

Cleaning a circuit

This is another demo of some of the lower level functions, which the program uses to implement higher level functionality.

1. Cloning

Cloning a circuit is a straight forward way of preserving the original circuit by manipulating a copy of the circuit. We load an arbitrary circuit.

```
c1 = Circuit('circuits/voltage_divider.txt');  
c1.list
```

```
ans =  
    'Vin 1 0 DC 5  
    R1 1 2 1000  
    R2 2 0 3000  
,
```

We then clone the circuit object and start manipulating it.

```
c2 = c1.clone;  
ELAB.simplify(c2);  
c2.list
```

```
ans =  
    'Vin 1 0 DC 5  
    Req1 1 0 4000  
,
```

As seen here, the original circuit is preserved.

```
c1.list
```

```
ans =  
    'Vin 1 0 DC 5  
    R1 1 2 1000  
    R2 2 0 3000  
,
```

2. Exporting

To export the netlist of a circuit object, we simply call the circuit's export function, which will create a netlist file in the current directory.

```
pwd
```

```
ans =  
'C:\Users\nkvra\Google_Drive\Documents\Projects\ELABorate\examples'
```