



Parameter Optimizers

Web applications contain a large number of URLs that can include multiple parameters in which, parts of parameters are static/same. When **Learning** is enabled for a web application on the Barracuda Web Application Firewall, URL profiles and parameter profiles are created based on the traffic processed by the Barracuda Web Application Firewall according to a set of matching criteria specified on the **WEBSITES > Adaptive Profiling** page, in the **Adaptive Profiling** section. In this scenario, the Barracuda Web Application Firewall creates a parameter profile for each parameter on every occurrence, which may result in populating a large number of profiles with the same parameters.

For example: Consider 'Learning' was enabled for a particular service and the 'Learning Utility' creates the following parameters:

param1
param2
...
...
...
param100

Managing a huge number of profiles having the same security requirement can become unnecessarily complex to handle. You can handle such issues by properly identifying the pattern within the parameters and coalescing multiple parameter profiles into one. The parameter profiles mentioned in the example above can be coalesced as:

- **Start Token:** param

Where:

- **Start Token** is configured with the parameter substring that remains constant from the start of the parameter. Anything after the configured **Start Token** value is considered as a variable.

This will coalesce all parameter profiles into one i.e. param*.

Using Parameter Optimizers

You can configure parameter optimizers in any of the following two ways:

1. If you have prior knowledge of the parameter structure, configure parameter optimizers before enabling **Learning** for the web application.
OR
2. Enable **Learning** for the web application and allow the Barracuda Web Application Firewall to create profiles for the web application. This may result in creating multiple URL/parameter profiles with identifiable patterns. Note the created patterns, configure parameter optimizers and click **Merge** to coalesce multiple parameter profiles into one.

Steps to Add a Parameter Optimizer

1. Go to the **WEBSITES > Adaptive Profiling** page.
2. In the **Parameter Optimizers** section, click **Add** next to the service for which you want to add URL optimizer. The **Create Parameter Profile Optimizer** page appears.
3. In the **Create Parameter Profile Optimizer** page, specify values for **Optimizer Name**, and **Start Token**:
4. Click **Save**.

