

Using endpoint groups

- [Configuring Kaa](#)
 - [Profile filters](#)
 - [Custom endpoint groups](#)

Kaa provides a mechanism for endpoints aggregation within the application that is based on groups. Grouping endpoints enables you to activate specific [configuration](#) parameters, control access to [notification](#) topics, etc. Please review the [Kaa grouping design reference](#) for more details.

This guide will familiarize you with the basic concepts of designing endpoint groups. It is assumed that you have either set up a [Kaa Sandbox](#), or a [fully-blown Kaa cluster](#) already and that you have created a [tenant](#) and an [application](#) in Kaa. It is also strongly recommended to review [collecting endpoint profiles guide](#) before you proceed with this one.

Configuring Kaa

Each Kaa application has a special, built-in, non-user-editable group "all" with weight 0. The associated profile filter is automatically set equal to "true" for each profile schema version in the system. Therefore, group "all" contains every endpoint registered in the application. You can create your custom endpoint groups using the [Admin UI](#) or [REST API](#).

Once created, an endpoint group does not contain any endpoints, so you will need to create and add custom profile filters to the group.

Profile filters

Each group can be associated with multiple profile filters, each specific to a separate profile schema version. Only one profile filter can be defined for a profile schema version.

We will use profile schema defined in "[collecting endpoint profiles guide](#)" section and the following sample profiles:

Profile A	Profile B	Profile C
<pre>{ "id": "device1", "os": "Android", "os_version": "2.2", "build": "2.0.1" }</pre>	<pre>{ "id": "device2", "os": "Android", "os_version": "4.0.1", "build": "3.0 RC1" }</pre>	<pre>{ "id": "device3", "os": "iOS", "os_version": "8.0", "build": "3.0 RC1" }</pre>

Creating profile filters is possible through either [Admin UI](#) or [REST API](#).

Once a profile filter is created, you need to activate it. Filters that are not activated do not impact endpoint groups and do not affect the endpoints.

Custom endpoint groups

The table below demonstrates the use of profile filters and results of filtering for sample profiles.

Group Name	Filter	result for profile A	result for profile B	result for profile C
Android Froyo endpoints	<code>os.toString().equals("Android") and os_version.toString().startsWith("2.2")</code>	true	false	false
Android endpoints	<code>os.toString().equals("Android")</code>	true	true	false

iOS 8 endpoints	<code>os.toString().equals("iOS")</code> and <code>os_version.toString().startsWith("8")</code>	false	false	true
3.0 RC1 QA group endpoints	<code>build.toString().equals("3.0 RC1")</code>	false	true	true

Thus, "Android Froyo endpoints" group will contain only device A; "Android endpoints" group will contain devices A and B; "iOS 8 endpoints" group will contain device C, and "3.0 RC1 QA group endpoints" will contain endpoints B and C.