

tf.scatter_update

```
scatter_update(
    ref,
    indices,
    updates,
    use_locking=True,
    name=None
)
```

Defined in `tensorflow/python/ops/gen_state_ops.py`.

See the guide: [Variables > Sparse Variable Updates](#)

Applies sparse updates to a variable reference.

This operation computes

```
# Scalar indices
ref[indices, ...] = updates[...]

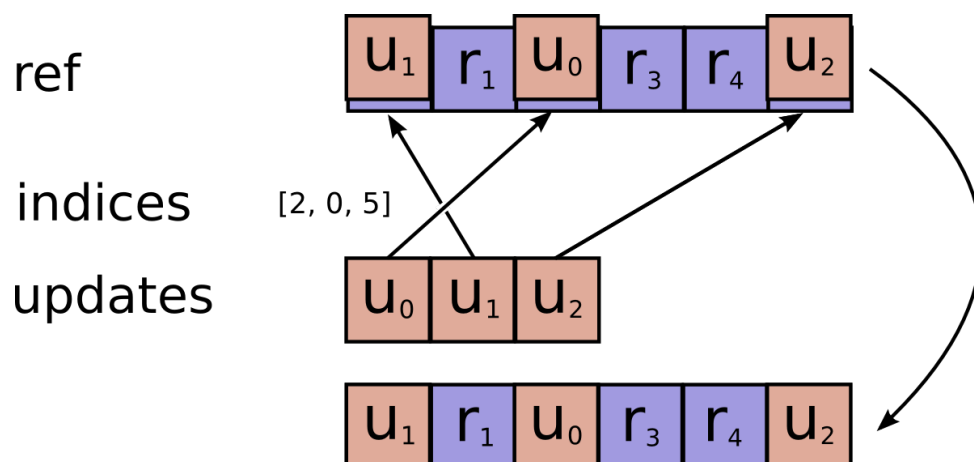
# Vector indices (for each i)
ref[indices[i], ...] = updates[i, ...]

# High rank indices (for each i, ..., j)
ref[indices[i, ..., j], ...] = updates[i, ..., j, ...]
```

This operation outputs `ref` after the update is done. This makes it easier to chain operations that need to use the reset value.

If values in `ref` is to be updated more than once, because there are duplicate entries in `indices`, the order at which the updates happen for each value is undefined.

Requires `updates.shape = indices.shape + ref.shape[1:]`.



Args:

- ref**: A mutable **Tensor**. Should be from a **Variable** node.
- indices**: A **Tensor**. Must be one of the following types: **int32**, **int64**. A tensor of indices into the first dimension

of `ref`.

- `updates` : A `Tensor`. Must have the same type as `ref`. A tensor of updated values to store in `ref`.
- `use_locking` : An optional `bool`. Defaults to `True`. If True, the assignment will be protected by a lock; otherwise the behavior is undefined, but may exhibit less contention.
- `name` : A name for the operation (optional).

Returns:

Same as `ref`. Returned as a convenience for operations that want to use the updated values after the update is done.

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Last updated November 2, 2017.

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