

tf.variable_axis_size_partitioner

```
variable_axis_size_partitioner(  
    max_shard_bytes,  
    axis=0,  
    bytes_per_string_element=16,  
    max_shards=None  
)
```

Defined in [tensorflow/python/ops/partitioned_variables.py](#).

See the guide: [Variables > Variable Partitioners for Sharding](#)

Get a partitioner for VariableScope to keep shards below `max_shard_bytes`.

This partitioner will shard a Variable along one axis, attempting to keep the maximum shard size below `max_shard_bytes`. In practice, this is not always possible when sharding along only one axis. When this happens, this axis is sharded as much as possible (i.e., every dimension becomes a separate shard).

If the partitioner hits the `max_shards` limit, then each shard may end up larger than `max_shard_bytes`. By default `max_shards` equals `None` and no limit on the number of shards is enforced.

One reasonable value for `max_shard_bytes` is `(64 << 20) - 1`, or almost `64MB`, to keep below the protobuf byte limit.

Args:

- `max_shard_bytes`: The maximum size any given shard is allowed to be.
- `axis`: The axis to partition along. Default: outermost axis.
- `bytes_per_string_element`: If the `Variable` is of type string, this provides an estimate of how large each scalar in the `Variable` is.
- `max_shards`: The maximum number of shards in int created taking precedence over `max_shard_bytes`.

Returns:

A partition function usable as the `partitioner` argument to `variable_scope`, `get_variable`, and `get_partitioned_variable_list`.

Raises:

- `ValueError`: If any of the byte counts are non-positive.

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