

How MERGE Actions are implemented

-- A MERGE Statement Example

```
MERGE INTO MyProducts MP
USING Products Prod
ON MP.Product_PK = Prod.ProductID
WHEN MATCHED AND (MP.Product_PK % 10 = 0) THEN
    DELETE
WHEN MATCHED THEN
    UPDATE SET
        price = Prod.UnitPrice
        ,SupplierID = Prod.SupplierID
WHEN NOT MATCHED THEN
    INSERT
        (Product_PK, ProdName, SupplierID, Price)
    VALUES
        (Prod.ProductID, Prod.ProductName
        ,Prod.SupplierID, Prod.UnitPrice);
```

How MERGE Statement is implemented

```
MERGE INTO MyProducts MP
USING Products Prod
ON MP.Product_PK = Prod.ProductID
WHEN MATCHED AND (MP.Product_PK % 10 = 0) THEN
    DELETE
```

```
DELETE MyProducts
FROM MyProducts MP
JOIN Products Prod
ON MP.ProductID = Prod.ProductID
WHERE MP.Product_PK % 10 = 0;
```

```
WHEN MATCHED THEN
    UPDATE SET
        price = Prod.UnitPrice
        ,SupplierID = Prod.SupplierID
```

```
UPDATE MyProducts
SET MP.Price = Prod.UnitPrice, MP.SupplierID = Prod.SupplierID
FROM MyProducts MP
JOIN Products Prod
ON MP.ProductID = Prod.ProductID;
```

```
WHEN NOT MATCHED THEN
    INSERT
        (Product_PK, ProdName, SupplierID, Price)
    VALUES
        (Prod.ProductID, Prod.ProductName
        ,Prod.SupplierID, Prod.UnitPrice)
```

```
INSERT INTO MyProducts (Product_PK, ProdName, SupplierID, Price)
SELECT ProductID, ProductName,SupplierID,UnitPrice
FROM Products
WHERE ProductID NOT IN (SELECT ProductID from MyProducts
    UNION SELECT ProductID from deleted)
```

```
USE Northwind;
```

```
-- Create MyProducts demo table.
```

```
CREATE TABLE MyProducts
(
    Product_PK INT NOT NULL
    ,ProdName NVARCHAR(80) NOT NULL
    ,SupplierID INT NULL
    ,Price MONEY NULL
);
```

```
/* Insert only even numbered rows from the Products table into
MyProducts. */
```

```
INSERT INTO MyProducts
            (Product_PK, ProdName, SupplierID, Price)
SELECT ProductID, ProductName, NULL, NULL
FROM Products
WHERE ProductID % 2 = 0
ORDER BY ProductID;
```

```
-- Verify contents of the demo table before MERGE.
```

```
SELECT * FROM MyProducts;
```