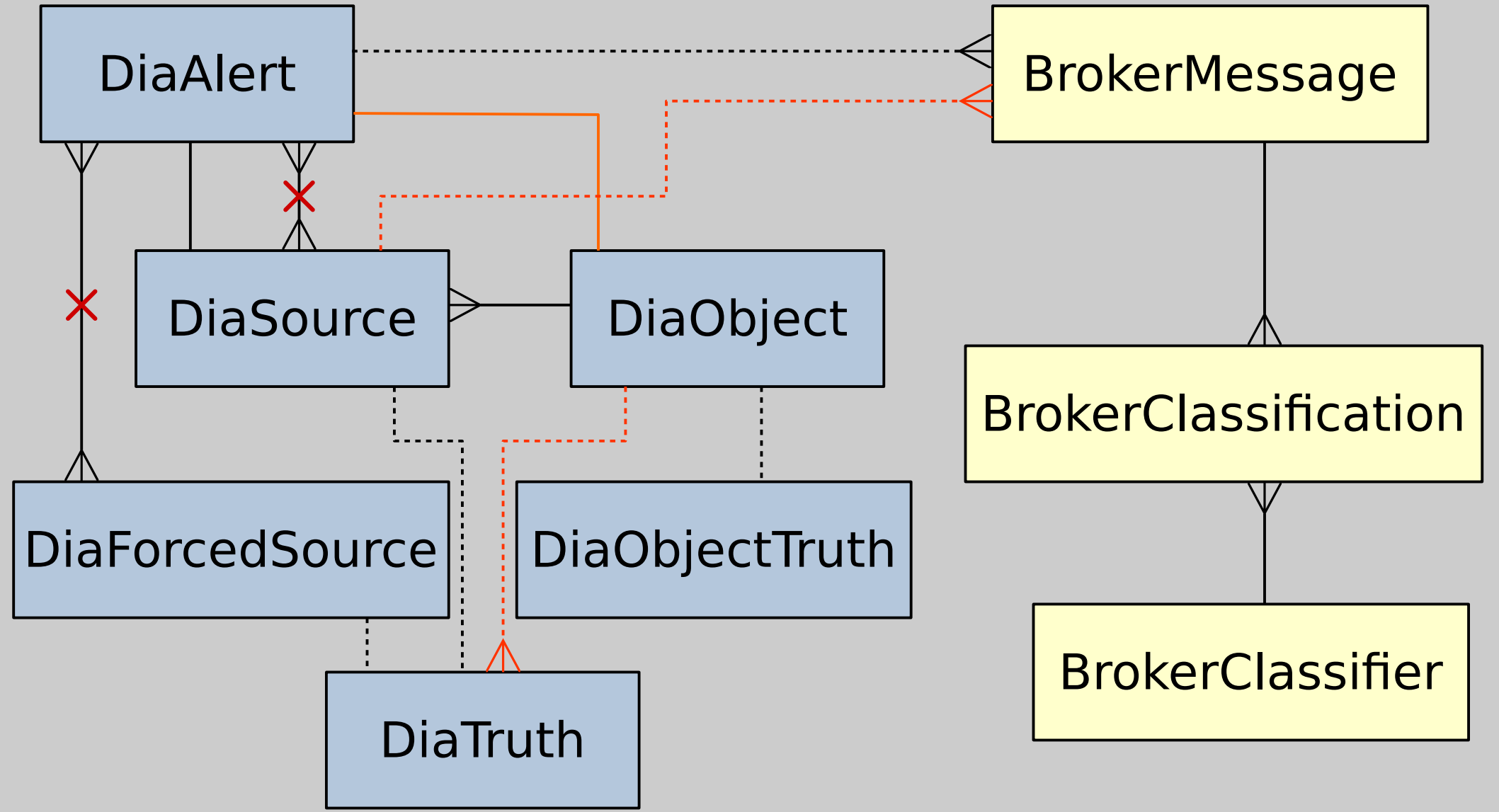
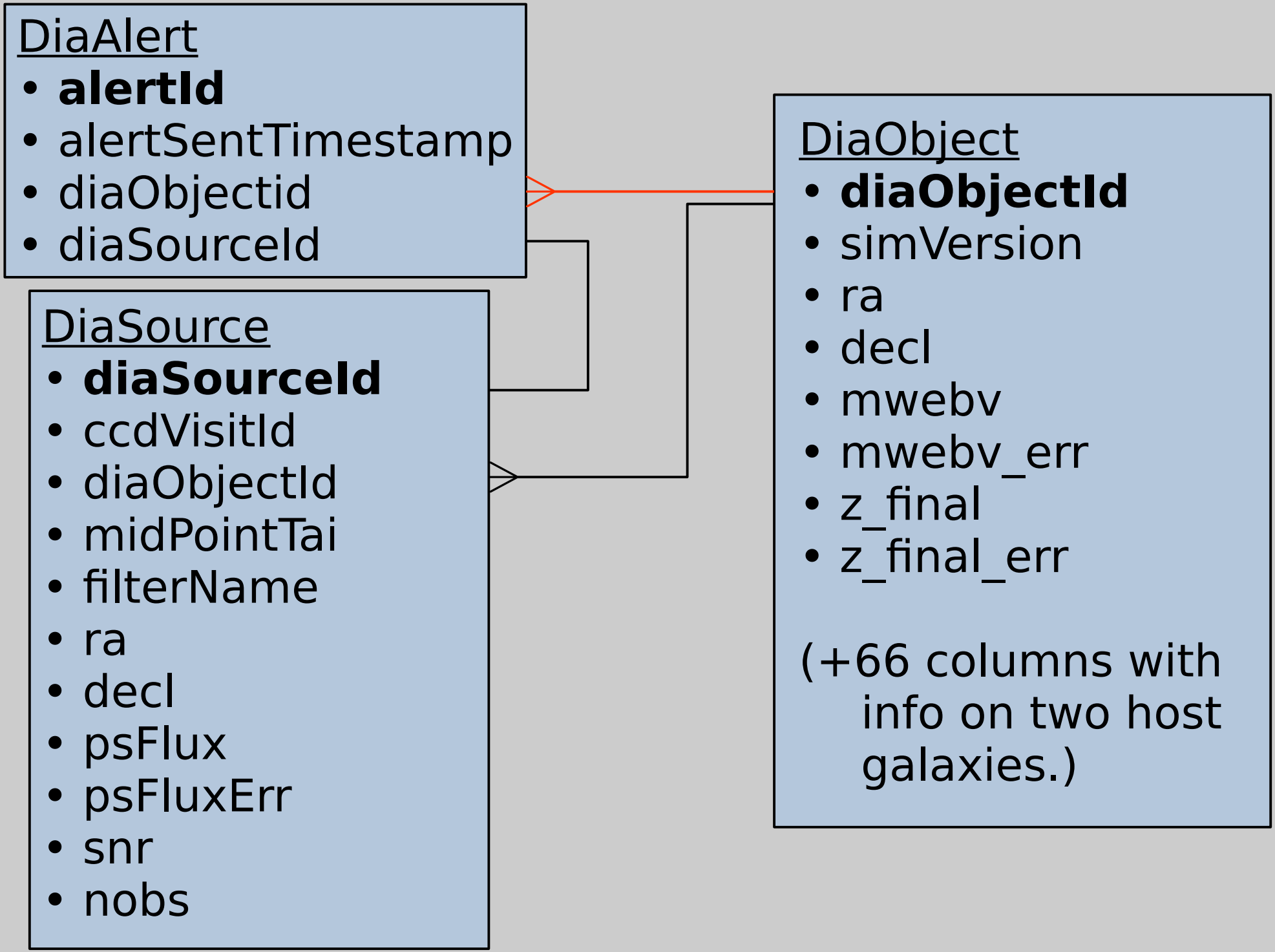
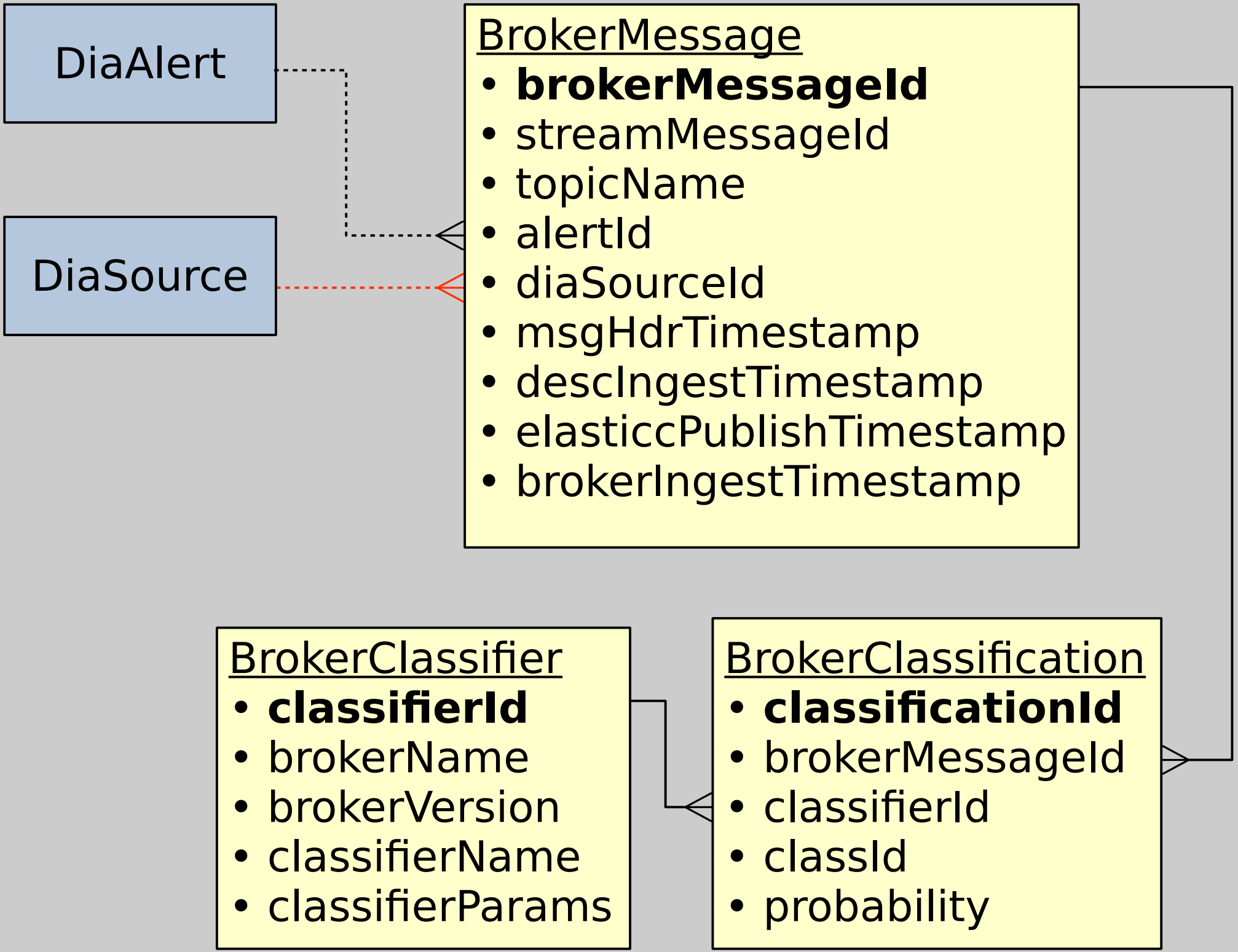
The ELAsTiCC (TOM) Database: Table Relationships




DiaAlert
• alertId
• alertSentTimestamp
• diaObjectid
• diaSourceId
DiaSource
• diaSourceId
• ccdVisitId
• diaObjectId
• midPointTai
• filterName
• ra
• decl
• psFlux
• psFluxErr
• snr
• nobs
DiaObject
• diaObjectId
• simVersion
• ra
• decl
• mwebv
• mwebv_err
• z_final
• z_final_err
(+66 columns with info on two host galaxies.)


DiaAlert
DiaSource
BrokerMessage
• brokerMessageId
• streamMessageId
• topicName
• alertId
• diaSourceId
• msgHdrTimestamp
• descIngestTimestamp
• elasticcPublishTimestamp
• brokerIngestTimestamp
BrokerClassifier
• classifierId
• brokerName
• brokerVersion
• classifierName
• classifierParams
BrokerClassification
• classificationId
• brokerMessageId
• classifierId
• classId
• probability

The ELAsTiCC Table Rows (Anticipated)

DiaAlert	53 million
DiaSource	53 million
DiaObject	4 million
DiaForcedSource	140 million
BrokerClassifier	~30
BrokerClassification	~7 billion
BrokerMessage	~400 million

Anticipated disk usage: 1–2 TB

Currently, the broker tables are at ~10% of full size.

- ELAsTiCC is a simulation of 3 years of LSST transient detections.
- It does not include any artifacts or asteroids; it has ~1% the variable stars of the real survey.