SIEMENS

Algorithm Validation Toolkit
AVT2EXT

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Algorithm Validation Toolkit
Administration Guide

R1.0

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History

Document History

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History of released Versions

Version	Release date	Product Version

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1 Introduction

1.1 Purpose of the document

The Administration Guide describes how to backup the Assessment Database and view audit trails. It assumes familiarity with operating systems and databases.

1.2 Database backup

The Assessment Database (AD) of AVT stores images and annotations for example for research studies on annotation variability. The images and in particular the annotations that may be created during the study using the AVT Image Annotation Tool (IA) should be backed up regularly to protect the research data against hardware failures.

The IBM DB2 database contains all annotations and meta-information about images. For instructions on how to perform backups of the database please refer to the documentation of DB2, in particular the move command.

The actual DICOM files are stored in the subfolder AD-Data of the AVT installation folder to allow transparent access with other tools. The location of this folder can be changed by setting the environment variable AD_DATA_STORE in the startup.bat file in the XIPHost folder of the AVT installation. The administrator can use operating system tools (e.g. Windows Explorer, xcopy, tar, rsync) to perform regular backups of the images.

1.3 Audit trails

Changes to the annotation data in AD are recorded in an audit trail. Each creation or change to annotations is tracked with timestamp, user, comment, and pedigree information as passed to the AD API from other applications. Since AVT has no use cases that would modify images and images are referenced from annotations using the unique DICOM identifiers, the audit trail does not store information directly related to images.

In order to view the audit trail of a specific annotation one can use the IBM DB2 Control Center or any other SQL query tool using the command

SELECT * FROM AUDITTRAIL WHERE UID = ‘?’

where ? needs to be replaced with the unique identifier (uid) of the annotation.

In order to view the audit trail of all annotations of a specific image one can use the command:

SELECT * FROM AUDITTRAIL, IMAGE_ANNOTATION, REFERENCE_IMAGES, WHERE

AUDITTRAIL.UID = IMAGE_ANNOTATION.ANNOTATION_UID

AND

IMAGE_ANNOTATION.ANNOTATION_ID=REFERENCE_IMAGES.ANNOTATION_ID

AND

REFERENCE_IMAGES.IMAGE_PK_ID = IMAGE. IMAGE_PK_ID

AND

IMAGE.SOP_INSTANCE_UID = '?'

where ? needs to be replaced with the DICOM SOP identifier.