

## 41. PHP SimpleXML

PHP SimpleXML handles the most common XML tasks and leaves the rest for other extensions.

### 41.1. What is PHP SimpleXML?

SimpleXML is new in PHP 5.

The SimpleXML extension provides a simple way of getting an XML element's name and text.

Compared to DOM or the Expat parser, SimpleXML just takes a few lines of code to read text data from an XML element.

SimpleXML converts the XML document (or XML string) into an object, like this:

- Elements are converted to single attributes of the SimpleXMLElement object. When there's more than one element on one level, they are placed inside an array
- Attributes are accessed using associative arrays, where an index corresponds to the attribute name
- Text inside elements is converted to strings. If an element has more than one text node, they will be arranged in the order they are found

SimpleXML is fast and easy to use when performing tasks like:

- Reading/Extracting data from XML files/strings
- Editing text nodes or attributes

However, when dealing with advanced XML, you are better off using the Expat parser or the XML DOM.

### 41.2. Installation

As of PHP 5, the SimpleXML functions are part of the PHP core. No installation is required to use these functions.

### 41.3. PHP SimpleXML Examples

Assume we have the following XML file, "note.xml":

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<note>
  <to>Tove</to>
  <from>Jani</from>
  <heading>Reminder</heading>
  <body>Don't forget me this weekend!</body>
</note>
```

Now we want to output different information from the XML file above:

## Example 1

Output keys and elements of the \$xml variable (which is a SimpleXMLElement object):

```
<?php
$xml=simplexml_load_file("note.xml");
print_r($xml);
?>
```

The output of the code above will be:

```
SimpleXMLElement Object ( [to] => Tove [from] => Jani
[heading] => Reminder [body] => Don't forget me this
weekend! )
```

## Example 2

Output the data from each element in the XML file:

```
<?php
$xml=simplexml_load_file("note.xml");
echo $xml->to . "<br>";
echo $xml->from . "<br>";
echo $xml->heading . "<br>";
echo $xml->body;
?>
```

The output of the code above will be:

```
Tove
Jani
Reminder
Don't forget me this weekend!
```

## Example 3

Output the element's name and data for each child node:

```
<?php
$xml=simplexml_load_file("note.xml");
echo $xml->getName() . "<br>";

foreach($xml->children() as $child)
{
    echo $child->getName() . ": " . $child . "<br>";
}
?>
```

The output of the code above will be:

```
note
to: Tove
from: Jani
heading: Reminder
body: Don't forget me this weekend!
```

## 41.4. More PHP SimpleXML

For more information about the PHP SimpleXML functions, visit our [PHP SimpleXML Reference](#).