Department of Industrial Relations

eCPR XML Guidelines

August, 2015

Version 1.9

Contents

1. Introduction

This guide will provide guidelines for contractors familiar with using XML files to upload Certified Payroll Records in XML format.

2. System Requirements

XML files can be created and edited with any standard text editor such as Notepad (PC) or Textedit (Mac). We highly recommend Notepad++ or XML Notepad for editing and validating XML files against a schema file.
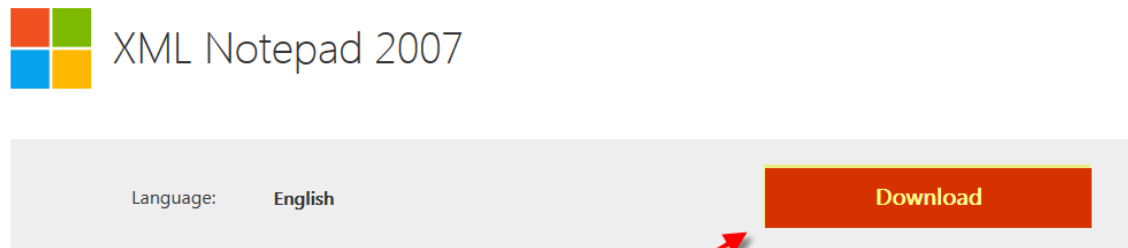
3. XML File Validation

3.1 Software Installation

- There are several freeware, and commercial products to validate XML files against a schema. Following software is a free XML editor from Microsoft:
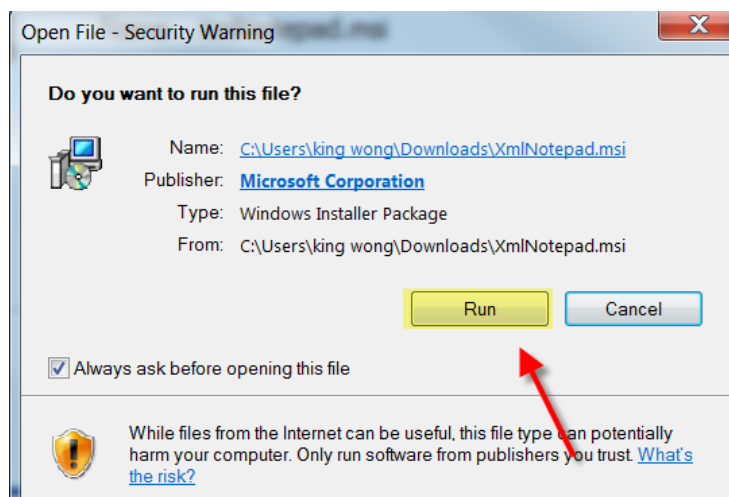
    1. **XML Notepad**

- To download:

    1. Go to this Webpage: http://www.microsoft.com/en-us/download/details.aspx?id=7973

    2. Click "**Download**".

3. After the download is done, Click "**Run**" to start the installation process.

4. Go through the installation wizard and click "**Install**" to complete the installation.
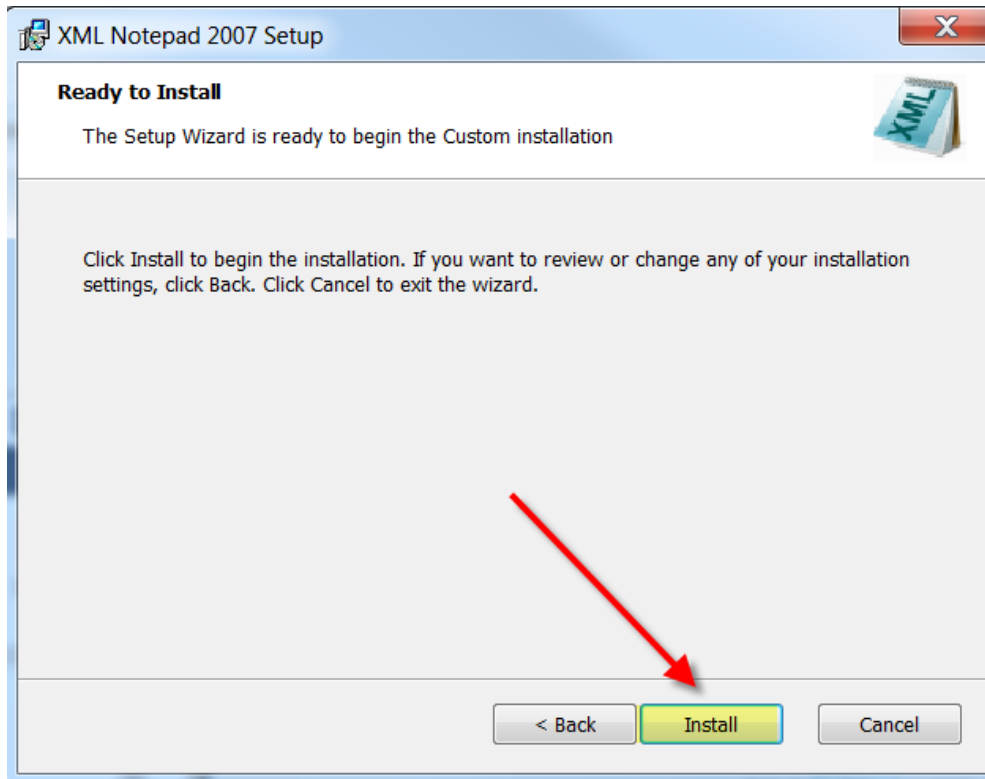
5. A following page with additional links to XML is shown after a successful installation:

3.2 How to Validate an XML file against the eCPR schema file using XML Notepad

- The following files are available to help you follow eCPR XML guideline:

  1. **CPRSample.xml (XML with sample data)**

  2. **CPR.xsd (eCPR Schema)**

- To save the **CPRSample.xml** and **CPR.xsd** files to a local drive:

  1. Go to eCPR Home Page.

  2. Right-click on the "**eCPR schema CPR.xsd**" link and choose "**Save target as**." Change the file extension to **.xsd** and save as type "**XSD File**" or "**All Files(*.*)**" to a local drive.
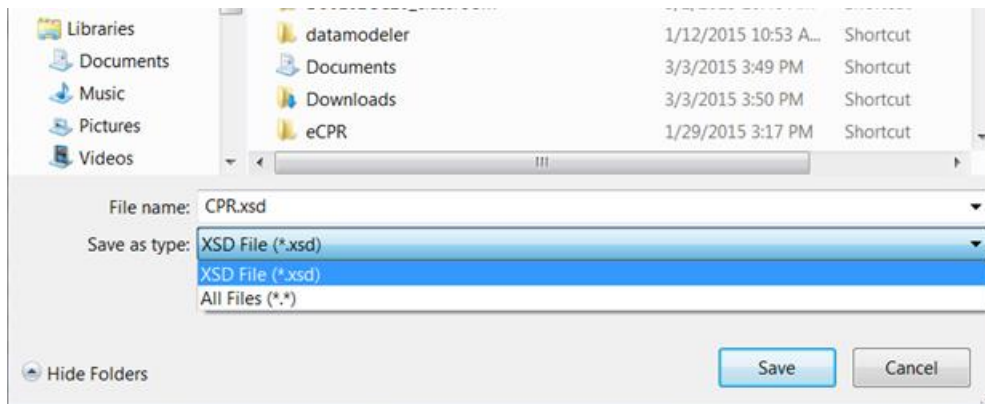
  3. Right-click on the "**CPRSample.xml**" and choose "**Save target as.**" Change the file extension to **.xml** and save as type "**XML File**" or "**All Files(*.*)**" to a local drive.
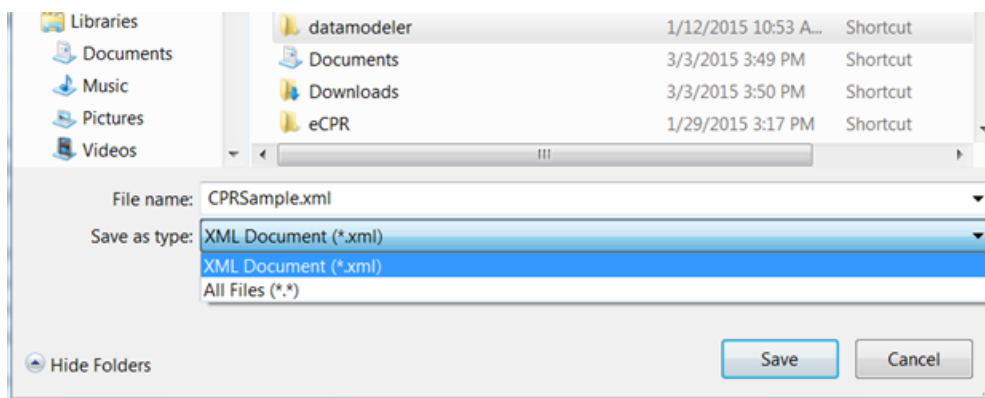
- To validate XML files against the eCPR Schema:

1. Launch **XML Notepad**

2. Click "**File**" from the menu bar, and select "**Open**" and browse to **CPRSample.XML** location to open the file. The file will open with a vertically split window of "Tree View" on the left and the texts of values on the right.
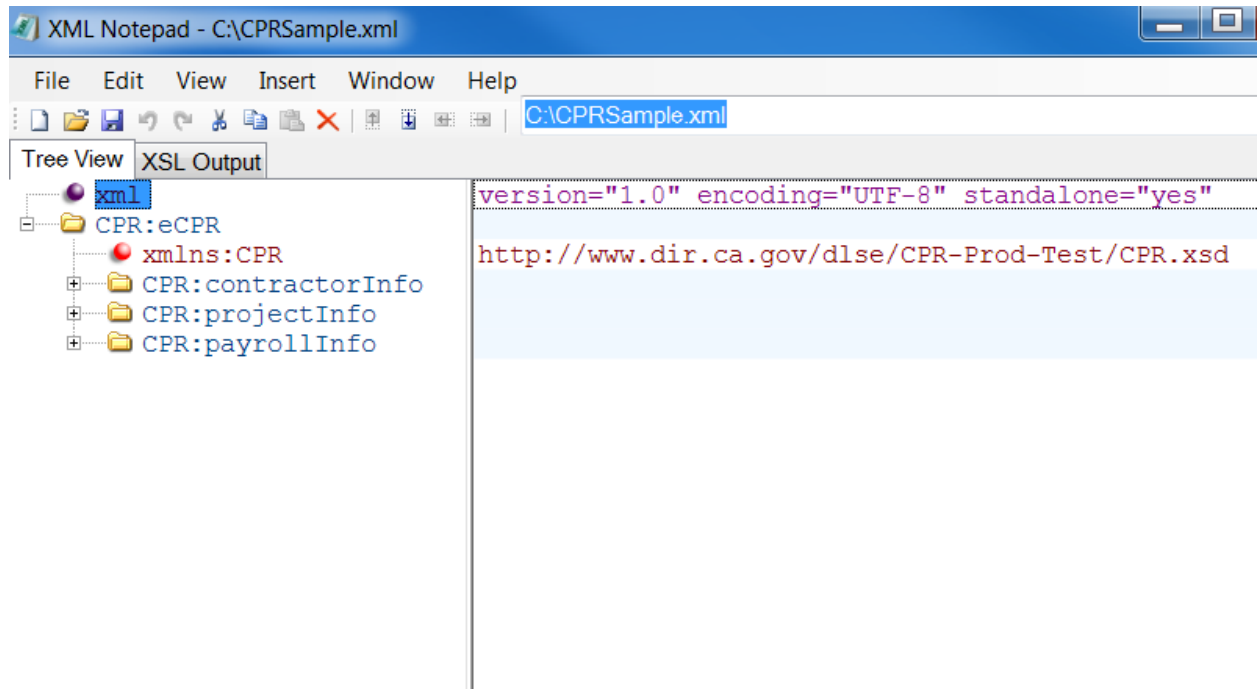
3. After the **CPRSample.xml** is open in the XML Notepad, Click "**View**" from the menu bar and select "**Schemas**".
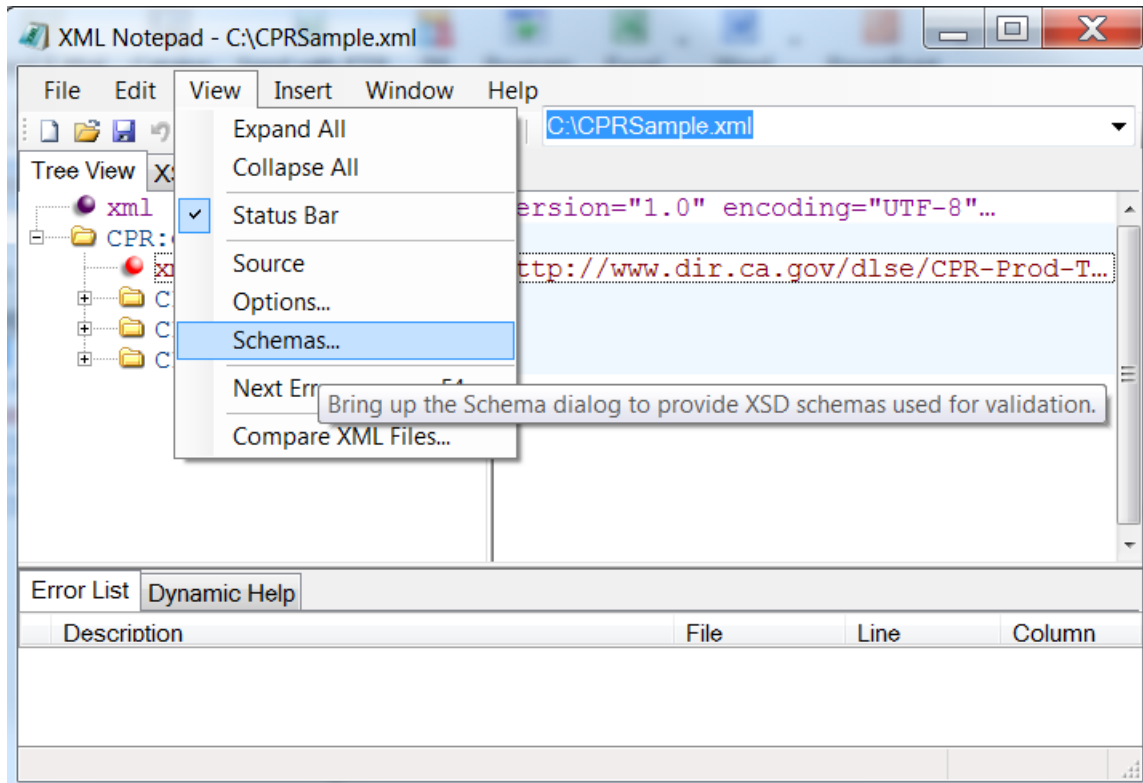
4. The XML Schemas diaglog box will pops up. If there are any schemas listed in the XML schemas dialog box, click "**Clear"**. This will erase any schemas that have been previously loaded.

5. Click "**Add schemas"** and browse to the location of saved **CPR.xsd (eCPR schema).** Click "**Ok**" to load the schema.
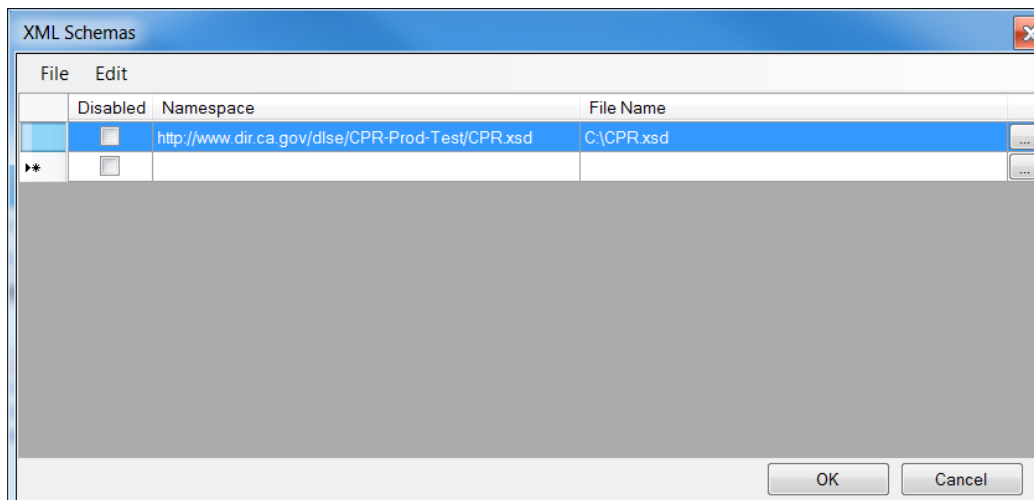
6. After the CPR.xsd is loaded, any errors that occur while editing the XML file will show up in the "**Error List tab**", at the bottom of the XML Notepad.

7. When you double click on the error, the record with the error will be opened on the right side with the value enclosed in a box.

8. Select or hover over the corresponding element to display the xsd: annotations.
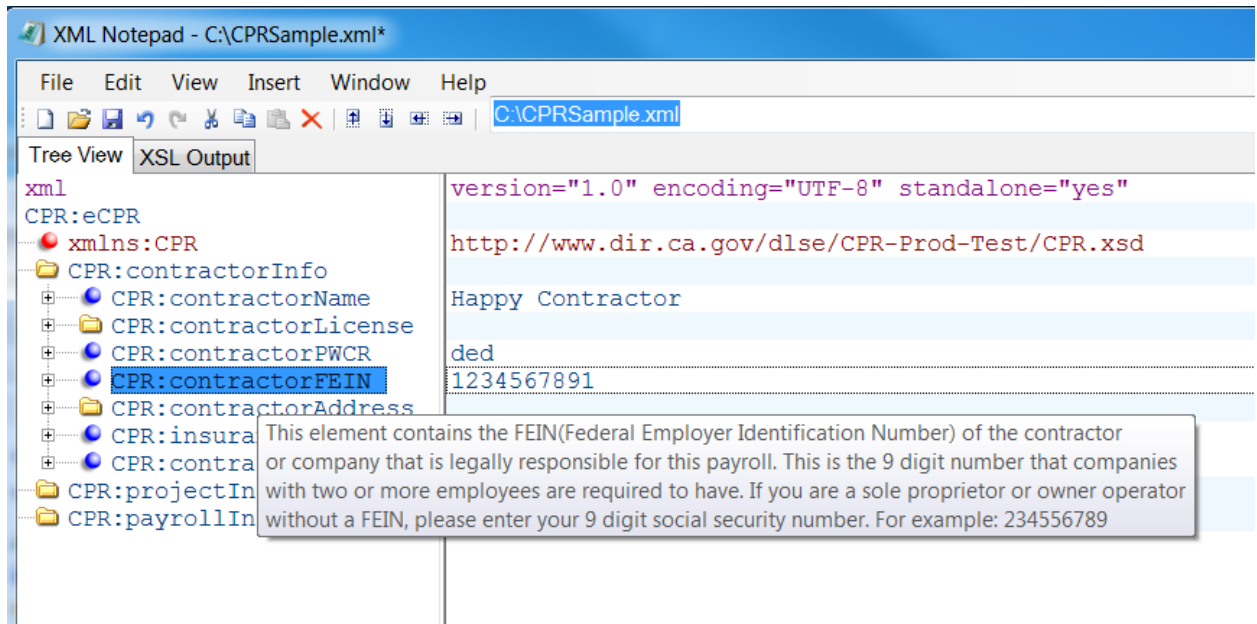
9. Fix the value and save the file.

- To view the source XML document:

1. Click "**View**" on the menu bar.

2. Select "**Source**".
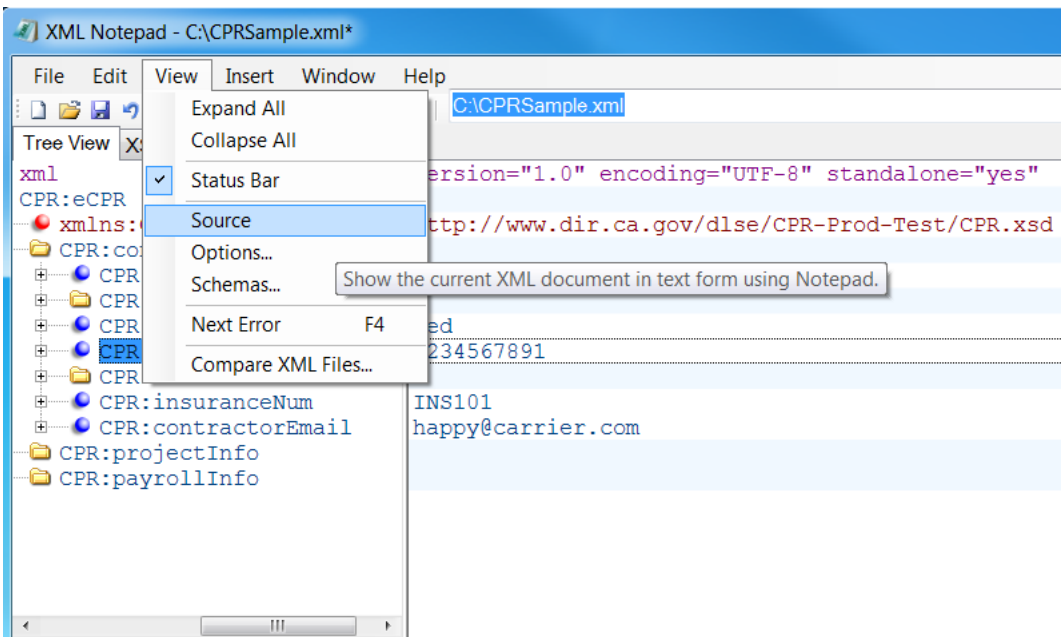
# 4. Create an XML file using CPRSample.xml as a template

- The following files are available to help you follow eCPR XML guideline:

  1. **CPRSample.xml (XML with sample data)**

  2. **CPR.xsd (eCPR Schema)**

- Save the **CPRSample.xml** and **CPR.xsd** files to a local or network drive.

- Open **CPR.xsd** with any standard text editor or XML editor. The file will open and display the existing code.

- Review the **CPR.xsd file**, and know the acceptable values of each element.

```xml
1  <?xml version="1.0" encoding="utf-8"?>
2  <xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema"
3      xmlns:CPR="http://oak01web/dlse/CPR-Test/CPR.xsd"
4      targetNamespace="http://oak01web/dlse/CPR-Test/CPR.xsd"
5      elementFormDefault="qualified" attributeFormDefault="unqualified">
6      <!--XML SCHEMA for electronic California Payroll Records version Pre-development-->
7      <!--day element changed according to iform-->
8      <xs:include schemaLocation=""></xs:include>
9      <xs:element name="eCPR">
10         <xs:complexType>
11             <xs:sequence>
12                 <xs:element name="contractorInfo">
13                     <xs:annotation>
14                         <xs:documentation>
15                             This element contains information of the
16                             contractor or company that is legally
17                             responsible for this payroll.
18                         </xs:documentation>
19                     </xs:annotation>
20                     <xs:complexType>
21                         <xs:sequence>
22                             <xs:element name="contractorName">
23                                 <xs:annotation>
24                                     <xs:documentation>
25                                         This element contains the name
26                                         of the contractor or company
27                                         that is legally responsible for
28                                         this payroll.
29                                     </xs:documentation>
30                                 </xs:annotation>
31                                 <xs:simpleType>
32                                     <xs:restriction base="xs:string">
33                                         <xs:minLength value="1" />
34                                         <xs:maxLength value="56" />
35                                     </xs:restriction>
36                                 </xs:simpleType>
```

element definition

acceptable values

- Open **CPRSample.xml** with any standard text editor or XML editor.

```
1  <?xml version="1.0" encoding="UTF-8"?>
2  <CPR:eCPR xmlns:CPR="http://oak01web/dlse/CPR-Test/CPR.xsd">
3    <CPR:contractorInfo>
4      <CPR:contractorName>Happy Carrier</CPR:contractorName>
5      <CPR:contractorLicense>
6        <CPR:licenseType>OTHER</CPR:licenseType>
7        <CPR:licenseNum>California Motor Carrier Permit: 0123456</CPR:licenseNum>
8      </CPR:contractorLicense>
9      <CPR:contractorPWCR>1234567890</CPR:contractorPWCR>
10     <CPR:contractorFEIN>123456789</CPR:contractorFEIN>
11     <CPR:contractorAddress>
12       <CPR:street>999 Carrier Rd</CPR:street>
13       <CPR:city>Oakland</CPR:city>
14       <CPR:state>CA</CPR:state>
15       <CPR:zip>94612</CPR:zip>
16     </CPR:contractorAddress>
17     <CPR:insuranceNum>Insurance101</CPR:insuranceNum>
18     <CPR:contractorEmail>happy@carrier.com</CPR:contractorEmail>
19   </CPR:contractorInfo>
```

- **Edit the file:**

  1. Enter the appropriate values for all fields under <CPR:contractorInfo> element:

```
1  <?xml version="1.0" encoding="utf-8"?>
2  <CPR:eCPR xmlns:CPR="http://www.dir.ca.gov/dlse/CPR-Prod-Test/CPR.xsd">
3    <CPR:contractorInfo>
4      <CPR:contractorName>Happy Carrier</CPR:contractorName>
5      <CPR:contractorLicense>
6        <CPR:licenseType>OTHER</CPR:licenseType>
7        <CPR:licenseNum>California Motor Carrier Permit: 0123456</CPR:licenseNum>
8      </CPR:contractorLicense>
9      <CPR:contractorPWCR>1234567890</CPR:contractorPWCR>
10     <CPR:contractorFEIN>123456789</CPR:contractorFEIN>
11     <CPR:contractorAddress>
12       <CPR:street>999 Carrier Rd</CPR:street>
13       <CPR:city>Oakland</CPR:city>
14       <CPR:state>CA</CPR:state>
15       <CPR:zip>94612</CPR:zip>
16     </CPR:contractorAddress>
17     <CPR:insuranceNum>Insurance101</CPR:insuranceNum>
18     <CPR:contractorEmail>happy@carrier.com</CPR:contractorEmail>
19   </CPR:contractorInfo>
```

2. For the "Lincense Type" field, enter "CSLB", "PL", or "OTHER".

```xml
 1  <?xml version="1.0" encoding="utf-8"?>
 2  <CPR:eCPR xmlns:CPR="http://www.dir.ca.gov/dlse/CPR-Prod-Test/CPR.xsd">
 3    <CPR:contractorInfo>
 4      <CPR:contractorName>Happy Carrier</CPR:contractorName>
 5      <CPR:contractorLicense>
 6        <CPR:licenseType>OTHER</CPR:licenseType>
 7        <CPR:licenseNum>California Motor Carrier Permit: 0123456</CPR:licenseNum>
 8      </CPR:contractorLicense>
 9      <CPR:contractorPWCR>1234567890</CPR:contractorPWCR>
10      <CPR:contractorFEIN>123456789</CPR:contractorFEIN>
11      <CPR:contractorAddress>
12        <CPR:street>999 Carrier Rd</CPR:street>
13        <CPR:city>Oakland</CPR:city>
14        <CPR:state>CA</CPR:state>
15        <CPR:zip>94612</CPR:zip>
16      </CPR:contractorAddress>
17      <CPR:insuranceNum>Insurance101</CPR:insuranceNum>
18      <CPR:contractorEmail>happy@carrier.com</CPR:contractorEmail>
19    </CPR:contractorInfo>
```

3. For the "PWCR" field, enter "NA" if you have not registered for the PWCR. If you wish to apply for PWCR, please follow this link: https://efiling.dir.ca.gov/PWCR/

```xml
 3    <CPR:contractorInfo>
 4      <CPR:contractorName>Happy Carrier</CPR:contractorName>
 5      <CPR:contractorLicense>
 6        <CPR:licenseType>OTHER</CPR:licenseType>
 7        <CPR:licenseNum>California Motor Carrier Permit: 0123456</CPR:licenseNum>
 8      </CPR:contractorLicense>
 9      <CPR:contractorPWCR>NA</CPR:contractorPWCR>
10      <CPR:contractorFEIN>123456789</CPR:contractorFEIN>
11      <CPR:contractorAddress>
12        <CPR:street>999 Carrier Rd</CPR:street>
13        <CPR:city>Oakland</CPR:city>
14        <CPR:state>CA</CPR:state>
15        <CPR:zip>94612</CPR:zip>
16      </CPR:contractorAddress>
17      <CPR:insuranceNum>Insurance101</CPR:insuranceNum>
18      <CPR:contractorEmail>happy@carrier.com</CPR:contractorEmail>
19    </CPR:contractorInfo>
```

4. Under <CPR: ProjectInfo> element, the mandatory fields to be filled out are Contract Agency, and Project ID.

```
20⊖   <CPR:projectInfo>
21      <CPR:awardingBody></CPR:awardingBody>
22      <CPR:contractAgency>CA-DIR</CPR:contractAgency>
23      <CPR:projectName></CPR:projectName>
24      <CPR:projectID>7</CPR:projectID>
25      <CPR:awardingBodyID></CPR:awardingBodyID>
26      <CPR:projectNum></CPR:projectNum>
27      <CPR:contractID></CPR:contractID>
28⊖     <CPR:projectLocation>
29        <CPR:description></CPR:description>
30        <CPR:street></CPR:street>
31        <CPR:city></CPR:city>
32        <CPR:county></CPR:county>
33        <CPR:state></CPR:state>
34        <CPR:zip></CPR:zip>
35      </CPR:projectLocation>
36    </CPR:projectInfo>
37⊖  <CPR:payrollInfo>
```

5. If you don't know the "Project ID" , you will need to enter the three required fields that will be used to "Lookup" the Project ID in the PWC-100 database. The fields are Awardig Body ID, Contract ID, and Project Number.

```
20⊖   <CPR:projectInfo>
21      <CPR:awardingBody></CPR:awardingBody>
22      <CPR:contractAgency>CA-DIR</CPR:contractAgency>
23      <CPR:projectName></CPR:projectName>
24      <CPR:projectID></CPR:projectID>
25      <CPR:awardingBodyID>100010009</CPR:awardingBodyID>
26      <CPR:projectNum>H14248</CPR:projectNum>
27      <CPR:contractID>12-08</CPR:contractID>
28⊖     <CPR:projectLocation>
29        <CPR:description></CPR:description>
30        <CPR:street></CPR:street>
31        <CPR:city></CPR:city>
32        <CPR:county></CPR:county>
33        <CPR:state></CPR:state>
34        <CPR:zip></CPR:zip>
35      </CPR:projectLocation>
36    </CPR:projectInfo>
```

6. Awarding Body ID, Project Number, and Contract ID can be left blank if the Project ID is entered.

```
20⊖   <CPR:projectInfo>
21       <CPR:awardingBody></CPR:awardingBody>
22       <CPR:contractAgency>CA-DIR</CPR:contractAgency>
23       <CPR:projectName></CPR:projectName>
24       <CPR:projectID>7</CPR:projectID>
25       <CPR:awardingBodyID></CPR:awardingBodyID>
26       <CPR:projectNum></CPR:projectNum>
27       <CPR:contractID></CPR:contractID>
28⊖     <CPR:projectLocation>
29         <CPR:description></CPR:description>
30         <CPR:street></CPR:street>
31         <CPR:city></CPR:city>
32         <CPR:county></CPR:county>
33         <CPR:state></CPR:state>
34         <CPR:zip></CPR:zip>
35       </CPR:projectLocation>
36   </CPR:projectInfo>
```

7. All other fields must be empty under <CPR: ProjectInfo> element

```
20⊖   <CPR:projectInfo>
21       <CPR:awardingBody></CPR:awardingBody>
22       <CPR:contractAgency>CA-DIR</CPR:contractAgency>
23       <CPR:projectName></CPR:projectName>
24       <CPR:projectID>7</CPR:projectID>
25       <CPR:awardingBodyID>100010009</CPR:awardingBodyID>
26       <CPR:projectNum>H14248</CPR:projectNum>
27       <CPR:contractID>12-08</CPR:contractID>
28⊖     <CPR:projectLocation>
29         <CPR:description></CPR:description>
30         <CPR:street></CPR:street>
31         <CPR:city></CPR:city>
32         <CPR:county></CPR:county>
33         <CPR:state></CPR:state>
34         <CPR:zip></CPR:zip>
35       </CPR:projectLocation>
36   </CPR:projectInfo>
```

8. Enter the appropriate values for the all fields under <CPR: payrollInfo> element:

```
 1  <?xml version="1.0" encoding="utf-8"?>
 2⊖ <CPR:eCPR xmlns:CPR="http://www.dir.ca.gov/dlse/CPR-Prod-Test/CPR.xsd">
 3⊕   <CPR:contractorInfo>▯
20⊕   <CPR:projectInfo>▯
37⊖   <CPR:payrollInfo>
38         <CPR:statementOfNP>false</CPR:statementOfNP>
39         <CPR:payrollNum></CPR:payrollNum>
40         <CPR:amendmentNum></CPR:amendmentNum>
41         <CPR:forWeekEnding>2015-01-09</CPR:forWeekEnding>
42⊖       <CPR:employees>
43⊕         <CPR:employee>▯
133⊕        <CPR:employee>▯
223        </CPR:employees>
224      </CPR:payrollInfo>
225  </CPR:eCPR>
```

9. If the submitting payroll week isn't a statement of non-peformance, enter "false" for <statementOfNP> element. The values for <CPR:payrollNum> and <CPR:amendmentNum> elements are automactically assignedd by the eCPR system and must be empty.

```
 1  <?xml version="1.0" encoding="utf-8"?>
 2⊖ <CPR:eCPR xmlns:CPR="http://www.dir.ca.gov/dlse/CPR-Prod-Test/CPR.xsd">
 3⊕   <CPR:contractorInfo>▯
20⊕   <CPR:projectInfo>▯
37⊖   <CPR:payrollInfo>
38         <CPR:statementOfNP>false</CPR:statementOfNP>
39         <CPR:payrollNum></CPR:payrollNum>
40         <CPR:amendmentNum></CPR:amendmentNum>
41         <CPR:forWeekEnding>2015-01-09</CPR:forWeekEnding>
42⊖       <CPR:employees>
43⊕         <CPR:employee>▯
133⊕        <CPR:employee>▯
223        </CPR:employees>
224      </CPR:payrollInfo>
225  </CPR:eCPR>
```

10. For the <CPR:forWeekEnding> element, enter the ending date of payroll week in following date format: yyyy-mm-dd.

```xml
 1 <?xml version="1.0" encoding="utf-8"?>
 2 <CPR:eCPR xmlns:CPR="http://www.dir.ca.gov/dlse/CPR-Prod-Test/CPR.xsd">
 3    <CPR:contractorInfo>
20    <CPR:projectInfo>
37    <CPR:payrollInfo>
38       <CPR:statementOfNP>false</CPR:statementOfNP>
39       <CPR:payrollNum></CPR:payrollNum>
40       <CPR:amendmentNum></CPR:amendmentNum>
41       <CPR:forWeekEnding>2015-01-09</CPR:forWeekEnding>
42       <CPR:employees>
43          <CPR:employee>
133         <CPR:employee>
223      </CPR:employees>
224   </CPR:payrollInfo>
225 </CPR:eCPR>
```

11. Each worker's information is enclosed in each <CPR:employee> element. To add new workers to the Payroll Information, add <CPR: employee> elements contained within the parent element < CPR: employees>.

```xml
37    <CPR:payrollInfo>
38       <CPR:statementOfNP>false</CPR:statementOfNP>
39       <CPR:payrollNum></CPR:payrollNum>
40       <CPR:amendmentNum></CPR:amendmentNum>
41       <CPR:forWeekEnding>2015-01-09</CPR:forWeekEnding>
42       <CPR:employees>
43          <CPR:employee>
133         <CPR:employee>
223      </CPR:employees>
224   </CPR:payrollInfo>
```
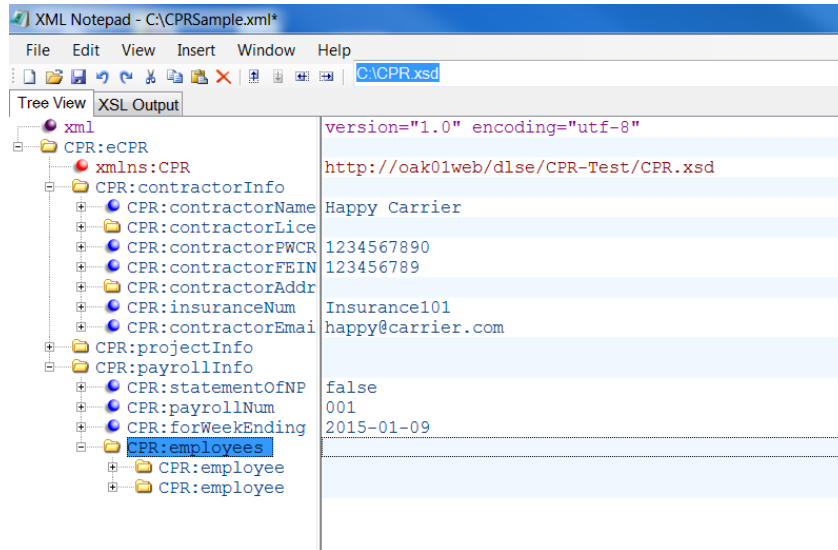
12. If you are using XML Notepad, right click the "**CPR:employee**" and click "Copy" to copy the node. Select "**CPR:employees**" and click "Paste" to add a new employee.

13. Each employee <CPR:name> element needs to have an "id" attribute that contains the SSN::Name of the employee. The "Name" must be all upper-case.

In XML Notepad

14. Fill out Payroll Record for each employee(All fields under employee are mandatory except "<CPR:notes>":

```
37⊖      <CPR:employees>
38⊖        <CPR:employee>
39           <CPR:name id="111223333::JOHN SMITH">John Smith</CPR:name>
40⊖          <CPR:address>
41             <CPR:street>33 Elm Ave</CPR:street>
42             <CPR:city>Oakland</CPR:city>
43             <CPR:state>CA</CPR:state>
44             <CPR:zip>94612</CPR:zip>
45           </CPR:address>
46           <CPR:ssn>111223333</CPR:ssn>
47           <CPR:numWithholdingExemp>2</CPR:numWithholdingExemp>
48           <CPR:workClass>Carrier Driver</CPR:workClass>
49⊖          <CPR:payroll>
50⊖            <CPR:hrsWorkedEachDay>
51⊖              <CPR:day id="1">
52                 <CPR:date>2015-01-03</CPR:date>
53                 <CPR:straightTime>8</CPR:straightTime>
54                 <CPR:overtime>1</CPR:overtime>
55                 <CPR:doubletime>0</CPR:doubletime>
56               </CPR:day>
57⊖              <CPR:day id="2">
58                 <CPR:date>2015-01-04</CPR:date>
59                 <CPR:straightTime>8</CPR:straightTime>
60                 <CPR:overtime>0</CPR:overtime>
61                 <CPR:doubletime>0</CPR:doubletime>
62               </CPR:day>
63⊖              <CPR:day id="3">
64                 <CPR:date>2015-01-05</CPR:date>
65                 <CPR:straightTime>8</CPR:straightTime>
66                 <CPR:overtime>1</CPR:overtime>
67                 <CPR:doubletime>0</CPR:doubletime>
68               </CPR:day>
69⊖              <CPR:day id="4">
70                 <CPR:date>2015-01-06</CPR:date>
71                 <CPR:straightTime>8</CPR:straightTime>
72                 <CPR:overtime>0</CPR:overtime>
73                 <CPR:doubletime>0</CPR:doubletime>
74               </CPR:day>
```
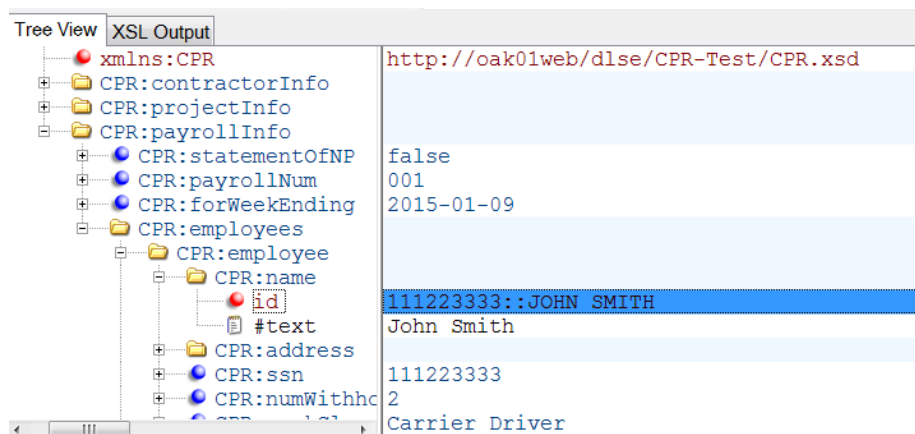
```
75⊖                    <CPR:day id="5">
76                        <CPR:date>2015-01-07</CPR:date>
77                        <CPR:straightTime>8</CPR:straightTime>
78                        <CPR:overtime>0</CPR:overtime>
79                        <CPR:doubletime>0</CPR:doubletime>
80                     </CPR:day>
81⊖                    <CPR:day id="6">
82                        <CPR:date>2015-01-08</CPR:date>
83                        <CPR:straightTime>8</CPR:straightTime>
84                        <CPR:overtime>1</CPR:overtime>
85                        <CPR:doubletime>0</CPR:doubletime>
86                     </CPR:day>
87⊖                    <CPR:day id="7">
88                        <CPR:date>2015-01-09</CPR:date>
89                        <CPR:straightTime>8</CPR:straightTime>
90                        <CPR:overtime>0</CPR:overtime>
91                        <CPR:doubletime>0</CPR:doubletime>
92                     </CPR:day>
93                  </CPR:hrsWorkedEachDay>
94⊖                 <CPR:totHrs>
95                     <CPR:totHrsStraightTime>56</CPR:totHrsStraightTime>
96                     <CPR:totHrsOvertime>3</CPR:totHrsOvertime>
97                     <CPR:totHrsDoubletime>0</CPR:totHrsDoubletime>
98                  </CPR:totHrs>
99⊖                 <CPR:hrlyPayRate>
00                     <CPR:hrlyPayRateStraightTime>50.00</CPR:hrlyPayRateStraightTime>
01                     <CPR:hrlyPayRateOvertime>60.00</CPR:hrlyPayRateOvertime>
02                     <CPR:hrlyPayRateDoubletime>70.00</CPR:hrlyPayRateDoubletime>
03                  </CPR:hrlyPayRate>
04⊖                 <CPR:grossAmountEarned>
05                     <CPR:thisProject>2000</CPR:thisProject>
06                     <CPR:allWork>3000</CPR:allWork>
07                  </CPR:grossAmountEarned>

203⊖               <CPR:deductionsContribPay>
204                    <CPR:fedTax>100.00</CPR:fedTax>
205                    <CPR:FICA>50.00</CPR:FICA>
206                    <CPR:stateTax>20.00</CPR:stateTax>
207                    <CPR:SDI>10.00</CPR:SDI>
208                    <CPR:vacationHoliday>10</CPR:vacationHoliday>
209                    <CPR:healthWelfare>10</CPR:healthWelfare>
210                    <CPR:pension>10</CPR:pension>
211                    <CPR:training>10</CPR:training>
212                    <CPR:fundAdmin>20</CPR:fundAdmin>
213                    <CPR:dues>30</CPR:dues>
214                    <CPR:travelSubs>30</CPR:travelSubs>
215                    <CPR:savings>0.0</CPR:savings>
216                    <CPR:other>0.0</CPR:other>
217                    <CPR:total>200</CPR:total>
218                    <CPR:notes>This is a a sample</CPR:notes>
219               </CPR:deductionsContribPay>
```

15. <CPR:notes> element can be used to add a free form supplemental descriptive information for each employee's payroll, but it isn't mandatory and can be left blank.

```
203⊖                <CPR:deductionsContribPay>
204                   <CPR:fedTax>100.00</CPR:fedTax>
205                   <CPR:FICA>50.00</CPR:FICA>
206                   <CPR:stateTax>20.00</CPR:stateTax>
207                   <CPR:SDI>10.00</CPR:SDI>
208                   <CPR:vacationHoliday>10</CPR:vacationHoliday>
209                   <CPR:healthWelfare>10</CPR:healthWelfare>
210                   <CPR:pension>10</CPR:pension>
211                   <CPR:training>10</CPR:training>
212                   <CPR:fundAdmin>20</CPR:fundAdmin>
213                   <CPR:dues>30</CPR:dues>
214                   <CPR:travelSubs>30</CPR:travelSubs>
215                   <CPR:savings>0.0</CPR:savings>
216                   <CPR:other>0.0</CPR:other>
217                   <CPR:total>200</CPR:total>
218                   <CPR:notes>This is a a sample</CPR:notes>
219                </CPR:deductionsContribPay>
```

16. If the submitting payroll week is a statement of non-peformance, enter "true" for <statementOfNP> element. All <CPR:employee> elements contained within the <CPR: employees> element aren't included.

```
37⊖  <CPR:payrollInfo>
38     <CPR:statementOfNP>true</CPR:statementOfNP>
39     <CPR:payrollNum></CPR:payrollNum>
40     <CPR:amendmentNum></CPR:amendmentNum>
41     <CPR:forWeekEnding>2015-01-09</CPR:forWeekEnding>
42⊖    <CPR:employees>
43     </CPR:employees>
44   </CPR:payrollInfo>
45 </CPR:eCPR>
```

- Review and save your XML file.

5. XML File Naming Convention for eCPR

- Please follow the example given below when naming XML files for submission:

    1. 6789_DIR001_010915.xml

- This naming convention can be broken down into following sections: [last 4 digits of FEIN number]_[Project ID]_[week ending date].xml

    1. 6789 = last 4 digits of FEIN number

    2. DIR001 = Project ID

    3. 010915 = Week ending date

- The xml file must end with the extension ".xml".