

InternodeEncryption

Inter-node encryption uses standard TLS/SSL to authenticate and encrypt messages between nodes, to protect data in transit between nodes, and to prevent unauthorized access to/control of nodes.

Encryption can be applied to all inter-node messages, just messages crossing from one rack to another, or just messages crossing from one datacenter to another.

This page needs fleshing out... skeleton instructions from <https://issues.apache.org/jira/browse/CASSANDRA-3051> are:

1. follow the steps for generating a keystore and a trust store here: <http://download.oracle.com/javase/6/docs/technotes/guides/security/jsse/JSSERefGuide.html#CreateKeystore> 2. plug those files into `encryption_options` in `cassandra.yaml` 3. make sure `encryption_options.internode_encryption = all` in the `yaml`.

See the section at the bottom of `conf/cassandra.yaml`:

```
# Enable or disable inter-node encryption
# Default settings are TLS v1, RSA 1024-bit keys (it is imperative that
# users generate their own keys) TLS_RSA_WITH_AES_128_CBC_SHA as the cipher
# suite for authentication, key exchange and encryption of the actual data transfers.
# NOTE: No custom encryption options are enabled at the moment
# The available internode options are : all, none, dc, rack
#
# If set to dc cassandra will encrypt the traffic between the DCs
# If set to rack cassandra will encrypt the traffic between the racks
#
# The passwords used in these options must match the passwords used when generating
# the keystore and truststore.  For instructions on generating these files, see:
# http://download.oracle.com/javase/6/docs/technotes/guides/security/jsse/JSSERefGuide.html#CreateKeystore
encryption_options:
    internode_encryption: none
    keystore: conf/.keystore
    keystore_password: cassandra
    truststore: conf/.truststore
    truststore_password: cassandra
```

See also [SimpleAuthenticator](#) for details of the authentication of Thrift clients (rather than between nodes).

<https://c.statcounter.com/9397521/0/fe557aad/1/> | stats