

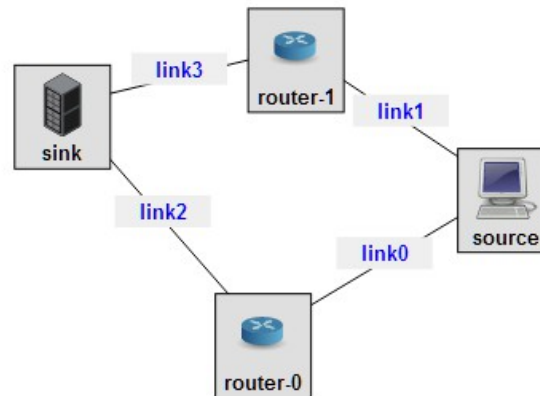
Embedding Jacks

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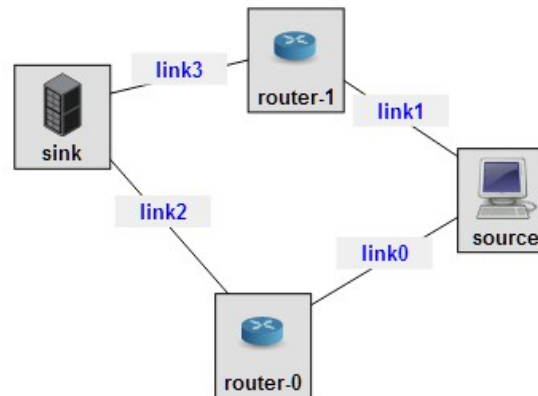
What is Jacks?

- Topology
 - Viewer
 - Editor
- Reads/Writes RSpecs
- Embeds in Web Pages
 - Built in JavaScript
 - Hosted at emulab.net

Jacks Editor



Jacks and Host Page



Include Jacks Script

```
<script type="text/javascript" src="https://code.jquery.com/jquery-2.1.0.min.js"></script>  
<script type="text/javascript" src="js/jacks.js"></script>
```

- jQuery must be included first

Jacks Container and Instantiation

```
<div id="jacksContainer" class="jacks" style="display: none"></div>
```

```
window.jacksInstance = new window.Jacks({  
  mode: 'editor',  
  source: 'rspec',  
  root: '#jacksContainer',  
  show: {  
    rspec: false,  
    tour: false,  
    version: true,  
    menu: true  
  },  
},
```

Important: canvasOptions

```
canvasOptions: {
  defaults: [
    {
      name: 'Add VM',
      type: 'default-vm'
    },
    {
      name: 'Add Xen VM',
      type: 'emulab-xen',
      image: 'urn:publicid:IDN+emulab.net+image+emulab-ops//UBUNTU12-64-STD'
    },
    {
      name: 'Add Raw PC',
      type: 'emulab-rawpc',
      image: 'urn:publicid:IDN+emulab.net+image+emulab-ops//UBUNTU12-64-STD'
    },
    {
      name: 'Add Small Exogeni',
      type: 'ml.small'
    },
    {
      name: 'Add Open VSwitch',
      type: 'emulab-xen',
      image: 'urn:publicid:IDN+instageni.gpolab.bbn.com+image+emulab-ops:Ubuntu12-64-OVS',
      icon: 'https://www.emulab.net/protogeni/jacks-stable/images/router.svg'
    }
  ]
}
```

Important: readyCallback option

```
readyCallback: function (input, output) {  
  jacksInput = input;  
  jacksOutput = output;  
  
  input.trigger('change-topology',  
    [{ rspec:  
      document.getElementById('rspec').textContent }]);  
  
  jacksOutput.on('fetch-topology', saveToFile);  
}
```


Talking to Jacks

```
readyCallback: function (input, output) {  
  jacksInput = input;  
  jacksOutput = output;  
  
  input.trigger('change-topology',  
    [{ rspec:  
      document.getElementById('rspec').textContent }]);  
  
  jacksOutput.on('fetch-topology', saveToFile);  
}
```

Reacting to Jacks

```
readyCallback: function (input, output) {  
  jacksInput = input;  
  jacksOutput = output;  
  
  input.trigger('change-topology',  
    [{ rspec:  
      document.getElementById('rspec').textContent }]);  
  
  jacksOutput.on('fetch-topology', saveToFile);  
}
```

Documentation

Live Editor

<https://www.emulab.net/protogeni/jacks-stable/editor.html>

Documentation

<https://www.emulab.net/protogeni/jacks-doc/>