MQ Light & MQ connection test
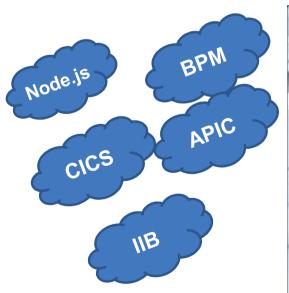
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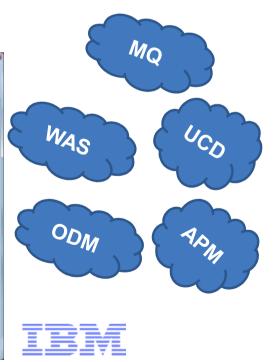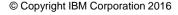
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- Madrid, 25-28 October 2016
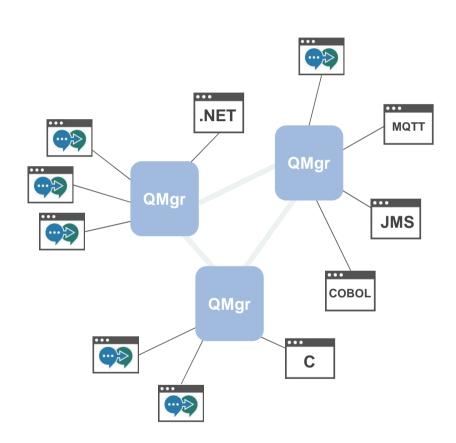- Details and Registration at http://learnquestconference.com/ctu16/

MQ Light

- A new messaging API proposed by IBM

- Designed for "light" messaging… quick to install, implement… for the cloud

- Simple, programming-language-neutral messaging model
  - For now: Node.js, Java, Ruby, Python….

- Facilitates community drivers for languages & frameworks

- Pub/Sub model

- Open wire protocol (AMQP 1.0) & Open Source client libraries

- IBM supporting for…
  - IBM MQ (distributed) as of v8.0.0.4
  - IBM MessageHub on Bluemix (Kafka base)

Connecting MQ Light applications to MQ
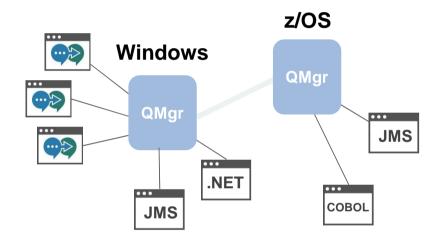
- MQ Light applications connect directly into MQ queue managers

- A new MQ channel type of "AMQP"
  - Supported from **MQ 8.0.0.4**
  - Similar in style to an MQTT channel
  - Supports the subset of the AMQP 1.0 Oasis specification required for MQ Light applications
  - Distributed MQ only

- MQ Light applications interoperable with all other MQ applications
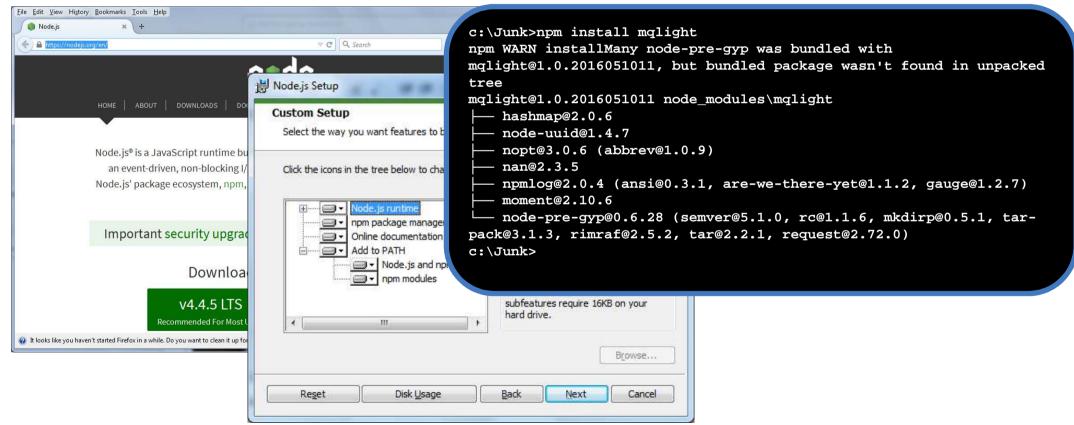 - All share the same topic space

Carl's qwickie test...

1. **Install MQv9 on Windows**
2. **Install Node.js and MQ Light**
3. **Configure & start AMQP channel**
4. **Develop Node.js sample**
5. **Test**

5
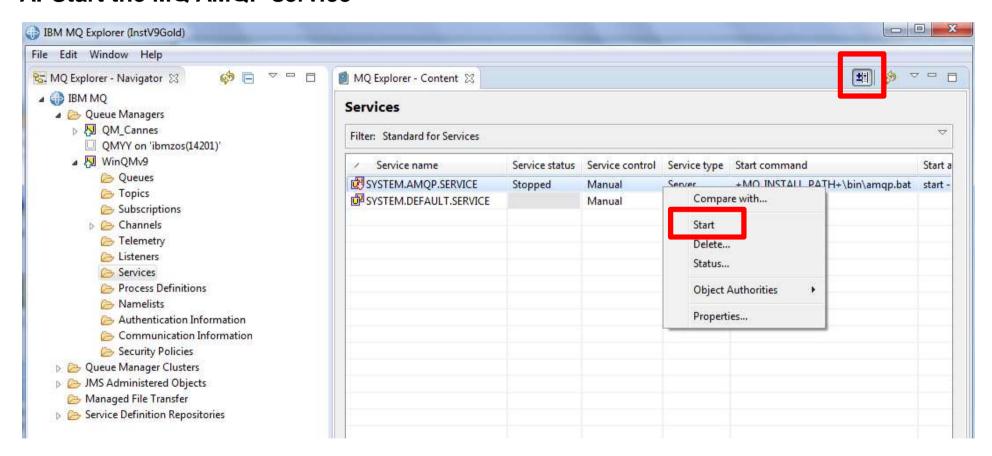
2. Install Node.js and Node.js MQ Light support

https://nodejs.org/en/


```
c:\Junk>npm install mqlight
npm WARN installMany node-pre-gyp was bundled with
mqlight@1.0.2016051011, but bundled package wasn't found in unpacked
tree
mqlight@1.0.2016051011 node_modules\mqlight
├── hashmap@2.0.6
├── node-uuid@1.4.7
├── nopt@3.0.6 (abbrev@1.0.9)
├── nan@2.3.5
├── npmlog@2.0.4 (ansi@0.3.1, are-we-there-yet@1.1.2, gauge@1.2.7)
├── moment@2.10.6
└── node-pre-gyp@0.6.28 (semver@5.1.0, rc@1.1.6, mkdirp@0.5.1, tar-
pack@3.1.3, rimraf@2.5.2, tar@2.2.1, request@2.72.0)
c:\Junk>
```

3. Configure & start AMQP channel

A. Start the MQ AMQP service

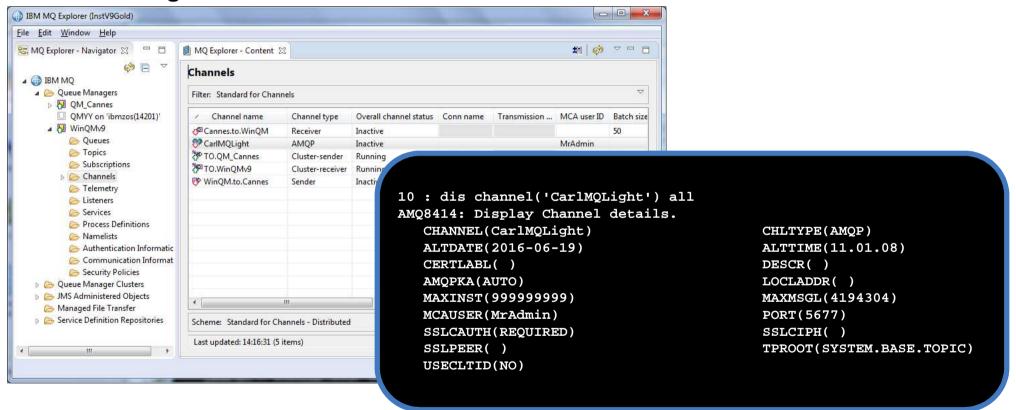# 3. Configure & start AMQP channel, cont'd

B. Configure an AMQP channel


```
10 : dis channel('CarlMQLight') all
AMQ8414: Display Channel details.
   CHANNEL(CarlMQLight)              CHLTYPE(AMQP)
   ALTDATE(2016-06-19)              ALTTIME(11.01.08)
   CERTLABL( )                      DESCR( )
   AMQPKA(AUTO)                     LOCLADDR( )
   MAXINST(999999999)              MAXMSGL(4194304)
   MCAUSER(MrAdmin)                 PORT(5677)
   SSLCAUTH(REQUIRED)              SSLCIPH( )
   SSLPEER( )                       TPROOT(SYSTEM.BASE.TOPIC)
   USECLTID(NO)
```

Be sure to verify your Channel and Connection Authentication parameters, then Start this MQ channel
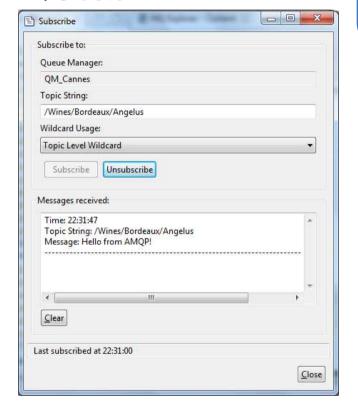
4. Develop Node.js sample

Set the Pub/Sub Topic

Set the IP and port

```javascript
var mqlight = require('mqlight');
var topicPattern = '/Wines/Bordeaux/Angelus';

var recvClient = mqlight.createClient({service: 'amqp://localhost:5677'});
recvClient.on('started', function() {
  recvClient.subscribe(topicPattern);
  recvClient.on('message', function(data, delivery) {
    console.log('Recv: %s', data);
  });
});

var sendClient = mqlight.createClient({service: 'amqp://localhost:5677'});
var topic = 'public';
sendClient.on('started', function() {
  sendClient.send('/Wines/Bordeaux/Angelus', 'Hello from AMQP!', function
(err, data) {
    console.log('Sent: %s', data);
    sendClient.stop();
  });
});
```

See **https://www.npmjs.com/package/mqlight** for info and sample
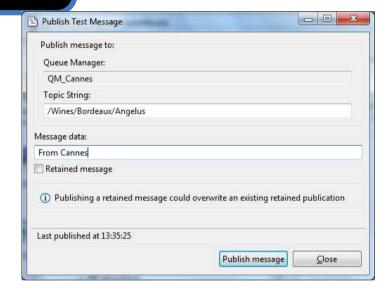
5. Test and run

A. Subscribe on any QM in the MQ Cluster

```
c:\Junk>node MQLight_send.js
Sent: /Wines/Bordeaux/Angelus
Recv: Hello from AMQP!
Recv: From Cannes
```

B. Start MQ Light app to Subscribe AND Publish

C. Publish more from any QM in the MQ Cluster

See **https://www.npmjs.com/package/mqlight** for info and sample