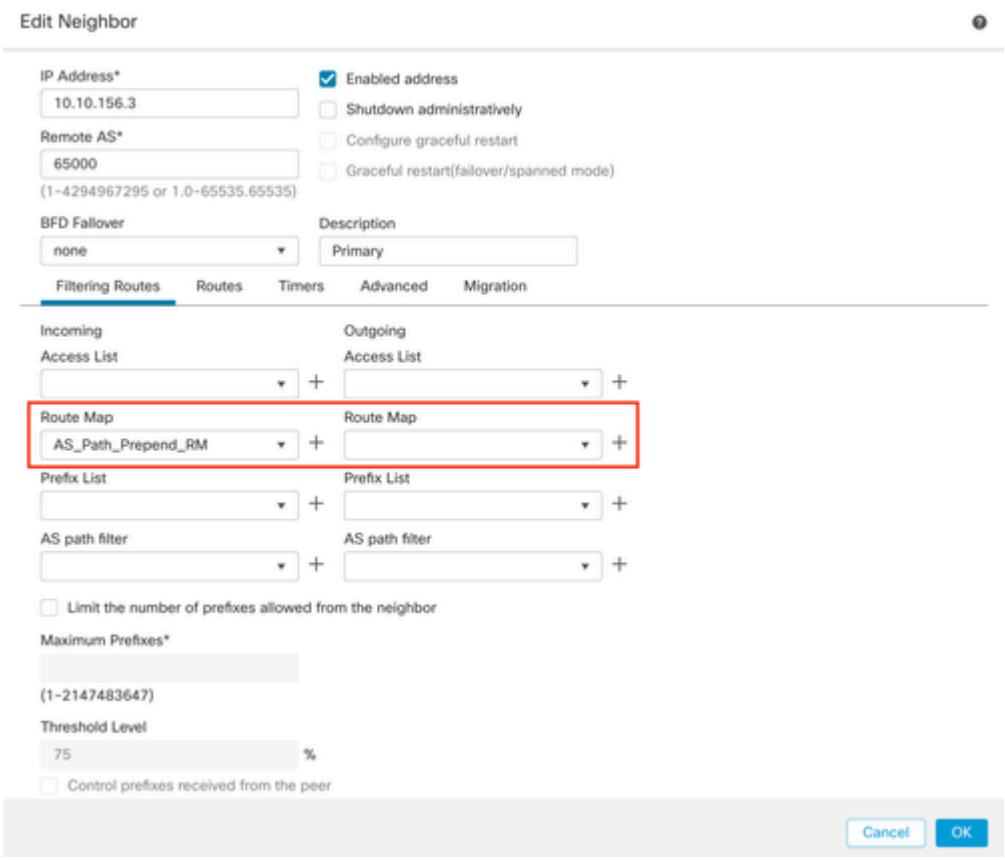


Step 7.Click **Add >Save**.

Step 8. Click **Device >Device Managemen**t, and select the **Device** you want to apply the AS Path Prepend.

Step 9. Click **Routing >IPv4** in the BGP section, then **Neighbor**.

Step 10. Click the **Edit** icon for the Neighbor you want to apply the AS Path Prepend. On the **Filtering Routes** section, select the **Route Map** from the drop-down menu in the **Incoming** or **Outgoing** traffic in the **Route Map** section.



Step 11. Click **OK>Save**.

Configure BGP Local Preference

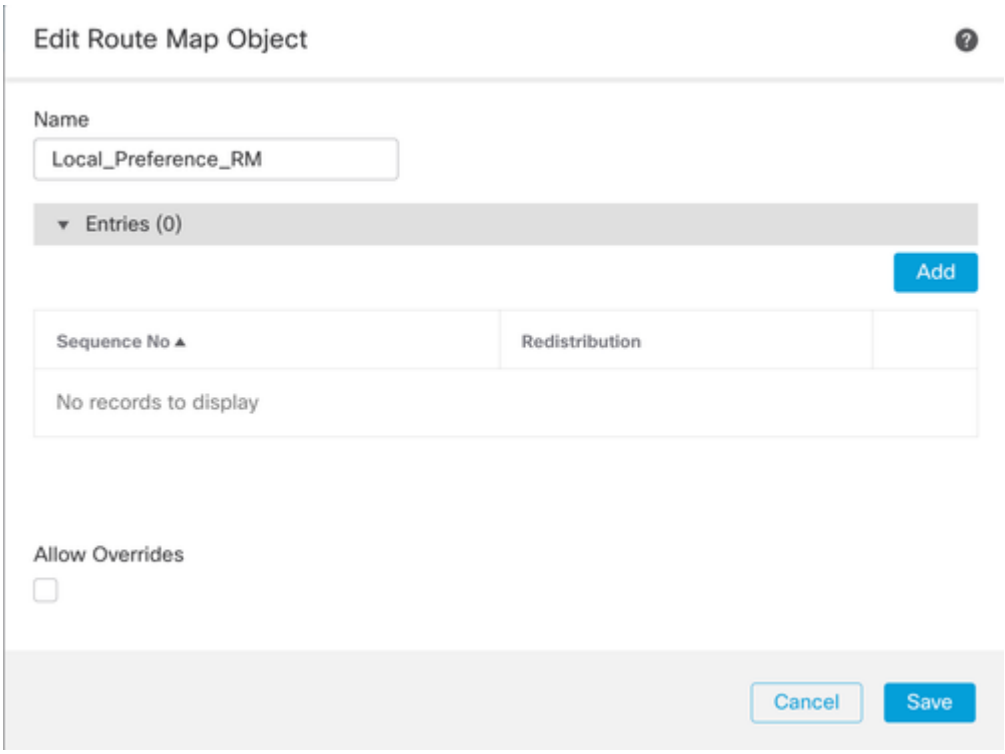
You can use Local Preference to manipulate the locally path selection. Refer to the BGP Path Selection for more information on BGP path selection.

Procedure

Step 1.Click **Objects >Route Map**.

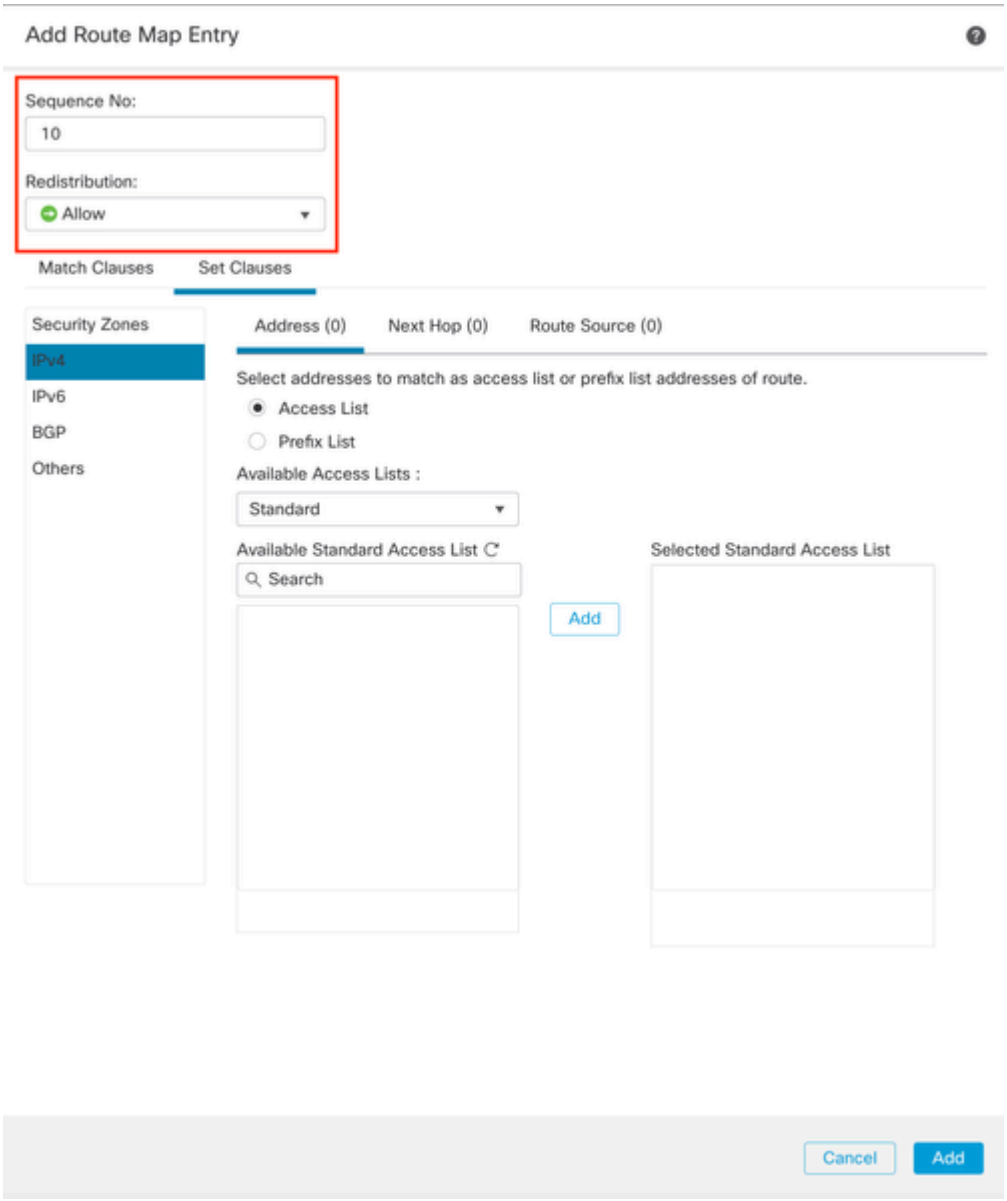
Step 2. Select the **Route Map** you assigned to the BGP peer where you applied the Local Preference or add a new Route Map by clicking **Add Route Map**.

Step 3. Configure the **Name** of the Route Map, then click **Add** under the **Entries** section.



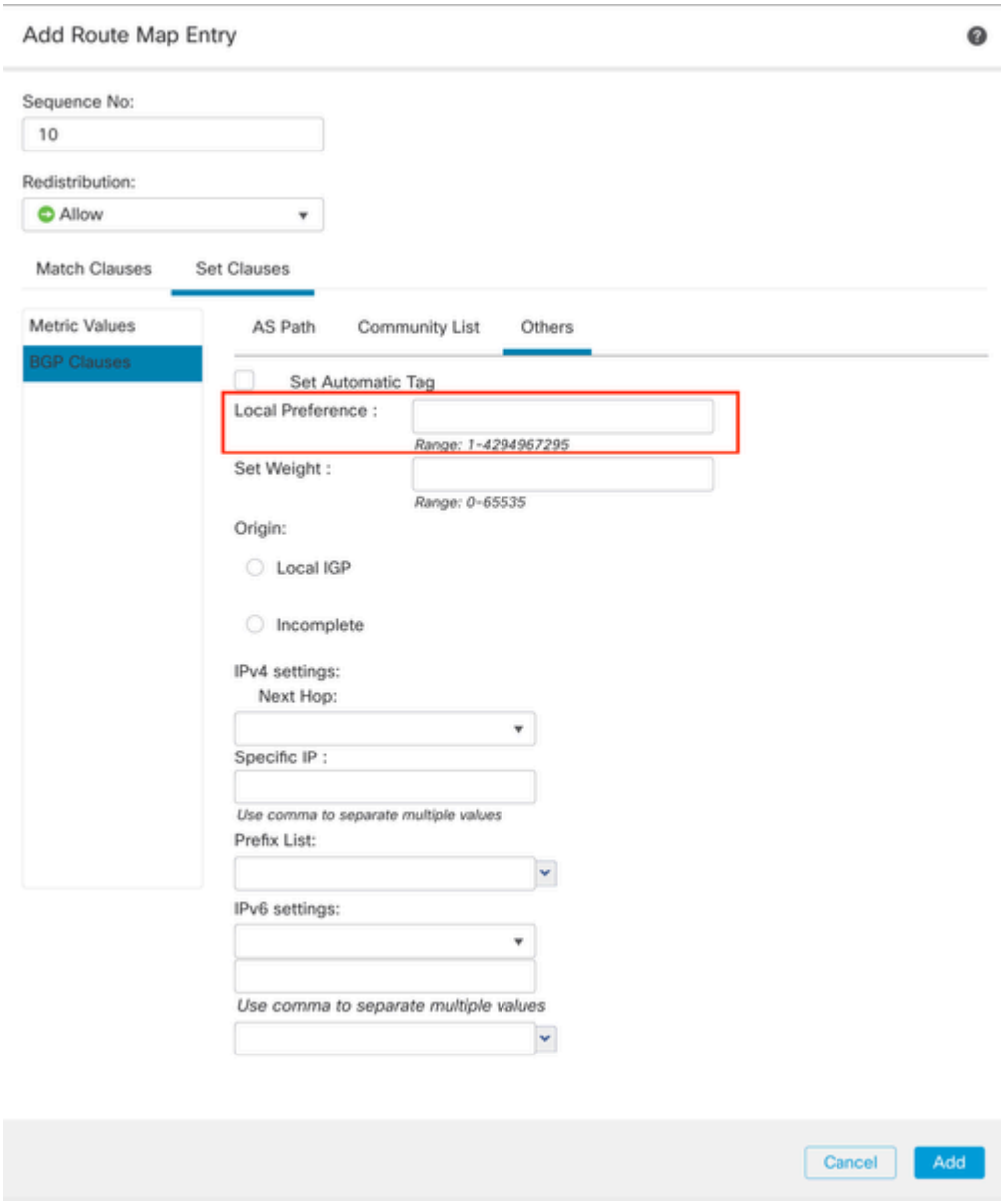
Step 4. Configure at a minimum, the next basic settings:

- Sequence No. - Select the **number** of the sequence.
- Redistribution - Select **Allow**.



Step 5. **Optional** - You can specify multiple variables like Prefix-List and Access lists in the **Match Classes** section.

Step 6. Click **Set Clauses> BGP Clauses> Others**. Configure the **Local Preference** where you want to apply to the **Local Preference** section.

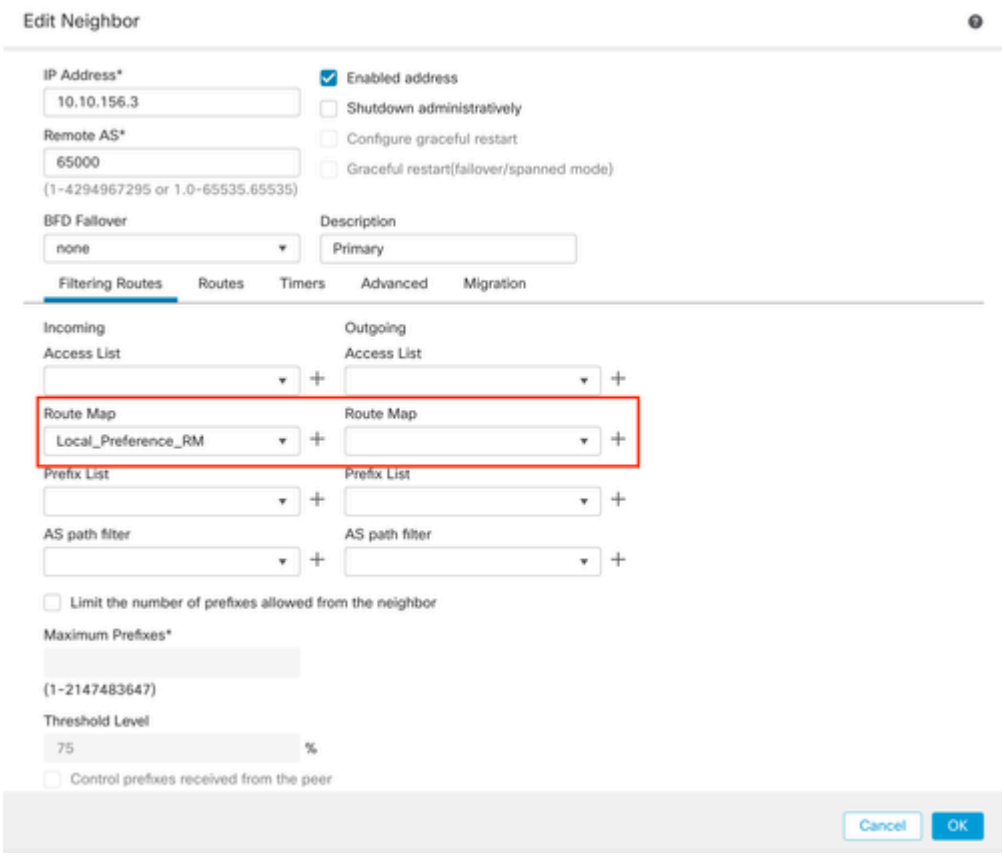


Step 7.Click **Add >Save**.

Step 8.Click **Device> Device Management**, and select the **Device** you want to apply to the Local Preference.

Step 9.Click **Routing >IPv4** in the **BGP** section, then **Neighbor**.

Step 10. Click the **Edit** icon for the Neighbor you want to apply the AS Local Preference. On the **Filtering Routes** section, select the **Route Map** from the drop-down menu in the **Incoming** or **Outgoing** traffic in the **Route Map** section.



Step 11.Click **OK >Save**.

Configure BGP Weight

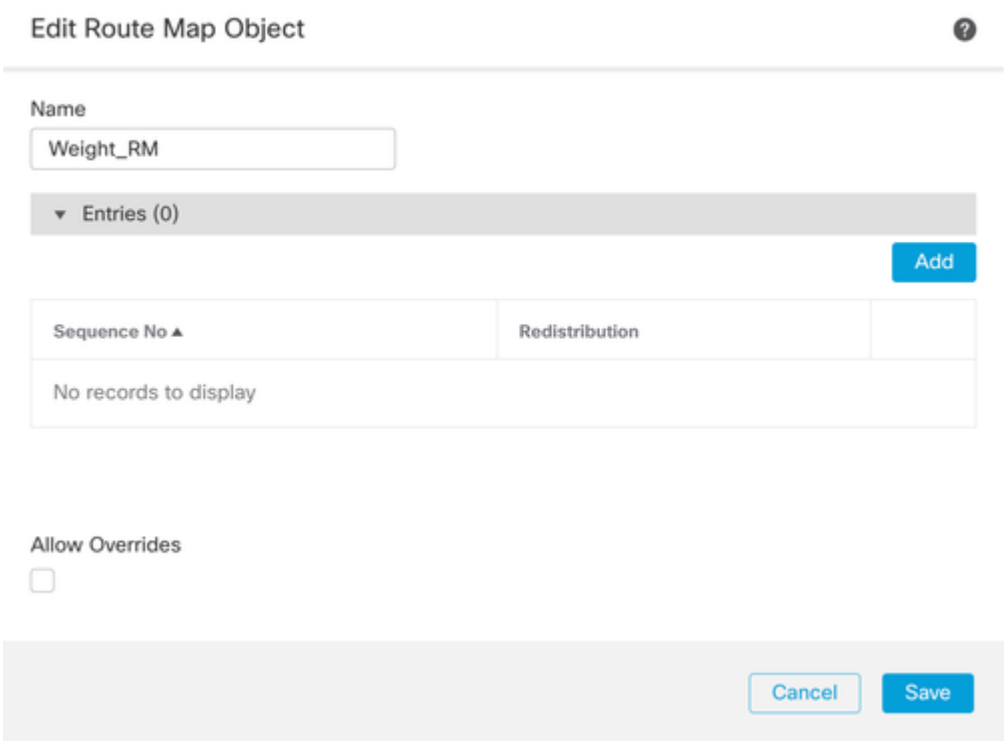
You can use Weight to manipulate the locally path selection. Refer to the BGP Path Selection for more information on BGP path selection.

Procedure

Step 1.Click **Objects >Route Map**.

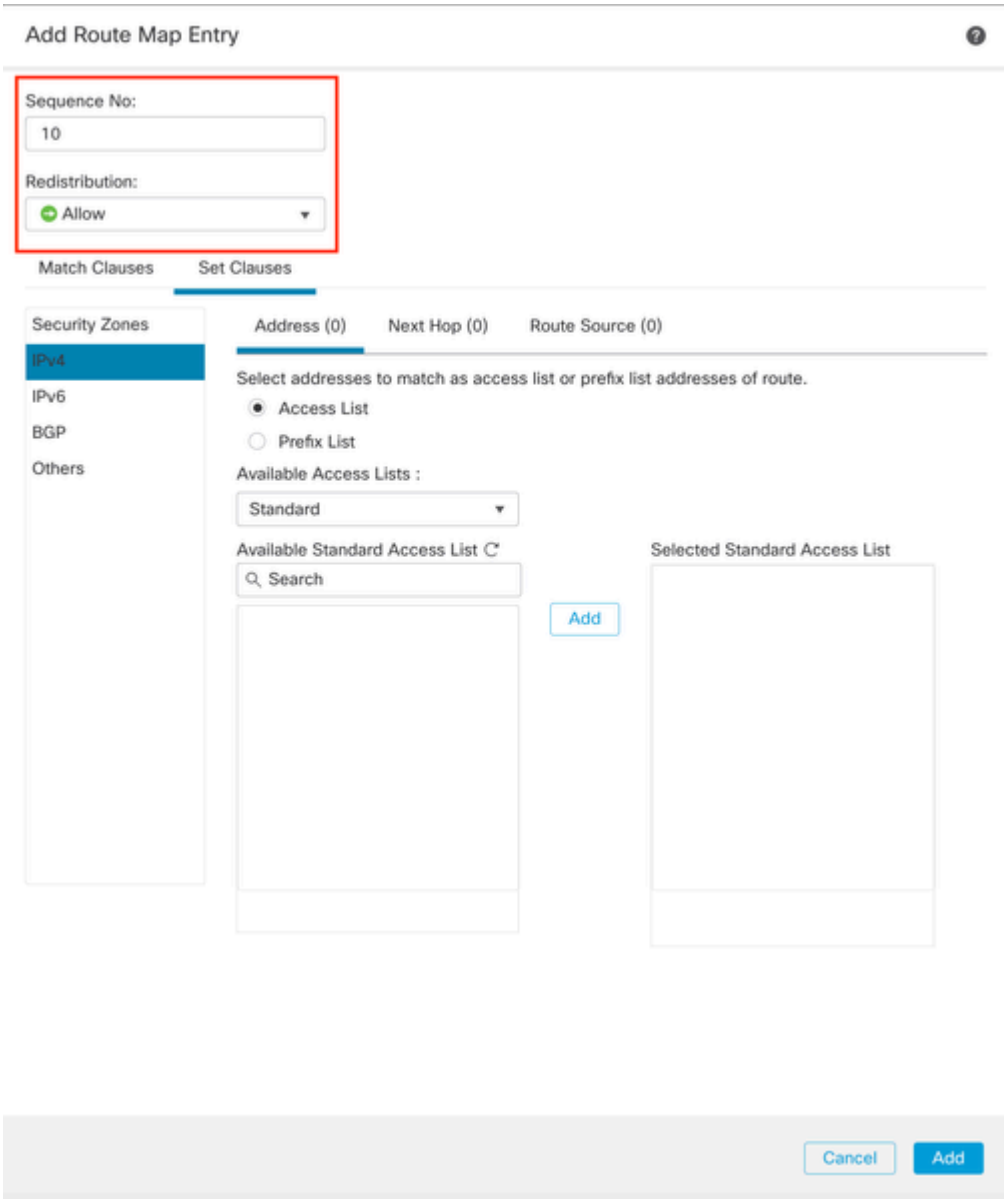
Step 2. Select the **Route Map** you assigned to the BGP peer where you applied the **Local Preference** or add a new **Route Map** by clicking **Add Route Map**.

Step 3. Configure the **Name** of the Route Map, then click **Add** under the **Entries** section.



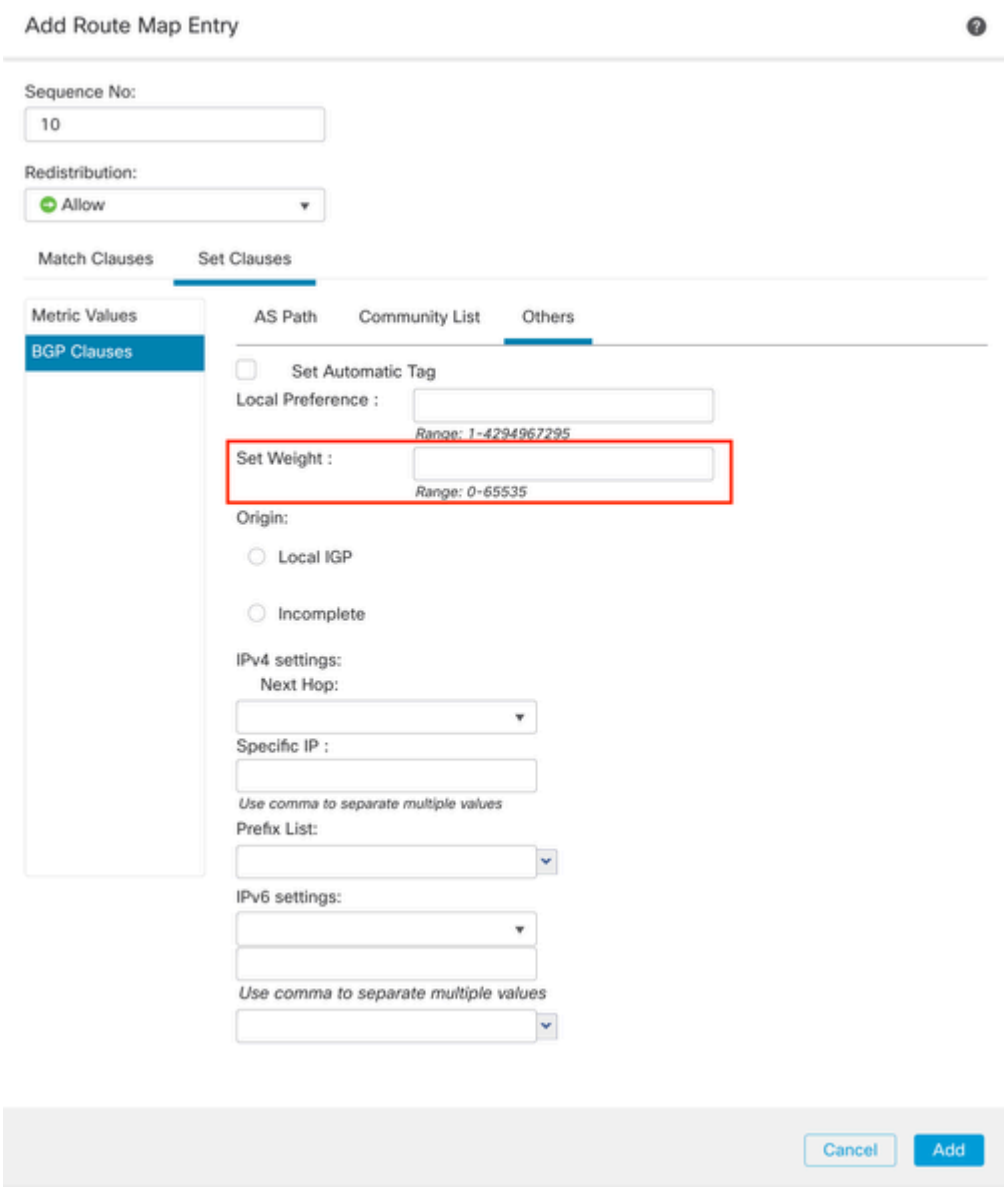
Step 4. Configure at least the next basic settings:

- Sequence No. - Select the **number** of the sequence.
- Redistribution - Select **Allow**.



Step 5. **Optional**: You can specify multiple variables like Prefix-List and Access lists in the **Match Classes** section.

Step 6.Click **Set Clauses >BGP Clauses >Others**. Configure the **Weight** to apply in the **Set Weight** section.

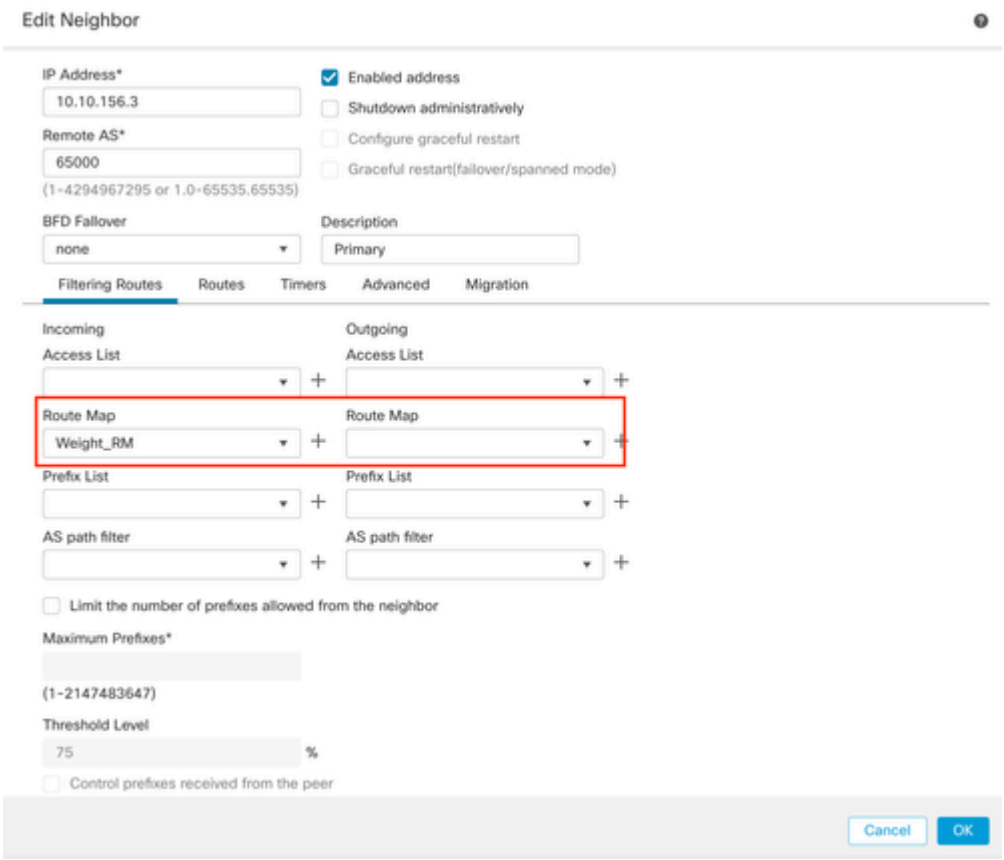


Step 7.Click **Add >Save**.

Step 8.Click **Device >Device Management**, and select the **Device** to apply the **Local Preference**.

Step 9.Click **Routing >IPv4** in the **BGP** section, then **Neighbor**.

Step 10.Click the **Edit** icon for the **Neighbor** you want to apply the Weight. On the **Filtering Routes** section, select the **Route Map** from the drop-down menu in the **Incoming** or **Outgoing** traffic in the **Route Map** section.



Step 11.Click **OK >Save**.

BGP AS Path Filter

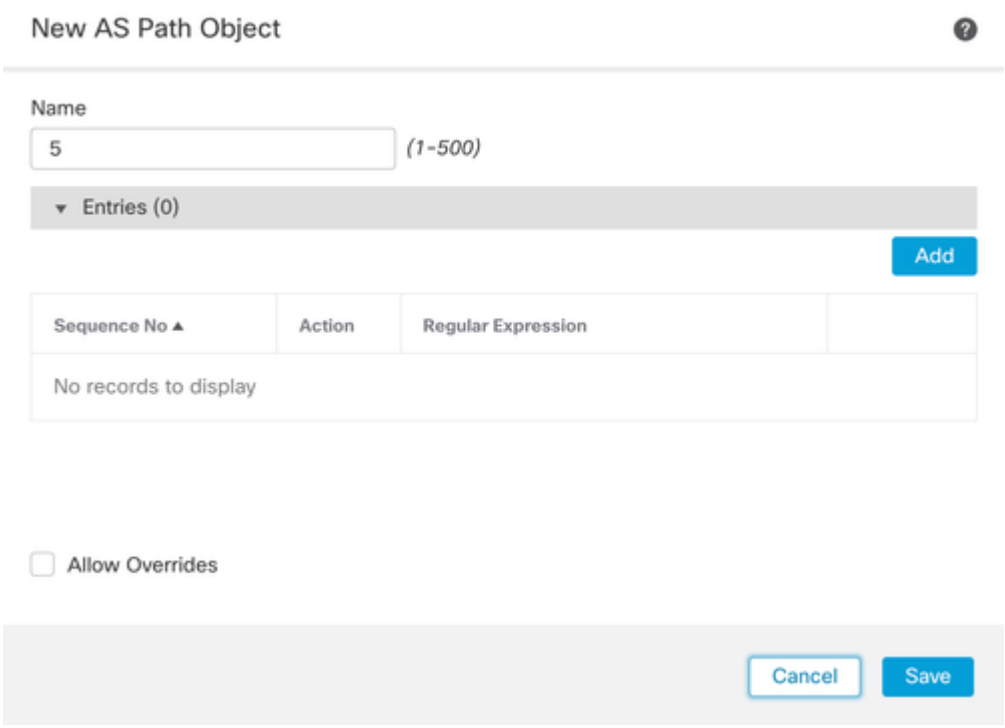
You can **Allow** or **Block** prefixes from certain autonomous systems. FTD allows you to filter based on Regular Expressions. Refer to the documentation for more information on Use on Regular Expressions in BGP.

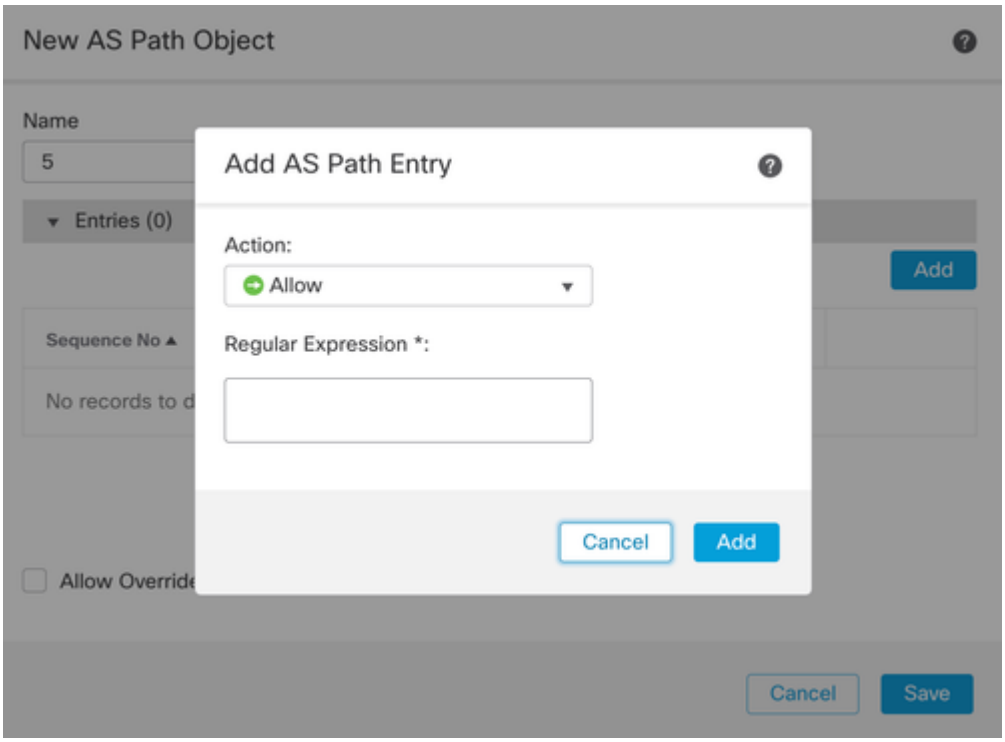
Procedure

Step 1.Click **Objects >AS Path**.

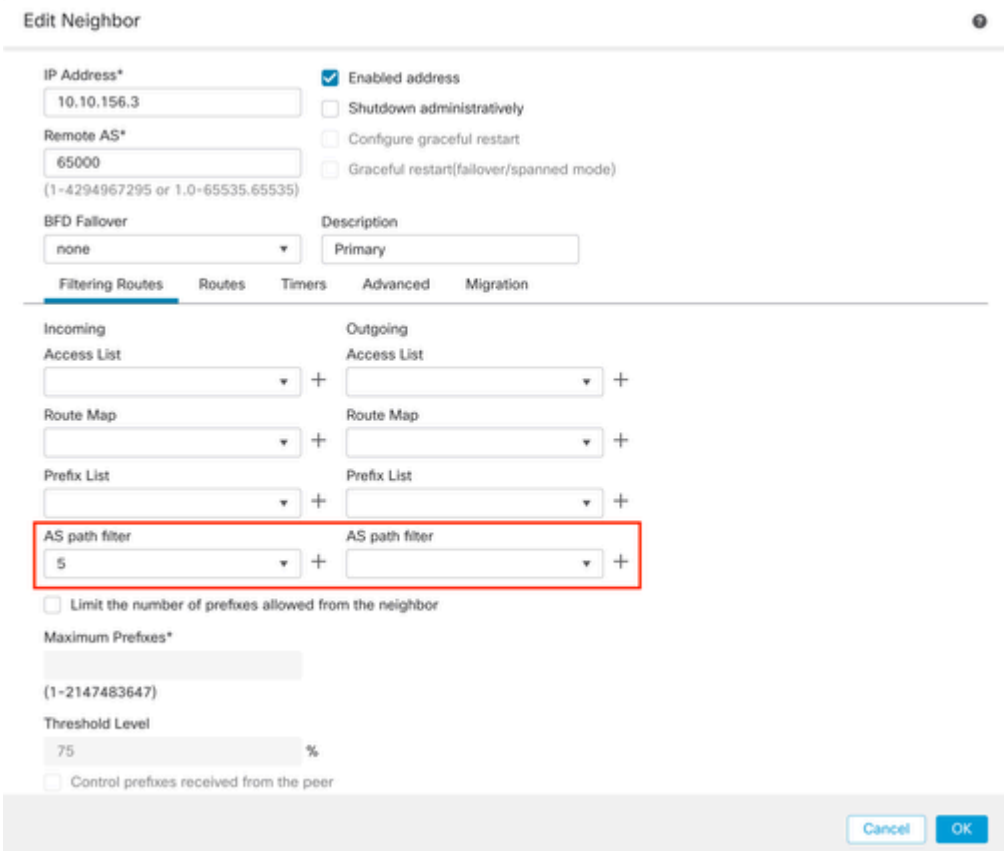
Step 2. Configure at least the next basic settings:

- Name - Select the **number** to the AS Path Object.
- Sequence No. - Click **Add** under the **Entries** section, then **Allow** or **Deny** based on the action you want to take. Configure the **Regular Expression** you to use, then click **Add >Save**.





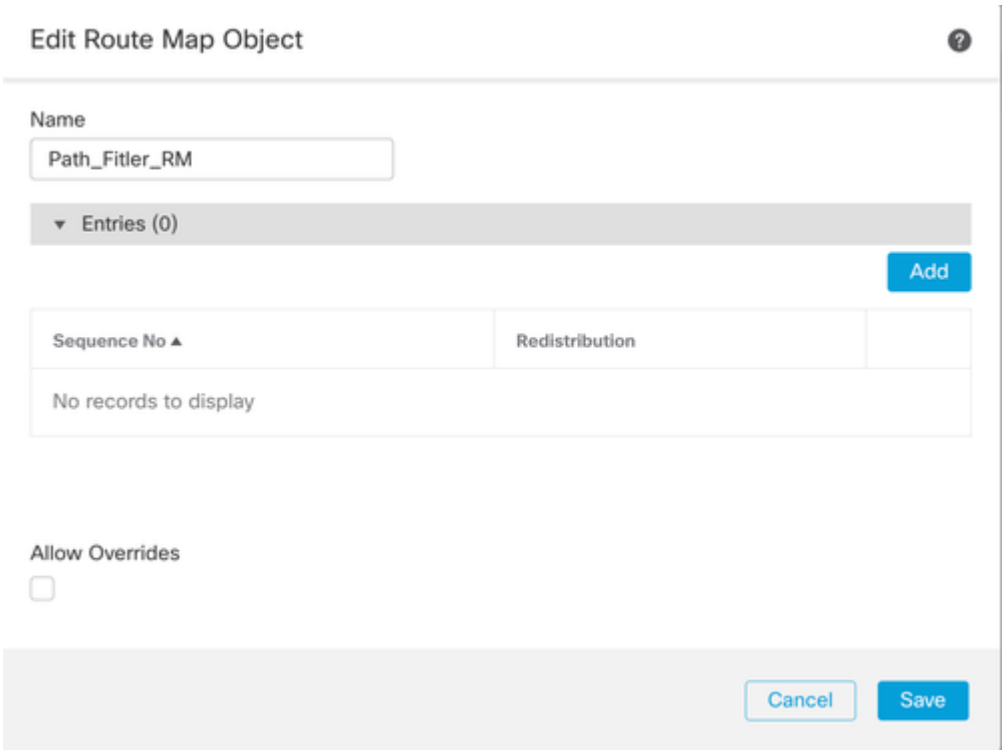
Step 3.**Optional**: You can configure the AS Path Object directly on the peer or into a Route Map. If you want to configure directly on the peer, click the **Edit** icon for the **Neighbor** where you want to apply the **AS Path Filter**. On the **Filtering Routes** section, select the **AS Path Object** from the drop-down menu in the **Incoming** or **Outgoing** traffic in the **AS Path Filter** section.



Step 3.Click **Objects >Route Map**.

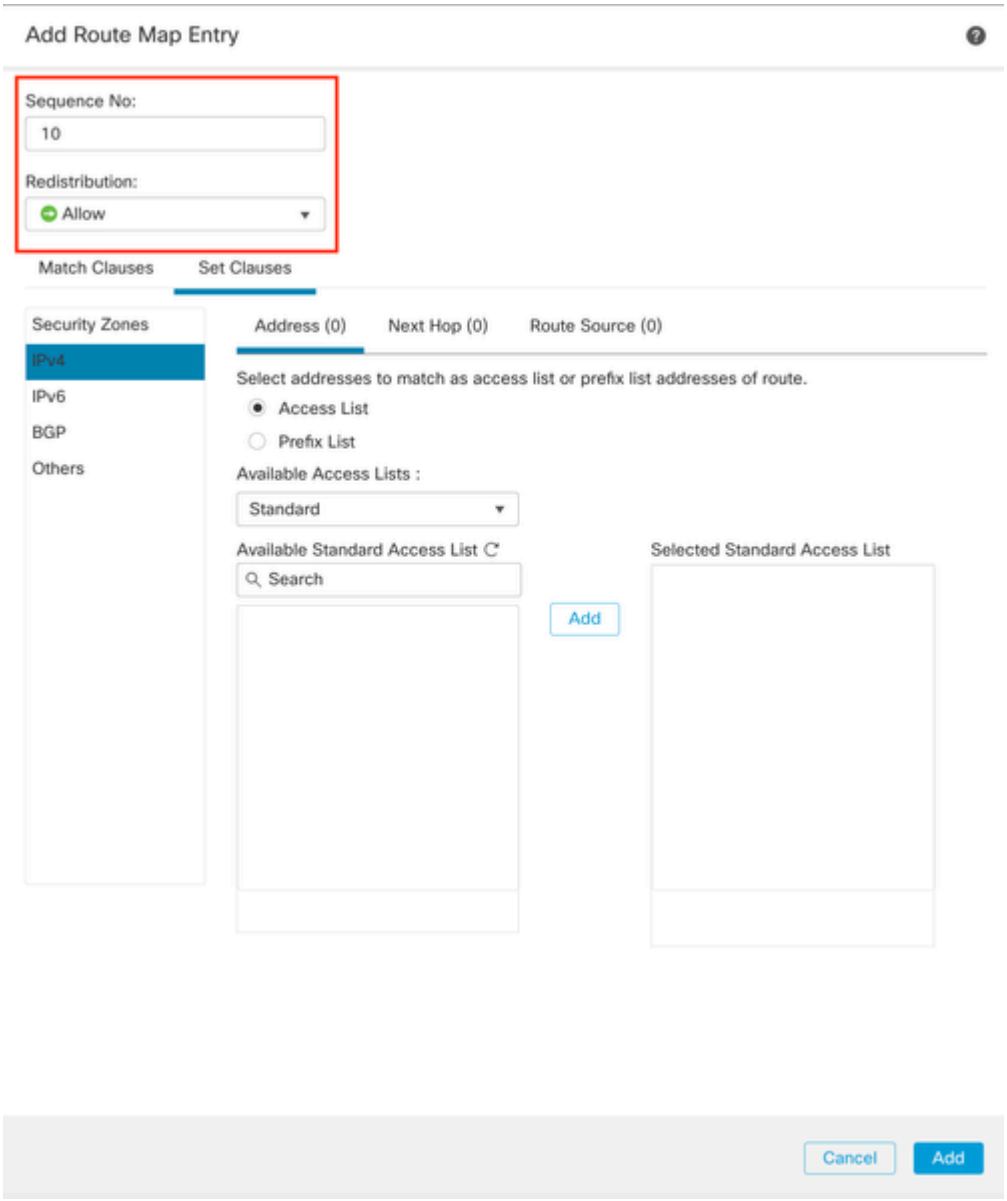
Step 4. Select the **Route Map** you assigned to the **BGP** peer where applied the **Path Filter** or add a new **Route Map** by clicking **Add Route Map**.

Step 5. Configure the **Name** of the Route Map, then click **Add** under the **Entries** section.

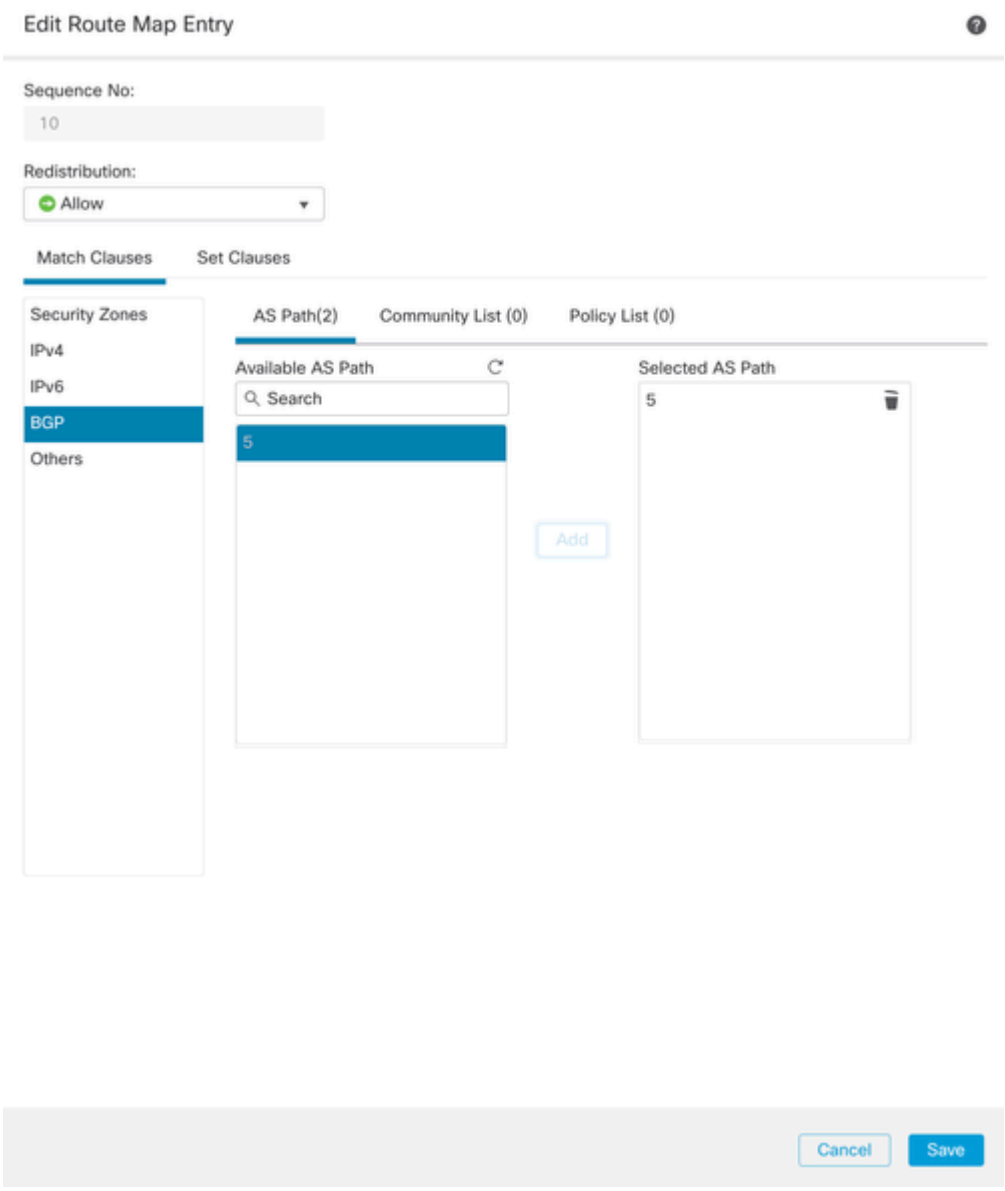


Step 6. Configure at least the next basic settings:

- Sequence No. - Select the **number** of the sequence.
- Redistribution - Select **Allow** (the action on the traffic is defined in Sequence No. In Step 2).



Step 7. Click **Match Clauses >BGP** and select the **AS Path Object** created in Step 1, then click **Add**.

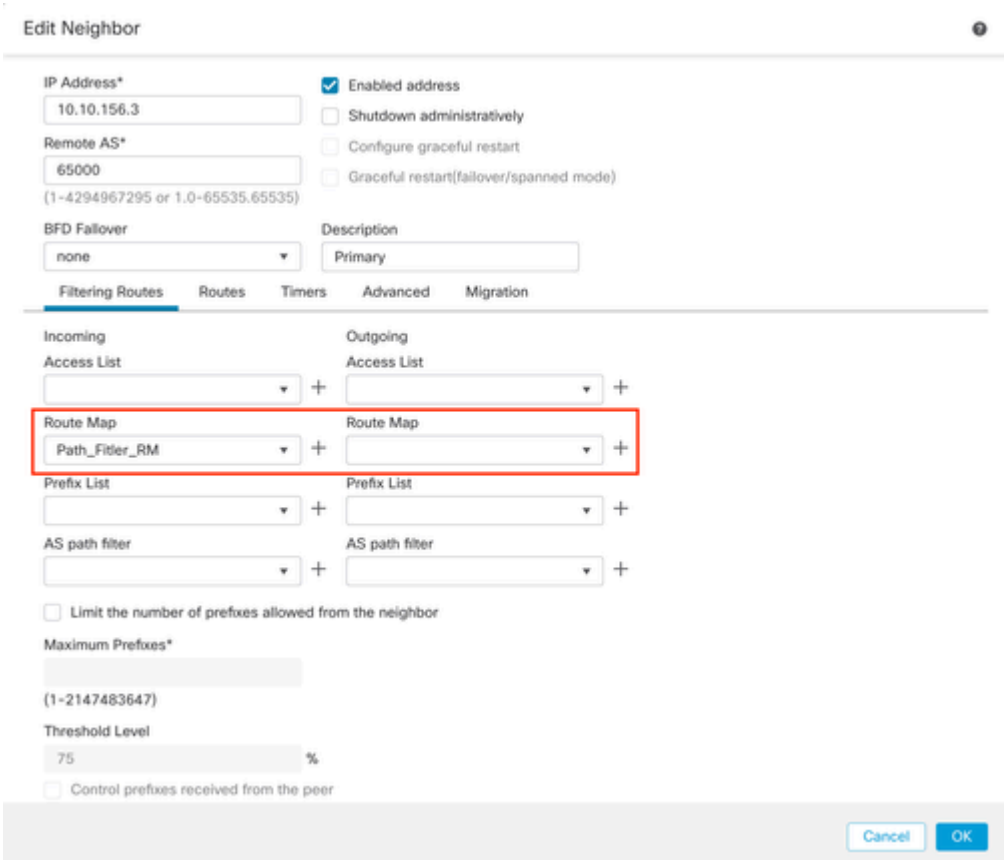


Step 8. Click **Save**.

Step 9.Click **Device >Device Management**, and select the **Device** to apply the **Regular Expression**.

Step 10.Click **Routing >IPv4** in the **BGP** section, then **Neighbor**.

Step 11.Click the **Edit** icon for the Neighbor where you want to apply the **AS Path Filter**. On the **Filtering Routes** section, select the **Route Map** from the drop-down menu in the **Incoming** or **Outgoing** traffic in the **Route Map** section.



Step 12. Click **OK >Save**.