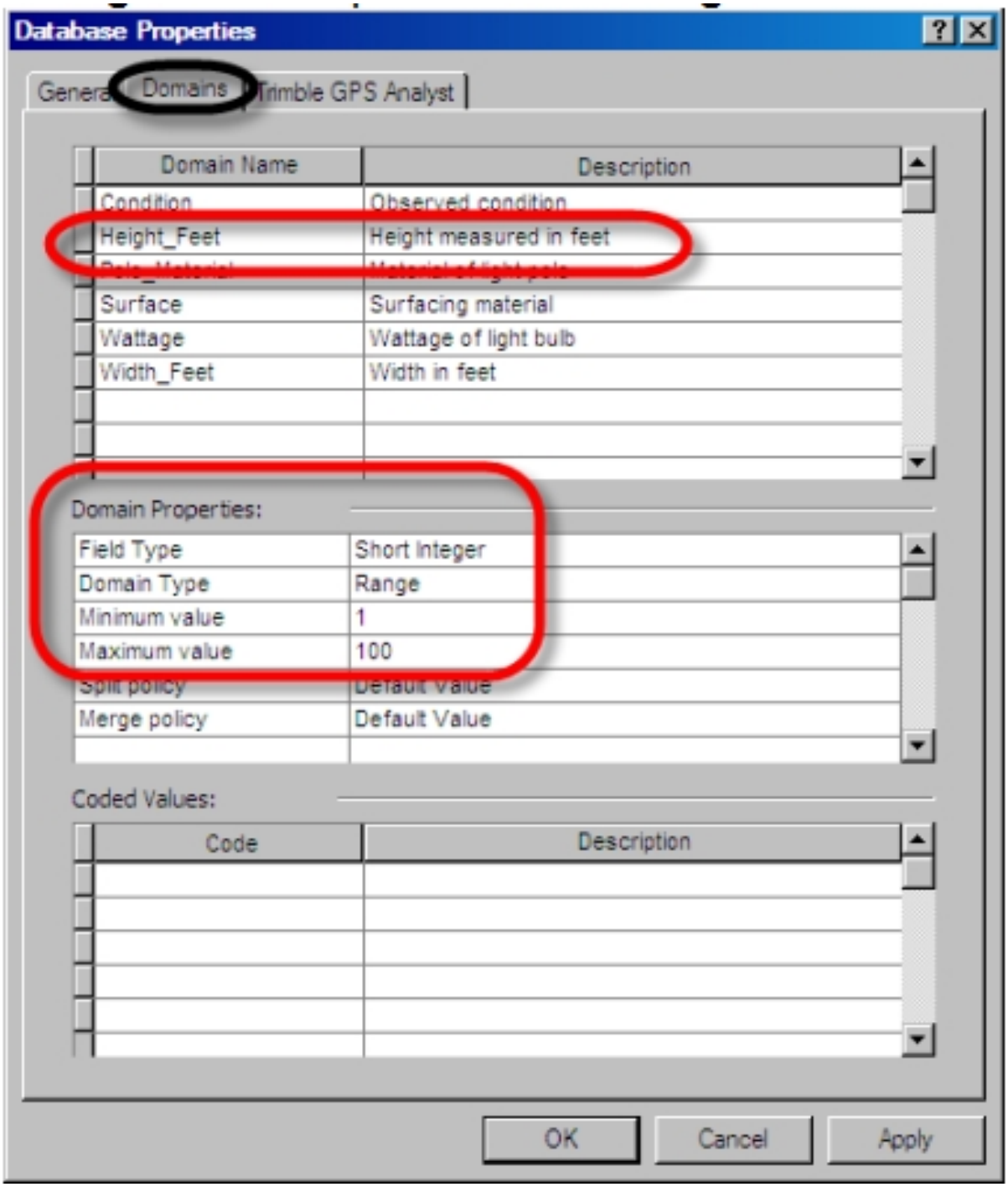
The range domain specifies a valid range of values for a numeric attribute.

Domains tab of the Properties window of a range value domain



Domain Name

The second Domain Name shown is Height_Feet. Height_Feet was also used as the field name for the feature class we explored for light poles. This is acceptable but it is not necessary for the names to match. A more generic name like Height_Feet was chosen to allow users to use this same domain to record the heights of other features that are also 1-100 feet tall. This domain could have been named Pole_Height_Feet if it were to be used exclusively for that purpose. There is no 'correct' choice; it depends on the nature of the other feature classes in

your geodatabase. This is the heart of the challenge in designing a geodatabase.

Description

The Description for this domain is in the next column. The description does not have to adhere to the limitations of the database, so they can contain special characters such as spaces. By specifying a description, you can use a more "user friendly" description of the content of the field than the domain name.

Domain Properties

The Field Type for this domain is Short Integer. To reiterate, the domain name of a domain and the field name of a feature class attribute field class DO NOT have to match to apply a domain to a feature class attribute. However, it IS REQUIRED that the field type of a domain must match the data type of a feature class attribute field to be used for that feature class. This will become clearer in Step 2 as we build a database together.

Looking back at the feature class property window for Light poles, you will see the data type of the Height_Feet attribute field is Short Integer. As you see here, the field type of the Height_Feet domain is also Short Integer. Therefore, this domain can be used as the range of valid values for the Height_Feet attribute field.

The **Domain Type** for this domain is Range and therefore requires specified **Minimum and Maximum Values.**

The **Split and Merge Policies** apply when editing features in ArcGIS Desktop.

Data collection

After locating a light pole feature by GPS, ArcPad will prompt you to enter an attribute value for Height_Feet. The numeric keyboard appears on the screen as a prompt for a numeric value. After you enter a value, ArcPad checks that a **Short Integer** which falls between the **Minimum** and
Maximum Values
was entered. If the entry does not meet these criteria, ArcPad will prompt you to re-enter a new value. This is enforced data integrity.

Note
It is not necessary to specify a domain for all field types. A feature class type that is short integer, long integer, float, or double without a specified domain will allow users to enter any integer or fractional value, regardless of minimum or maximum values.