

# How to convert a CSV file to XML with Node.js

File conversion from one format to another is one of the most common operations in many software projects. Node.js, with its extensive library of packages and tools, makes this process simple and efficient. In this article, we will see how to convert a CSV file to XML using Node.js.

To convert a CSV file to XML, we will use two packages:

- **csv-parser** to read and parse CSV files.
- **xmlbuilder2** to create the XML file.

Install the packages with the command:

```
npm install csv-parser xmlbuilder2
```

Then, create the main code:

```
const fs = require('fs');
const csv = require('csv-parser');
const { create } = require('xmlbuilder2');

// Main function
function convertCsvToXml(csvFilePath, xmlFilePath) {
    const data = [];

    // Read the CSV file
    fs.createReadStream(csvFilePath)
```

```
        .pipe(csv())
        .on('data', (row) => {
            data.push(row); // Add each CSV row to
the array
        })
        .on('end', () => {
            // Convert the array of objects to XML
            const xmlObj = {
                root: {
                    record: data
                }
            };

            const xml = create(xmlObj).end({
                prettyPrint: true
            });

            // Write the XML file
            fs.writeFileSync(xmlFilePath, xml,
'utf8');
            console.log(`Conversion complete! XML
file saved at: ${xmlFilePath}`);
        })
        .on('error', (err) => {
            console.error('Error reading the CSV:', err);
        });
    }

// File paths
const csvFilePath = 'input.csv'; // Replace with your
CSV file
const xmlFilePath = 'output.xml'; // Output XML file
name
```

```
// Start conversion  
convertCsvToXml(csvFilePath, xmlFilePath);
```

Create an `input.csv` file with the sample content:

```
name,age,city  
Alice,30,New York  
Bob,25,Los Angeles  
Charlie,35,Chicago
```

Run the code, and if everything is set up correctly, you will see a message confirming the creation of the XML file. The `output.xml` file should look something like this:

```
<?xml version="1.0"?>  
<root>  
  <record>  
    <name>Alice</name>  
    <age>30</age>  
    <city>New York</city>  
  </record>  
  <record>  
    <name>Bob</name>  
    <age>25</age>  
    <city>Los Angeles</city>  
  </record>  
  <record>  
    <name>Charlie</name>  
    <age>35</age>
```

```
<city>Chicago</city>
</record>
</root>
```

## Conclusion

Converting a CSV file to XML with Node.js is a simple process thanks to the `csv-parser` and `xmlbuilder2` packages. This technique can be used in various applications, such as data integration or format migration.