# KIDS Assembler User Guide

## Introduction

The KIDS Assembler combines KIDS components stored in multiple files into a single KIDS file. It intended to be used to prepare a patch for release.

## System Requirements

The KIDS Assembler is a Java console application. Java 7 must be installed to execute the KIDS assembler.

## XML manifest

The KIDS Assembler requires an XML manifest listing all of the files to be assembled as well as other attributes of the patch. The manifest makes the assumption that there is a single KIDS component in each file. However, if multiple components are found within a file, the KIDS assembler will include them all.

The names of the elements and attributes are based on the names of the equivalent fields in the KIDS installation process. The full XML schema definition can be found in Appendix A

Example of VistA Imaging Patch 127 manifest:

<?xml version="1.0" encoding="utf-8" ?>

<build name="MAG\*3.0\*127" patch="127"

patchName="Version 3.0 Patch 127 - Telereader Maintenance"

envCheckRoutine="" deleteEnvCheckRoutine=""

preInstallRoutine="PRE^MAGIP127"

deletePreInstalltRoutine="Yes"

postInstallRoutine="POS^MAGIP127"

deletePostInstallRoutine="Yes"

packageNumber="454"

packageName="IMAGING"

alphaBetaTesting="YES"

installationMessage="YES"

addressForUsageReporting="G.IMAGING DEVELOPMENT TEAM@FORUM.VA.GOV"

xmlns="http://va.gov/VistA/kids/manifest">

<requiredBuilds>

<!-- action= 0:Warning only;1:Don't install, remove global;2:Don't install, leave global;

-->

<requiredBuild name="MAG\*3.0\*123" action="2"/>

</requiredBuilds>

<components>

<dataDictionaries>

<dataDictionary name="2006.5841" export="DD\_2006\_5841.KID"/>

</dataDictionaries>

<routines>

<routine name="MAGDTR01" export="MAGDTR01.RTN"/>

<routine name="MAGDTR03" export="MAGDTR03.RTN"/>

<routine name="MAGDTR04" export="MAGDTR04.RTN"/>

<routine name="MAGDTR05" export="MAGDTR05.RTN"/>

<routine name="MAGGTU4T" export="MAGGTU4T.RTN"/>

<routine name="MAGIP127" export="MAGIP127.RTN"/>

<routine name="MAGNTLR2" export="MAGNTLR2.RTN"/>

<routine name="MAGNTLR4" export="MAGNTLR4.RTN"/>

<routine name="MAGNTLR5" export="MAGNTLR5.RTN"/>

<routine name="MAGNTLR6" export="MAGNTLR6.RTN"/>

<routine name="MAGNTLRS" export="MAGNTLRS.RTN"/>

</routines>

<rpcs>

<rpc name="MAG DICOM CON UNREADLIST GET" export="RPC\_MAG\_DICOM\_CON\_UNREADLIST\_GET.KID"/>

<rpc name="MAG DICOM CON UNREADLIST LOCK" export="RPC\_MAG\_DICOM\_CON\_UNREADLIST\_LOCK.KID"/>

<rpc name="MAG3 TELEREADER ACQ SRVC SETUP" export="RPC\_MAG3\_TELEREADER\_ACQ\_SRVC\_SETUP.KID"/>

<rpc name="MAG3 TELEREADER CLONE READER" export="RPC\_MAG3\_TELEREADER\_CLONE\_READER.KID"/>

<rpc name="MAG3 TELEREADER TIU TITLES LST" export="RPC\_MAG3\_TELEREADER\_TIU\_TITLES\_LST.KID"/>

</rpcs>

</components>

</build>

## Properties configuration file

The KIDS Assembler uses a KIDSAssembler.properties file for configuration. Any property defined in the properties file can be overridden on the command line.

Below are the properties that may be defined:

### rootDirectory

rootDirectory is the directory containing the searchDirectories.  
Default: the directory of the manifest file  
Example: va.gov.vista.kids.rootDirectory=C:\TFS\VistA\_Imaging\Dev\Patch119\Mumps

### searchDirectories

searchDirectories are a comma separated list of directory paths relative to rootDirectory. searchDirectories will be checked in the order listed for the component files in the manifest.  
Default: rootDirectory  
Example: va.gov.vista.kids.searchDirectories=Apps,Kids\_Components/DD Changes,Kids\_Components

### packageNumber

packageNumber is the number of the package within VistA.  
Default: 0  
Example: va.gov.vista.kids.packageNumber=454

### packageName

packageName is the name of the package within VistA.  
Default: empty string  
Example: va.gov.vista.kids.packageName=IMAGING

### packagePrefix

packagePrefix is the is the unique namespace prefix assigned to the Package within VistA.  
Default: empty string  
Example: va.gov.vista.kids.packagePrefix=MAG

### packageShortDescription

packageShortDescription is a brief description of the Package's functions within VistA.  
Default: empty string  
Example: va.gov.vista.kids.packageShortDescription=Imaging Release History

### packageVersion

packageVersion is the version number of the Package within VistA.  
Default: empty string  
Example: va.gov.vista.kids.packageVersion=3.0

### packageDateDistributed

packageDateDistributed is the date the release was distributed.  
Default: empty string  
Example: va.gov.vista.kids.packageDateDistributed=3020328

### packageDateInstalled

packageDateInstalled is the date the release was installed at the site.  
Default: empty string  
Example: va.gov.vista.kids.packageDateInstalled=3020328

### packageInstalledBy

packageInstalledBy is the person who installed this version at this site.  
Default: empty string  
Example: va.gov.vista.kids.packageInstalledBy=.5

### addressForUsageReporting

addressForUsageReporting is the VistA forum address which will be notified upon installation.  
Default: empty string  
Example: va.gov.vista.kids.addressForUsageReporting=G.IMAGING DEVELOPMENT TEAM@FORUM.VA.GOV

### installationMessage

installationMessage is message displayed during installation.  
Default: empty string  
Example: va.gov.vista.kids.installationMessage=Installing Patch 127

### startingKernelIen

startingKernelIen is the starting number which will be used when the kernel components are renumbered to be unique within this generated KIDS file  
Command line parameter: -k  
Default: 1  
Example: va.gov.vista.kids.startingKernelIen=1000

### buildIEN

buildIEN is the unique IEN of this build.  
Command line parameter: -b  
Default: 1  
Example: va.gov.vista.kids.buildNumber=3463

### testVersion

testVersion is the test number of this build.  
Command line parameter: -t  
Default: 0  
Example: va.gov.vista.kids.testVersion=8

### buildLabel

buildLabel is label of this build.  
Command line parameter: -l  
Default: empty string  
Example: va.gov.vista.kids.buildLabel=MAG3.0P127

### outputFileName

outputFileName is the name of the output KIDS file.  
Command line parameter: -n  
Default: the name of the manifest file with a .KID extension  
Example: va.gov.vista.kids.outputFileName= MAG3.0P127.KID

### outputDirectory

outputDirectory is the directory to store the output files (KID & Log).  
Command line parameter: -o  
Default: the name of the manifest file with a .KID extension  
Example: va.gov.vista.kids.outputDirectory=C\:\\Temp\\KIDS

## Running KIDS Assembler

KIDS Assembler is a Java console application. It must be run from the command prompt using Java. Running the following command line will display all of the options:

java -jar KIDSAssembler.jar

### Command Line Parameters

|  |  |  |  |
| --- | --- | --- | --- |
| Flag | Required | Equivalent Property | Description |
| -m | Required | va.gov.vista.kids.manifest | use given file for the build manifest |
| -b | Optional | va.gov.vista.kids.buildIEN | sets the build number |
| -k | Optional | va.gov.vista.kids.startingKernelIen | sets the starting kernel IEN |
| -l | Optional | va.gov.vista.kids.buildLabel | sets the build label |
| -n | Optional | va.gov.vista.kids.outputFileName | sets the output file name |
| -o | Optional | va.gov.vista.kids.outputDirectory | sets the directory for the output |
| -t | Optional | va.gov.vista.kids.testVersion | sets the test version |
| -D | Optional | va.gov.vista.kids.[property]=value | use value for given property |

-m is the only required parameter.

-D is a special parameter allowing the user to override any property specified in the KIDSAssembler.properties file. It can be used multiple times to override multiple properties.

### Example

java -jar KIDSAssembler.jar –m C:\TFS\VistA\_Imaging\Configuration\VistABuildConfiguration\MAG\_3\_0\_118.xml -t 100 -D va.gov.vista.kids.rootDirectory=C:\TFS\VistA\_Imaging\Dev\Patch118\Source\Production\VistA\Mumps

## Appendix A: KIDS Manifest XML Schema Definition

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

<xs:schema elementFormDefault="qualified" version="1.0" targetNamespace="http://va.gov/VistA/kids/manifest" xmlns:tns="http://va.gov/VistA/kids/manifest" xmlns:xs="http://www.w3.org/2001/XMLSchema">

<xs:element name="build" type="tns:kidsManifest"/>

<xs:element name="components" type="tns:manifestComponents"/>

<xs:complexType name="requiredBuild">

<xs:sequence/>

<xs:attribute name="name" type="xs:string"/>

<xs:attribute name="action" type="xs:string"/>

</xs:complexType>

<xs:complexType name="manifestComponents">

<xs:sequence>

<xs:element name="dataDictionaries" minOccurs="0">

<xs:complexType>

<xs:sequence>

<xs:element name="dataDictionary" type="tns:manifestComponent" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

</xs:complexType>

</xs:element>

<xs:element name="routines" minOccurs="0">

<xs:complexType>

<xs:sequence>

<xs:element name="routine" type="tns:manifestComponent" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

</xs:complexType>

</xs:element>

<xs:element name="rpcs" minOccurs="0">

<xs:complexType>

<xs:sequence>

<xs:element name="rpc" type="tns:manifestComponent" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

</xs:complexType>

</xs:element>

<xs:element name="options" minOccurs="0">

<xs:complexType>

<xs:sequence>

<xs:element name="option" type="tns:manifestComponent" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

</xs:complexType>

</xs:element>

<xs:element name="securityKeys" minOccurs="0">

<xs:complexType>

<xs:sequence>

<xs:element name="securityKey" type="tns:manifestComponent" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

</xs:complexType>

</xs:element>

<xs:element name="protocols" minOccurs="0">

<xs:complexType>

<xs:sequence>

<xs:element name="protocol" type="tns:manifestComponent" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

</xs:complexType>

</xs:element>

<xs:element name="templateLists" minOccurs="0">

<xs:complexType>

<xs:sequence>

<xs:element name="templateList" type="tns:manifestComponent" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

</xs:complexType>

</xs:element>

<xs:element name="hl7Applications" minOccurs="0">

<xs:complexType>

<xs:sequence>

<xs:element name="hl7Application" type="tns:manifestComponent" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

</xs:complexType>

</xs:element>

<xs:element name="hl7LogicalLinks" minOccurs="0">

<xs:complexType>

<xs:sequence>

<xs:element name="hl7LogicalLink" type="tns:manifestComponent" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

</xs:complexType>

</xs:element>

<xs:element name="parameterDefinitions" minOccurs="0">

<xs:complexType>

<xs:sequence>

<xs:element name="parameterDefinition" type="tns:manifestComponent" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

</xs:complexType>

</xs:element>

<xs:element name="parameterTemplates" minOccurs="0">

<xs:complexType>

<xs:sequence>

<xs:element name="parameterTemplate" type="tns:manifestComponent" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

</xs:complexType>

</xs:element>

<xs:element name="printTemplates" minOccurs="0">

<xs:complexType>

<xs:sequence>

<xs:element name="printTemplate" type="tns:manifestComponent" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

</xs:complexType>

</xs:element>

<xs:element name="sortTemplates" minOccurs="0">

<xs:complexType>

<xs:sequence>

<xs:element name="sortTemplate" type="tns:manifestComponent" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

</xs:complexType>

</xs:element>

<xs:element name="inputTemplates" minOccurs="0">

<xs:complexType>

<xs:sequence>

<xs:element name="inputTemplate" type="tns:manifestComponent" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

</xs:complexType>

</xs:element>

<xs:element name="forms" minOccurs="0">

<xs:complexType>

<xs:sequence>

<xs:element name="form" type="tns:manifestComponent" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

</xs:complexType>

</xs:element>

<xs:element name="functions" minOccurs="0">

<xs:complexType>

<xs:sequence>

<xs:element name="function" type="tns:manifestComponent" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

</xs:complexType>

</xs:element>

<xs:element name="dialogs" minOccurs="0">

<xs:complexType>

<xs:sequence>

<xs:element name="dialog" type="tns:manifestComponent" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

</xs:complexType>

</xs:element>

<xs:element name="bulletins" minOccurs="0">

<xs:complexType>

<xs:sequence>

<xs:element name="bulletin" type="tns:manifestComponent" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

</xs:complexType>

</xs:element>

<xs:element name="mailGroups" minOccurs="0">

<xs:complexType>

<xs:sequence>

<xs:element name="mailGroup" type="tns:manifestComponent" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

</xs:complexType>

</xs:element>

<xs:element name="helpFrames" minOccurs="0">

<xs:complexType>

<xs:sequence>

<xs:element name="helpFrame" type="tns:manifestComponent" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

</xs:complexType>

</xs:element>

</xs:sequence>

</xs:complexType>

<xs:complexType name="manifestComponent">

<xs:sequence/>

<xs:attribute name="name" type="xs:string"/>

<xs:attribute name="export" type="xs:string"/>

</xs:complexType>

<xs:complexType name="kidsManifest">

<xs:sequence>

<xs:element name="requiredBuilds" minOccurs="0">

<xs:complexType>

<xs:sequence>

<xs:element name="requiredBuild" type="tns:requiredBuild" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

</xs:complexType>

</xs:element>

<xs:element ref="tns:components" minOccurs="0"/>

</xs:sequence>

<xs:attribute name="name" type="xs:string"/>

<xs:attribute name="patch" type="xs:short" use="required"/>

<xs:attribute name="patchName" type="xs:string"/>

<xs:attribute name="packageNumber" type="xs:short"/>

<xs:attribute name="packageName" type="xs:string"/>

<xs:attribute name="packagePrefix" type="xs:string"/>

<xs:attribute name="packageShortDescription" type="xs:string"/>

<xs:attribute name="packageVersion" type="xs:string"/>

<xs:attribute name="packageDateDistributed" type="xs:string"/>

<xs:attribute name="packageDateInstalled" type="xs:string"/>

<xs:attribute name="packageInstalledBy" type="xs:string"/>

<xs:attribute name="alphaBetaTesting" type="xs:string"/>

<xs:attribute name="installationMessage" type="xs:string"/>

<xs:attribute name="addressForUsageReporting" type="xs:string"/>

<xs:attribute name="envCheckRoutine" type="xs:string"/>

<xs:attribute name="deleteEnvCheckRoutine" type="xs:string"/>

<xs:attribute name="preInstallRoutine" type="xs:string"/>

<xs:attribute name="deletePreInstalltRoutine" type="xs:string"/>

<xs:attribute name="postInstallRoutine" type="xs:string"/>

<xs:attribute name="deletePostInstallRoutine" type="xs:string"/>

</xs:complexType>

</xs:schema>