DATA TYPE CONVERSION

All fields in a data source have a data type. The data type reflects the kind of information stored in that field, for example integers (546), dates (11/20/2021) and strings ("Customer"). The data type of a field is identified in the Data pane by one of the icons shown below.

Icon	Data Type
Abc	Text / String values
📅	Date values
📅⏱	Date & Time values
#	Numerical values (decimal/whole)
T|F	Boolean values
🌐	Geographic values

Mostly Tableau will detect the fields correctly and assign the appropriate data types. However, there might be some occasions where we may have to manually change the data type as per our requirement. We will go through the possible data type conversions

NUMBER (DECIMAL) DATA TYPE CONVERSIONS

TARGET DATA TYPE

SOURCE DATA TYPE

Number (decimal)

Number (whole) — Decimal point is removed, and number approximated to closest whole number e.g: 261.96 to 262

Date && Time — Number changed to Date format 01-01-1900 00:00:00, A number is treated as the day in numeric order from 01-01-1990

Date — Number changed to Date format 01-01-1900, A number is treated as the day in numeric order from 01-01-1990

String — Numbers are treated as text

Boolean — All values replaced with nulls

Geographic Role — But the data type conversion may not be meaningful or helpful

NUMBER (WHOLE) DATA TYPE CONVERSIONS

TARGET DATA TYPE

SOURCE DATA TYPE

Number (whole)

Number (decimal) — Decimal point added e.g: 1 to 1.00

Date && Time — Number changed to Date format 01-01-1900 00:00:00, A number is treated as the day in numeric order from 01-01-1990

Date — Number changed to Date format 01-01-1900, A number is treated as the day in numeric order from 01-01-1990

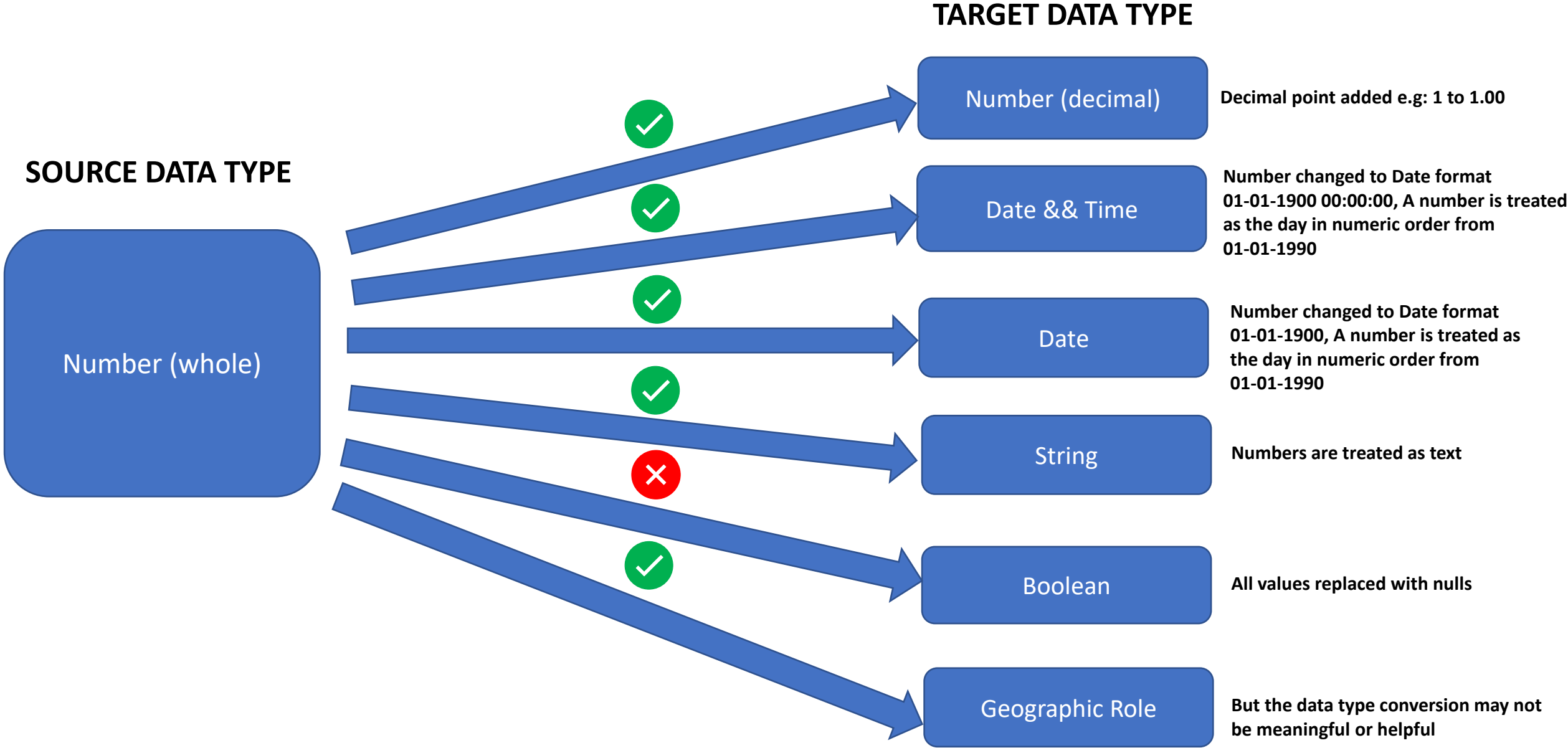String — Numbers are treated as text

Boolean — All values replaced with nulls
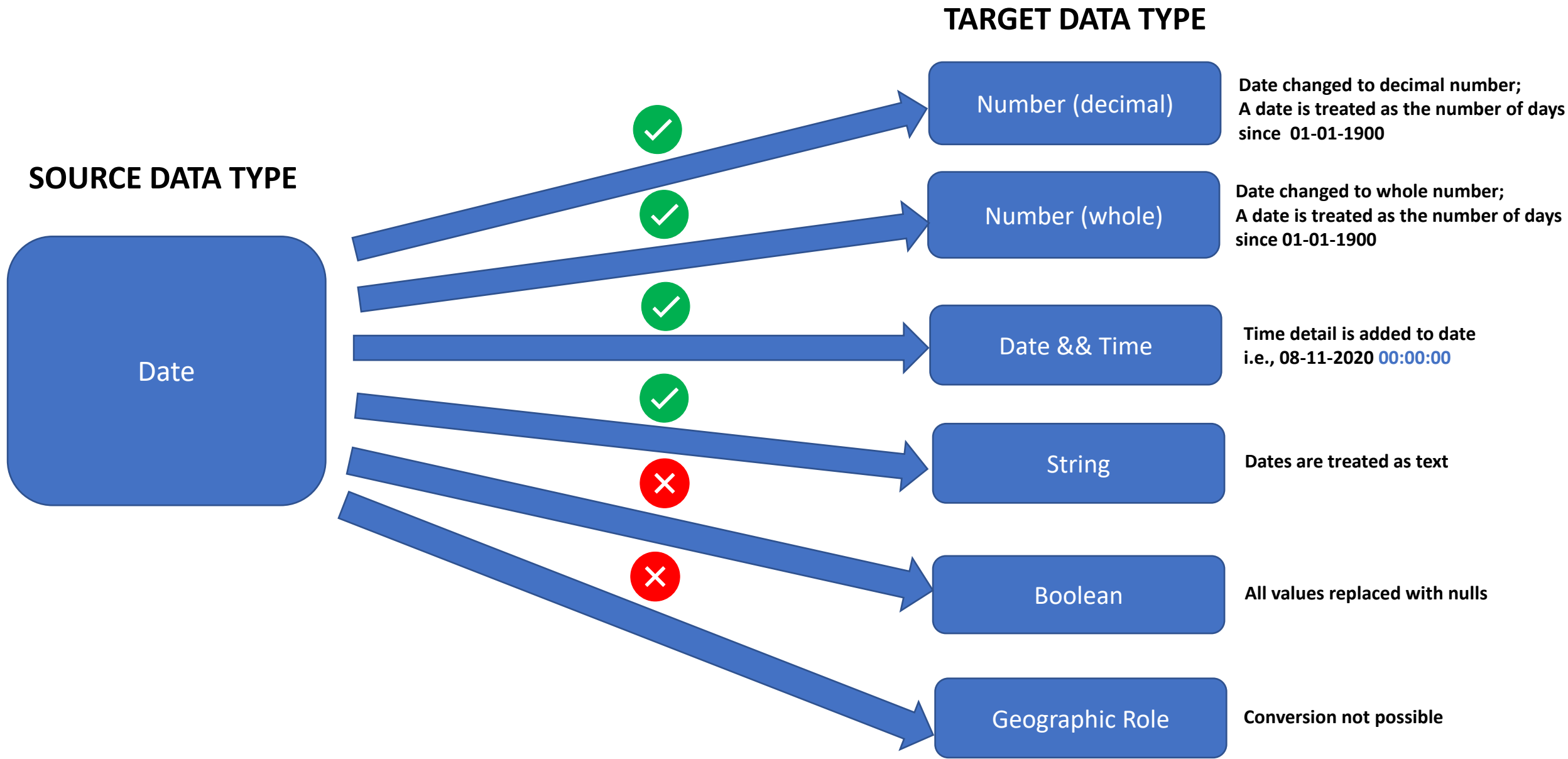
Geographic Role — But the data type conversion may not be meaningful or helpful

DATE DATA TYPE CONVERSIONS

TARGET DATA TYPE

SOURCE DATA TYPE

Date

Number (decimal) — Date changed to decimal number; A date is treated as the number of days since 01-01-1900

Number (whole) — Date changed to whole number; A date is treated as the number of days since 01-01-1900

Date && Time — Time detail is added to date i.e., 08-11-2020 00:00:00

String — Dates are treated as text

Boolean — All values replaced with nulls

Geographic Role — Conversion not possible

DATE && TIME DATA TYPE CONVERSIONS

TARGET DATA TYPE

SOURCE DATA TYPE

Date && Time

Number (decimal) — Date changed to decimal number; A date is treated as the number of days since 01-01-1900

Number (whole) — Date changed to whole number; A date is treated as the number of days since 01-01-1900

Date — The time portion is removed

String — Dates are treated as text

Boolean — All values replaced with nulls

Geographic Role — Conversion not possible

STRING DATA TYPE CONVERSIONS

SOURCE DATA TYPE

TARGET DATA TYPE

String

❌ → Number (decimal) — All values replaced with nulls

❌ → Number (whole) — All values replaced with nulls

❌ → Date && Time — All values replaced with nulls

❌ → Date — All values replaced with nulls

❌ → Boolean — All values replaced with nulls

✅ → Geographic Role — But the data type conversion may not be meaningful or helpful

BOOLEAN DATA TYPE CONVERSIONS

TARGET DATA TYPE

SOURCE DATA TYPE

GEOGRAPHIC DATA TYPE CONVERSIONS

SOURCE DATA TYPE

TARGET DATA TYPE

Geographic

Number (decimal) — All values replaced with nulls

Number (whole) — All values replaced with nulls

Date && Time — All values replaced with nulls

Date — All values replaced with nulls

Boolean — All values replaced with nulls