1. dcm4chee支持以下的日志审计：

https://github.com/dcm4che/dcm4chee-arc-light/wiki/Supported-Audit-Messages-and-Events

1. 日志格式为xml格式，如：

<?xml version="1.0" encoding="UTF-8" standalone="true"?>

-<AuditMessage xsi:noNamespaceSchemaLocation="http://www.dcm4che.org/DICOM/audit-message.rnc" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">-<EventIdentification EventOutcomeIndicator="0" EventDateTime="2017-03-31T15:24:32.746+02:00" EventActionCode="E"><EventID originalText="Query" codeSystemName="DCM" csd-code="110112"/></EventIdentification>-<ActiveParticipant NetworkAccessPointTypeCode="2" NetworkAccessPointID="127.0.0.1" UserIsRequestor="true" UserID="127.0.0.1"><RoleIDCode originalText="Source" codeSystemName="DCM" csd-code="110153"/></ActiveParticipant>-<ActiveParticipant NetworkAccessPointTypeCode="1" NetworkAccessPointID="localhost" UserIsRequestor="false" UserID="/dcm4chee-arc/aets/DCM4CHEE/rs/studies" AlternativeUserID="16800"><RoleIDCode originalText="Destination" codeSystemName="DCM" csd-code="110152"/></ActiveParticipant>-<AuditSourceIdentification AuditSourceID="dcm4chee-arc"><AuditSourceTypeCode csd-code="4"/></AuditSourceIdentification>-<ParticipantObjectIdentification ParticipantObjectTypeCodeRole="24" ParticipantObjectTypeCode="2" ParticipantObjectID="SearchForStudies"><ParticipantObjectIDTypeCode originalText="QIDO\_Query" codeSystemName="99DCM4CHEE" csd-code="QIDO"/><ParticipantObjectQuery>L2RjbTRjaGVlLWFyYy9hZXRzL0RDTTRDSEVFL3JzL3N0dWRpZXNpbmNsdWRlZmllbGQ9YWxsJmxpbWl0PTIxJm9mZnNldD0wJm9yZGVyYnk9LVN0dWR5RGF0ZSwtU3R1ZHlUaW1l</ParticipantObjectQuery><ParticipantObjectDetail value="VVRGLTg=" type="QueryEncoding"/></ParticipantObjectIdentification></AuditMessage>

1. 可以使用ELK对dcm4chee的日志进行处理，存放，查看和分析。
2. 可以发现$WILDFLY\_HOME/standalone/data/audit-spool/Audit\_Logger这个文件夹有日志相关的内容，但是有时候操作有没有日志生成，或有些日志会被自动删除。根据spool这个名字看出这只是一些日志临时文件。
3. 默认情况下，关于DICOM协议上的一些操作日志，如：

2019-08-12 13:44:51,566 INFO [org.dcm4che3.net.Dimse] (EE-ManagedExecutorService-default-Thread-14) DCM4CHEE<-WEASIS\_QR(3) << 14:C-STORE-RQ[pcid=89, prior=0

cuid=1.2.840.10008.5.1.4.1.1.4 - MR Image Storage

iuid=1.113654.5.15.1517 - ?

tsuid=1.2.840.10008.1.2 - Implicit VR Little Endian]

2019-08-12 13:44:51,578 INFO [org.dcm4che3.net.Dimse] (EE-ManagedExecutorService-default-Thread-13) DCM4CHEE<-WEASIS\_QR(3) >> 14:C-STORE-RSP[pcid=89, status=0H

cuid=1.2.840.10008.5.1.4.1.1.4 - MR Image Storage

iuid=1.113654.5.15.1517 - ?

tsuid=1.2.840.10008.1.2 - Implicit VR Little Endian]

2019-08-12 13:44:51,579 INFO [org.dcm4che3.net.Dimse] (EE-ManagedExecutorService-default-Thread-13) DCM4CHEE<-WEASIS\_QR(3) << 1:C-GET-RSP[pcid=1, remaining=2, completed=14, failed=0, warning=0, status=ff00H

cuid=1.2.840.10008.5.1.4.1.2.2.3 - Study Root Query/Retrieve Information Model - GET

tsuid=1.2.840.10008.1.2 - Implicit VR Little Endian]

2019-08-12 13:44:51,588 INFO [org.dcm4che3.net.Dimse] (EE-ManagedExecutorService-default-Thread-14) DCM4CHEE<-WEASIS\_QR(3) << 15:C-STORE-RQ[pcid=89, prior=0

cuid=1.2.840.10008.5.1.4.1.1.4 - MR Image Storage

iuid=1.113654.5.15.1518 - ?

tsuid=1.2.840.10008.1.2 - Implicit VR Little Endian]

2019-08-12 13:44:51,603 INFO [org.dcm4che3.net.Dimse] (EE-ManagedExecutorService-default-Thread-13) DCM4CHEE<-WEASIS\_QR(3) >> 15:C-STORE-RSP[pcid=89, status=0H

cuid=1.2.840.10008.5.1.4.1.1.4 - MR Image Storage

iuid=1.113654.5.15.1518 - ?

tsuid=1.2.840.10008.1.2 - Implicit VR Little Endian]

2019-08-12 13:44:51,604 INFO [org.dcm4che3.net.Dimse] (EE-ManagedExecutorService-default-Thread-13) DCM4CHEE<-WEASIS\_QR(3) << 1:C-GET-RSP[pcid=1, remaining=1, completed=15, failed=0, warning=0, status=ff00H

cuid=1.2.840.10008.5.1.4.1.2.2.3 - Study Root Query/Retrieve Information Model - GET

tsuid=1.2.840.10008.1.2 - Implicit VR Little Endian]

2019-08-12 13:44:51,605 INFO [org.dcm4che3.net.Dimse] (EE-ManagedExecutorService-default-Thread-14) DCM4CHEE<-WEASIS\_QR(3) << 16:C-STORE-RQ[pcid=89, prior=0

cuid=1.2.840.10008.5.1.4.1.1.4 - MR Image Storage

iuid=1.113654.5.15.1519 - ?

tsuid=1.2.840.10008.1.2 - Implicit VR Little Endian]

在/usr/app/wildfly-16.0.0.Final/standalone/log/server.log可以看到。

1. 可以把dcm4chee日志对接到elk，可以看到以下信息，总共227条：

