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**AMQP and Stasis message to AMQP support in
Asterisk
AstriDevCon 2017**





Why?

- Remove direct connection to AMI (no parsing)
 - And use AJAM to send actions to AMI
- Scale (auto)
 - <https://github.com/sboily/asterisk-consul-module>
- Remove external proxy for ARI
 - <https://github.com/nvisibleinc/go-ari-proxy>
- We already talked about this feature at the last Astridevcon



res_amqp

- AMQP client for Asterisk
 - Only publish
- Based on patch from <https://reviewboard.asterisk.org/r/4365/>
- Extracted version to have a first asterisk patch
 - <https://github.com/wazo-pbx/wazo-res-amqp>
- Base on librabbitmq
 - We only test with rabbitmq
- Configuration is on /etc/asterisk/amqp.conf
- it doesn't nothing, only an AMQP connection
- To install
 - git clone, make, make install



res_stasis_amqp

- Publish stasis messages to AMQP
 - <https://github.com/wazo-pbx/wazo-res-stasis-amqp>
- Support
 - stasis AMI
 - stasis ARI
 - stasis channel
- Depends on res_amqp
- Configuration /etc/asterisk/res_stasis_amqp.conf
- To install
 - git clone, make, make install
- To test on your Asterisk and get messages
 - <https://github.com/wazo-pbx/xivo-tools/blob/master/scripts/recv-bus-event>
 - Adapt the exchange on the script



Demo

```
root@wazo:/usr/src# ./recv-bus-event -k stasis.ami.8
usage: read RabbitMQ xivo exchange [-h] [-n HOSTNAME] [-p PORT]
      [-r ROUTING_KEY]
read RabbitMQ xivo exchange: error: unrecognized arguments: -k stasis.ami.8
root@wazo:/usr/src# ./recv-bus-event -r stasis.ami.*
2017-10-02 07:34:12,818 [22691] (INFO) (kombu.mixins): Connected to amqp://guest:**@127.0.0.1:5672//

2017-10-02 07:34:23,097 [22691] (INFO) (__main__): Received: {'Status': 'Registered', 'Username': 'sylvain', 'ChannelType': 'SIP', 'Domain': '172.16.42.86', 'Event': 'Registry'}
2017-10-02 07:34:31,533 [22691] (INFO) (__main__): Received: {'EventVersion': '1', 'EventTV': '31.533-0400', 'Service': 'SIP', 'RemoteAddress': 'IPV4/WSS/127.0.0.1/5060', 'Challenge': '61c55800', 'LocalAddress': 'IPV4/WSS/69.70.94.94/0', 'SessionID': '0x7f064806b3c8', 'Severity': 'Informational', 'Event': 'ChallengeSent', 'AccountID': 'xbonl980'}
2017-10-02 07:34:31,628 [22691] (INFO) (__main__): Received: {'EventVersion': '1', 'EventTV': '31.623-0400', 'Service': 'SIP', 'RemoteAddress': 'IPV4/WSS/127.0.0.1/5060', 'LocalAddress': 'IPV4/WSS/69.70.94.94/0', 'SessionID': '0x7f064806b3c8', 'UsingPassword': '1', 'Severity': 'Informational', 'Event': 'SuccessfulAuth', 'AccountID': 'xbonl980'}
2017-10-02 07:34:31,629 [22691] (INFO) (__main__): Received: {'PeerStatus': 'Registered', 'Peer': 'SIP/xbonl980', 'ChannelType': 'SIP', 'Event': 'PeerStatus', 'Address': '41255'}
2017-10-02 07:34:31,629 [22691] (INFO) (__main__): Received: {'Device': 'SIP/xbonl980', 'State': 'NOT_INUSE', 'Event': 'DeviceStateChange'}
2017-10-02 07:34:31,629 [22691] (INFO) (__main__): Received: {'Status': '1', 'Paused': '0', 'Ringinuse': '1', 'Skills': '', 'MemberName': 'SIP/xbonl980', 'Penalty': '0', 'LastPause': '0', 'Queue': 'test', 'LastCall': '0', 'Membership': 'static', 'InCall': '0', 'CallsTaken': '0', 'Interface': 'SIP/xbonl980', 'PausedReason': '', 'Event': 'QueueMemberStatus', 'StateInterface': 'SIP/xbonl980'}
2017-10-02 07:34:31,630 [22691] (INFO) (__main__): Received: {'Device': 'test_avail', 'State': 'NOT_INUSE', 'Event': 'DeviceStateChange'}
2017-10-02 07:34:31,702 [22691] (INFO) (__main__): Received: {'PeerStatus': 'Reachable', 'Peer': 'SIP/xbonl980', 'ChannelType': 'SIP', 'Event': 'PeerStatus'}
```



Integration in Asterisk

- Proposal
 - submit to gerrit the res-amqp support
 - submit to gerrit the res-stasis-amqp support
- Roadmap
 - Functional test
 - CEL?
 - CDR?
 - Your feedback is welcome!



Question?

Thank you for listening!

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