

Working with Optional Elements

LightWave Client has several mechanisms to indicate the presence of optional elements. These mechanisms use a schema property to indicate the presence or absence of the element.

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Using the hideIfEmpty Property

The *hideIfEmpty*: *true* property may be set on any element to indicate that if the source element is *empty*, it should not be included in the request payload. An element is considered empty when it is completely filled with the element's string padding character. Note that the string padding may be explicitly set on the element using the *stringPadding* property, or inherited from its parent. In the following example, if element *optionalIfSpaces* is filled with spaces, or *optionalIfZeros* is filled with zeros, the elements will not be included in the request payload.

```
{
  "SampleType": {
    "elements": [
      {
        "name": "optionalIfSpaces",
        "type": "string",
        "size": 32,
        "hideIfEmpty": true,
        "stringPadding": "spaces"
      },
      {
        "name": "optionalIfZeros",
        "type": "string",
        "size": 32,
        "hideIfEmpty": true,
        "stringPadding": "zeros"
      }
    ]
  }
}
```

Using the isSet Property

The *isSet* property may be set on any element, and references an integer element which is used to indicate the presence or absence of the source element. In the following example, element *theAddress* is included in the request payload only if the value of element *isAddressSet* is nonzero. In this example, the *hide* property is set on the *isAddressSet* element to indicate that it is never included in the request payload. Note that when a response is received, the *isSet* target element is set to zero if the source element is not present in the response, or nonzero if it is present.

```
{
  "SampleType": {
    "elements": [
      {
        "name": "isAddressSet",
        "type": "int",
        "size": 4,
        "hide": true
      },
      {
        "name": "theAddress",
        "type": "AddressType",
        "isSet": "isAddressSet"
      }
    ]
  }
}
```

Using the minOccurs Property



Using the `minOccurs` property has a mechanism to hide string elements is deprecated. New definitions should use `hideIfEmpty`.

The `"minOccurs": 0` property may be set on elements with `"type": "string"` to indicate that if the source element is filled with the string padding character, it should not be included in the request payload. In the following example, if element `optionalIfSpaces` is filled with spaces, or `optionalIfZeros` is filled with zeros, the elements will not be included in the request payload

```
{
  "SampleType": {
    "elements": [
      {
        "name": "optionalIfSpaces",
        "type": "string",
        "size": 32,
        "minOccurs": 0,
        "stringPadding": "spaces"
      },
      {
        "name": "optionalIfZeros",
        "type": "string",
        "size": 32,
        "minOccurs": 0,
        "stringPadding": "zeros"
      }
    ]
  }
}
```