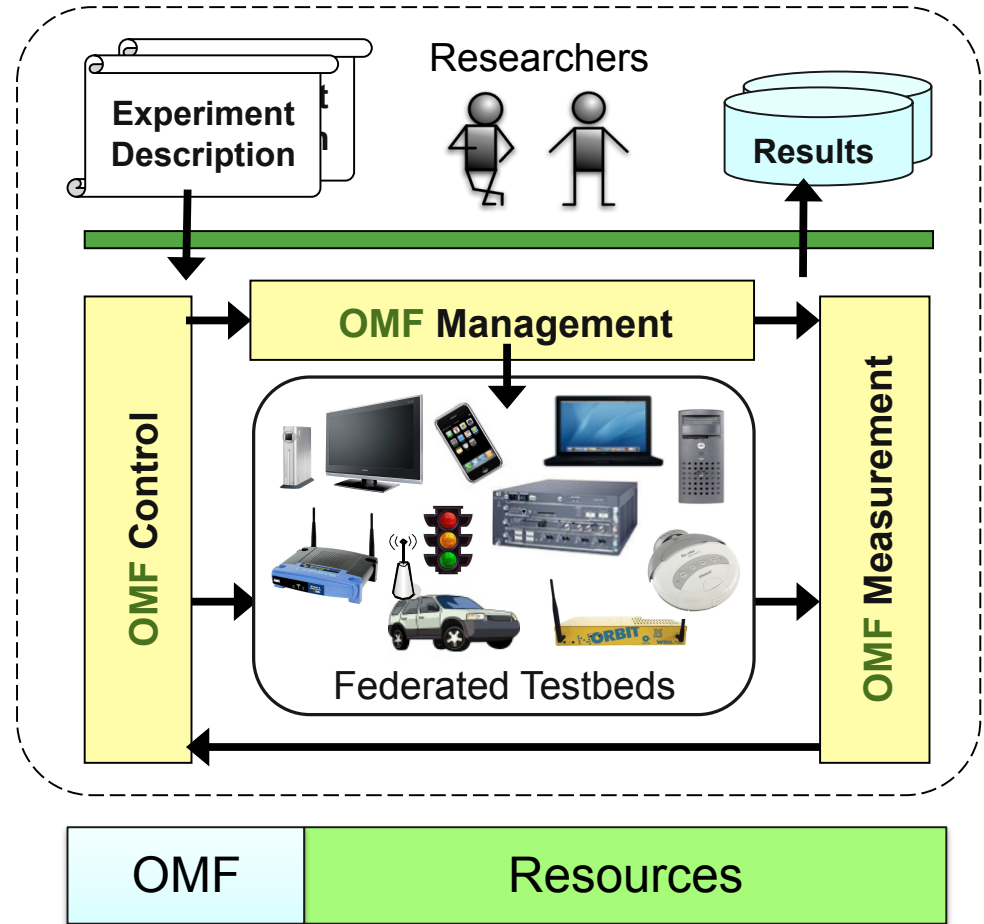
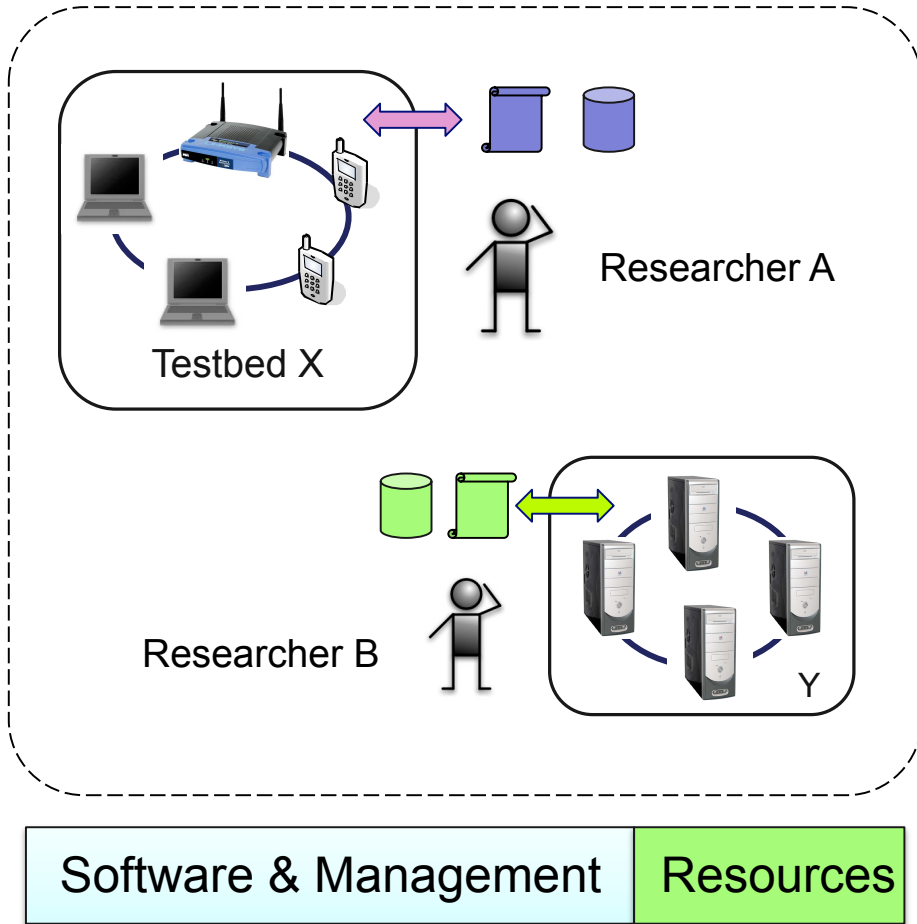
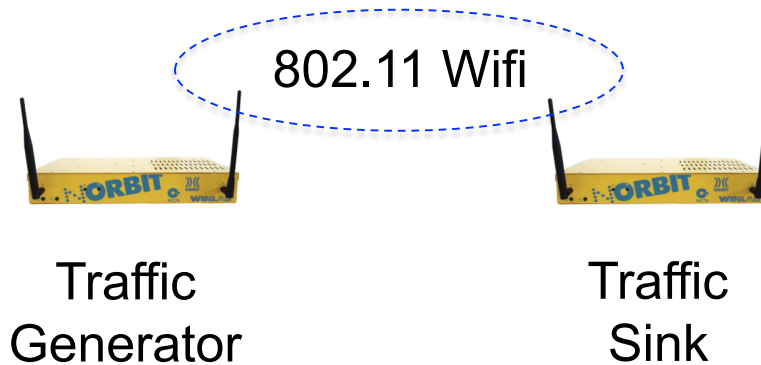


The Problem and our approach



Support & share different resources
 Federation of different testbeds

A Simple Example – Application def.



Experiment Description

1 - Resource Description & Configuration

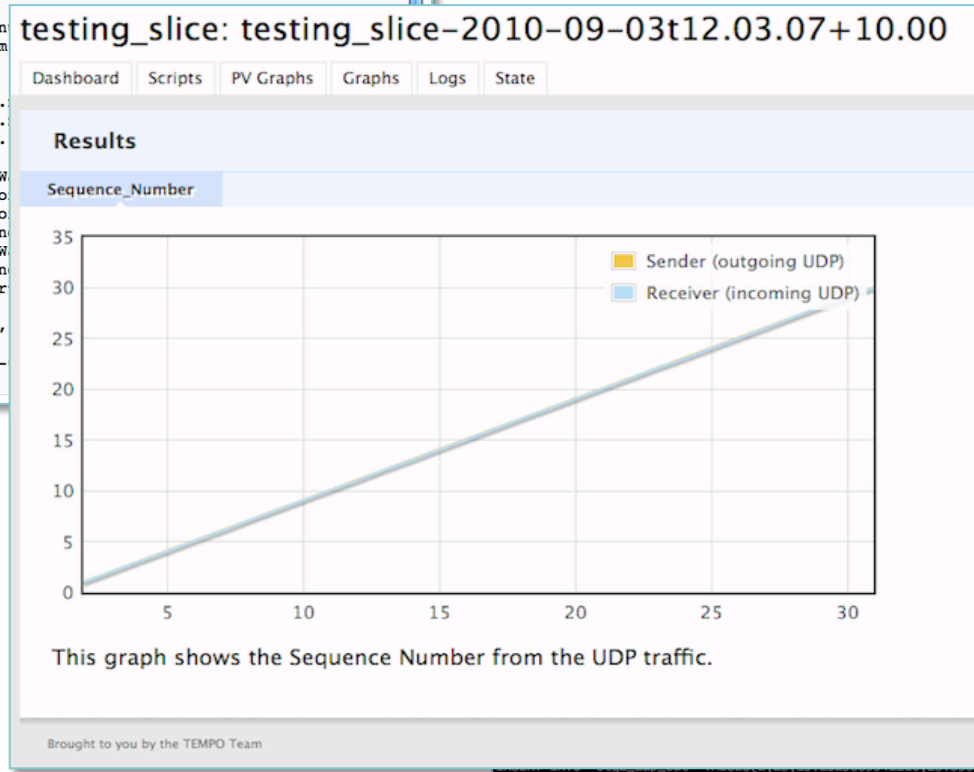
```
1 defApplication('test:app:otg2', 'otg2') do |a|
2
3   a.path = "/usr/bin/otg2"
4   a.version(1, 1, 3)
5   a.shortDescription = "Programmable traffic generator v2"
6
7   a.defProperty('generator', 'Type of generator to use (cbr or expo)',
8     'g', {:type => :string, :dynamic => false})
9   a.defProperty('udp:dst_host', 'IP address of the Destination',
10     nil, {:type => :string, :dynamic => false})
11   ...
12
13   a.defMeasurement('udp_out') do |m|
14     m.defMetric('ts', :float)
15     m.defMetric('seq_no', :long)
16     m.defMetric('pkt_length', :long)
17     m.defMetric('dst_host', :string)
18   end
19 end
```

A Simple Example – Experiment run



```
1 INFO NodeHandler: OMF Experiment Controller 5.3.634
2 INFO NodeHandler: Slice ID: testing_slice (default)
3 INFO NodeHandler: Experiment ID: testing_slice-2010-09-03t09.41.43+10.00
4 INFO NodeHandler: Message authentication is disabled
5 INFO NodeHandler: Web interface available at: http://10.0.0.200:4000
6 INFO Experiment: load system:exp:stdlib
7 INFO property.resetDelay: value = 210 (Fixnum)
8 INFO property.resetTries: value = 1 (Fixnum)
9 INFO Experiment: load system:exp:eventlib
10 INFO Experiment: load hello-world.rb
11 INFO Topology: Loading topology 'omf.nicta.'
12 INFO Topology: Loading topology 'omf.nicta.'
13 INFO ALL_UP_AND_INSTALLED: Event triggered.
14 INFO exp: This is my first OMF experiment
15 INFO exp: Request from Experiment Script: W
16 INFO omf.nicta.node29: Device 'net/w0' repo
17 INFO omf.nicta.node28: Device 'net/w0' repo
18 INFO exp: All my Applications are started n
19 INFO exp: Request from Experiment Script: W
20 INFO exp: All my Applications are stopped n
21 INFO EXPERIMENT_DONE: Event triggered. Star
22 INFO NodeHandler:
23 INFO NodeHandler: Shutting down experiment,
24 INFO NodeHandler:
25 INFO run: Experiment testing_slice-2010-09-
26
```

Standard-out Output



Real-time Graph Plotting

```
...ER, oml_ts_client REAL, oml_ts_server REAL, ts REAL,
INTEGER);
...7,1,2529749982059,1,1,512,'192.168.0.3',3000);
...9,2,2529519982636,1,2,512,'192.168.0.3',3000);
...78,3,25294099748135,1,3,512,'192.168.0.3',3000);
...6,4,26042199879885,1,4,512,'192.168.0.3',3000);
...5,5,25293799489737,1,5,512,'192.168.0.3',3000);
...6,6,25293999910355,1,6,512,'192.168.0.3',3000);
...7,7,25293899327517,1,7,512,'192.168.0.3',3000);
...8,8,25293999910355,1,8,512,'192.168.0.3',3000);
...9,9,25293999910355,1,9,512,'192.168.0.3',3000);
...12,10,2529389858246,1,10,512,'192.168.0.3',3000);
...63,11,2529389858246,1,11,512,'192.168.0.3',3000);
...55,12,2529379874468,1,12,512,'192.168.0.3',3000);
...17,13,2529359906912,1,13,512,'192.168.0.3',3000);
...49,14,2529349923134,1,14,512,'192.168.0.3',3000);
...65,15,2529359906912,1,15,512,'192.168.0.3',3000);
...68,16,2529219985008,1,16,512,'192.168.0.3',3000);
...04,17,2529189884663,1,17,512,'192.168.0.3',3000);
...7,18,2529329955578,1,18,512,'192.168.0.3',3000);
...4,19,2529599964619,1,19,512,'192.168.0.3',3000);
...59,20,25293597579,1,20,512,'192.168.0.3',3000);
...43,21,2529299855232,1,21,512,'192.168.0.3',3000);
...07,22,2529389858246,1,22,512,'192.168.0.3',3000);
...69,23,2529339790344,1,23,512,'192.168.0.3',3000);
...
INSERT INTO "otg2_udp_out" VALUES(2,24,20,252986997366,24,590785,24,2529329955578,1,24,512,'192.168.0.3',3000);
INSERT INTO "otg2_udp_out" VALUES(2,25,21,2530339956284,25,590927,25,2529329955578,1,25,512,'192.168.0.3',3000);
INSERT INTO "otg2_udp_out" VALUES(2,26,22,2530419826508,26,591048,26,252936989069,1,26,512,'192.168.0.3',3000);
INSERT INTO "otg2_udp_out" VALUES(2,27,23,2529789805412,27,591105,27,2529329955578,1,27,512,'192.168.0.3',3000);
INSERT INTO "otg2_udp_out" VALUES(2,28,24,2530479729176,28,591181,28,2529399991035,1,28,512,'192.168.0.3',3000);
INSERT INTO "otg2_udp_out" VALUES(2,29,25,2529779970646,29,591318,29,2529329955578,1,29,512,'192.168.0.3',3000);
INSERT INTO "otg2_udp_out" VALUES(2,30,26,2530619800091,30,59139,30,2529269754887,1,30,512,'192.168.0.3',3000);
COMMIT;
```

SQL-stored Measurements

