Rules

|  |  |  |  |
| --- | --- | --- | --- |
| Object | Source example | Rule | Result |
| Element with only text | <A>text</A> | The element name is represented as JSON property name and the text as the JSON property value | "A":"text" |
| Namespace | <ns:A>text</ns:A) | The element name includes the namespace prefix | "ns:A:":"text" |
| Element with only an attribute | <A x="att value"/> | The element is represented as a JSON object with the attribute represented as a name value pair property. To allow future potential two way conversion the attribute name is prefixed by "@". | "A":{  "@x":"att value"  } |
| Element with attribute(s) and text | <A x="att1 value" y="att2 value">text</A> | The property name "$" is used as the name of the property that has a value of the content of the element. | "A":{  "@x":"att1 value",  "@y":"att2 value",  "$":"text"  } |
| Null Elements | <A/> | The value of null elements is the empty string unless there is an attribute. | "A":"" |
| Complex Elements | <A>  <B>text 1</B>  <C>  <D>text 2</D>  </C>  </A> | Complex element contents will be treated as properties of the object that is named after the top level element | "A":{  "B":"text 1",  "C":{  "D":"text 2"  }  } |
| Repeated Elements | <A>  <B>text 1</B>  <B>text 2</B>  <C>  <D>text 3</D>  </C>  <C>  <D>text 4</D>  </C>  <A> | Repeated elements use the element name as a JSON array name and the values in the array as the text or child elements of the parent element. | "A":{  "B":["text 1",  "text 2"],  "C":["D":"text 3",  "D":"text 4"]  } |

Notes:

1. Since the conversion is for machine use, comments and procession instructions will not be transferred to JSON
2. Mixed elements with child elements and text are not allowed in PESC standards so no rule is required.

JSON representation rules (EBNF):

<element> ::= "<element name>":<element value>| "$":"<element text>"

<element value> ::= <element>|"<element text>"|<complex element>|<repeated element>|null

<complex element> ::= {<attribute list><element value>}

<repeated element> ::= [<element value>,<repeated element>|<element value>]

<attribute list> ::= <attribute>,<attribute list>|<attribute>

<attribute> ::= "@<attribute name>":"<attribute value>"