Alert Watch and Response Engine (AWARE)

**Version Description Document/Release Notes**

AWARE Version 1.1.3



**August 2014**

Prepared by Harris Corporation

Revision History

| Creation Date | Version No. | Description/Comments | Author(s) | Reviewer(s) | Review Type | Issue Date |
| --- | --- | --- | --- | --- | --- | --- |
| 08/18/2014 | 0.01 | Release of AWARE Version 1.1.3 | L. Glance |  |  | 08/26/2014 |
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Artifact Rationale

The Version Description Document (VDD) is the primary configuration control document used to track and control versions of software to be released to the operational environment. It is a summary of the features and contents for the software build. It identifies and describes the version of the software being delivered, including all changes to the software since the last VDD was issued. Every release of the software (including the initial release) shall be described by a VDD. Without this document, it would be nearly impossible to move an application or system from development to deployment reliably. Therefore the document is mandatory for each deployment.

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# Scope

This Version Description Document (VDD) is the documentation provided by the Harris Configuration Management (CM) Manager to certify the integrity of the Alert Watch and Response Engine (AWARE) software deliverable that is being installed at the Ralph H. Johnson Department of Veterans Affairs (VA) Medical Center in Charleston, South Carolina for beta testing. This document pulls together all the approved Change Requests (CR) for all source code and electronic documentation deliverables for the AWARE Version 1.1.3. CM certifies that the delivery has been assembled under Harris standard process and has the integrity required based on the control, review, and audit procedures inherited in Harris CM processes.

The VDD is an inventory document for the AWARE Version 1.1.3, similar to a packing list for a received shipment, or a bill of lading. It itemizes the current test build baseline for recent deliverables in terms of implemented change requests. The build level version inventory for each installer is listed in Section 2.

Appendix A contains the Release Notes that highlight the major functional or operational changes.

# Version Description

AWARE Version 1.1.3 consists of the product build from the AWARE Subversion Version Control tool, all documentation, and applicable release notes produced to date by the AWARE team for VA. This includes final, customer accepted versions of documentation. All software configuration items are contained in the AWARE Subversion (SVN) Version Control tool Deployment folder in the VA VHA Innovation Sandbox, tagged as “AWARE Version 1.1.3”; all delivered software documentation is contained in the Harris SharePoint site. The executables were made with CM involvement, and therefore CM certifies the ability to reproduce it. All artifacts used to produce this delivery are in the CM Subversion repository and were managed by CM for producing the deliverable following CM processes and procedures.

The package named “AWARE Version 1.1.3” consists of the following files to describe this release:

* VDD and Release Notes: T4\_AWARE\_VersionDD-V1.1.3.docx
* AWARE\_v1.1.3.zip containing the following installer files with date and time created, size, and SVN revision:

08/25/2014 9:41 AM 10,408,342 AwareInstaller.exe SVN 226

08/25/2014 9:48 AM 6,987,195 CPRS\_AWARE\_v\_1\_0.zip SVN 227

08/24/2014 11:47 PM 159,235 KIDS\_REMINDER\_DIALOGS\_v\_1\_2.zip SVN 223  
08/24/2014 11:48 PM 160,437 KIDS\_REMINDER\_DIALOGS\_v\_1\_2\_VMS.zip SVN 224   
08/21/2014 6:51 PM 2,654 QI\_Database\_Scripts\_v\_1\_3.zip SVN 216  
08/24/2014 10:07 PM 1,012,819 QI\_Manager\_v\_1\_3.zip SVN 222  
08/21/2014 1:45 PM 2,072,483 QI\_Reports\_v\_1\_3.zip SVN 212  
08/19/2014 5:36 PM 465,721 QI\_AWARE\_SQL\_Transporter\_v\_1\_3.zip SVN 203  
08/20/2014 6:29 PM 214,155 vefa\_csp\_v\_1\_3.xml SVN 208  
08/20/2014 6:29 PM 1,541,801 vefa\_IIS\_v\_1\_3.zip SVN 208

The QI Reports, QI Manager, QI Database Scripts, SQL Transporter, KIDS\_REMINDER\_DIALOGS, vefa\_csp, vefa\_IIS, and KIDS\_REMINDER\_DIALOGS for VMS were updated for this release.

AWARE Version 1.1.3 will be installed at the Ralph H. Johnson VA Medical Center in Charleston, SC.

# Change Request Reports

Harris only lists Change Records relative to the latest baseline in this document. Harris will provide direct reference to Change Records when necessary.

Table 1 - Change Request for This Release

| **Change Request ID** | **Summary** |
| --- | --- |
| CR-6 | Tracker: “Alert Cache Viewer - User with multiple keys issues”  When a user given both Alert Cache Viewer security keys (VEFA AWARE OWN ALERT CACHE and VEFA AWARE ALL ALERT CACHE), the software ignores VEFA AWARE ALL ALERT and use VEFA AWARE OWN ALERT CACHE. The preferred choice is to keep VEFA AWARE ALL ALERT. Code updated to use the VEFA AWARE ALL ALERT key if both values are present. |
| CR-7 | Tracker: “Alert Cache Viewer - 508 Compliance”  The contrast (background:foreground color) issues were fixed in Alert Cache Viewer and KB Editor forms. All disabled controls were changed to read-only and added labels to fields as needed. |
| CR-8 | Tracker: “Alert Cache Viewer/KB Editor User Name”  Alert Cache Viewer and KB Editor is using supported API ($$NAME^XUSER(duz)) to get the user name while the Alert Cache Collector is get the name directly from ^VA(200,DUZ,0). This difference is causing filtering issue in Alert Cache Viewer. $$NAME^XUSER includes DEGREE as well as PREFIX and SUFFIX in the name component file while user name doesn't include those fields. To be consistent, modified Alert Cache Viewer and KB Editor to get the user name directly from ^VA(200,DUZ,0). |
| CR-10 | Tracker: “Alert Cache Viewer – 5 minutes warning”  This is an enhancement and described in Section 7.5 of this document. |
| CR-13 | QI Tools: “QI Manager Tools Reports Names Problem”  Logon to the QI Manager as a Super User and go to "TOOLS". Edit a Report Name like "Provider1 All Alert Types Drill Down Level Greater7Days" and change it to "Provider All Alert Types Drill Down Level Greater7Days". Make sure the new name has more than 50 characters. After the update is saved, the report name is not changed and a new report name is created. If you select the new report name and click View you get a run time error.  - Modified the stored procedure dbo.usp\_UpdateReportsRec to redefine the input parameter as VARCHAR(100) instead of VHACHAR(50) because both report name and report presentation name are VARCHAR(100) in SECURITY\_ITEMS table.  - Add a maxlength=100 to the textbox control for report presentation name so the use can only enter up to 100 characters. |
| CR-14 | Tracker: “QI Manager Hyperlinks Not Working After a Report is Selected”  There is an issue with the “Tools” and “Logout” hyperlinks when a report name in the available reports drop down is selected and some parameters failed validation rule. The user can no longer click on these links.  Added ValidationGroup property to each validator and "View Report" button so that the validation only fails when "View Report" button is clicked. |
| CR-15 | QI Tools: “QI Manager SQL Injection on Tools Text Fields”  The free form text fields in the QI Manager, Tools Menu allow SQL Injection errors. Special characters such as single quote cause Server errors.  Converted the remaining 3 direct SQL calls to stored procedures. This code fix will fix both SQL Injection issue and special character issue. |
| CR-16 | Tracker: “Launching Alert Cache Viewer from CPRS”  This is an enhancement and described in Section 7.5 of this document. |
| CR-17 | QI Tools: “508 Issue: QI Manager - Document language missing”  During 508 testing using the WAVE Web Accessibility Evaluation Tool this was found. The QI Manager Web page has the following error. The language of the document is not identified.  Added the language of the document as English to the HTML tag. |
| CR-18 | QI Tools: “508 Issue: QI Manager Missing Form Label”  This issue was found during 508 testing using the WAVE Web Accessibility Evaluation Tool this. The QI Manager "Access Code:" and "Verify Code:" fields Form Control does not have a corresponding label. Replaced the table cell text for "Access Code:" and "Verify Code:" with label controls. The AssociatedControlID attributes for these two label controls are populated with the textbox control IDs for Access Code textbox and Verify Code textbox. |
| CR-19 | Alert Cache Log:  “OTHER-1.A 420 Alerts found. SQL Improper Date in Alert Cache record(s) causing SQL Transporter crash”  Exploratory and System Integration Testing by Harris users A.1. 420 Alerts found. SQL Transporter crash follows. Error found as improper SQL date/time in Alert Cache.  SQL server log expansion with data transfer capture on configurable parameter, and additional exception handling. Edits made in Alert Cache Builder for date/time defect in routine VEFAALR7 |
| CR-20 | “OTHER-1.B Also error on repeated and duplicate records in Alert Cache, and concatenation of repeated data in Alert Cache retrieval strings for subsequent parsing in data sent to SQL server”  A.2 Routine VEFAALR7 modifications to prevent concatenations in data sent to SQL at entry EXTALERT (NOT given to Charleston yet for defect checking, and later in next build). Also related to error in data dictionary set and kill logic for the “B” and “D” cross references to max length 30 when field widths for Alert cache NAME and ORDERING PROVIDER, respectively. Fixed in sandbox. (later in next build, the AWARE software build). Procedure can be done in Charleston to delete Cache, and redo-Cache. |
| CR-21 | Alert Cache Log:  “OTHER-1.C Data seen as “Negative” alert values in Alert Cache for [OCCULT BLOOD X3 MAILER]. “POSITIVE” as well as “comment” results”  Form Production account alert collected from mirrored test account AWARE usage, some OCCULT BLOOD values from real lab test names ,i.e. [OCCULT BLOOD X3 MAILER] have various values ( positive, negative, comments, etc). It is x3 test, so try to find 1st instance of POSITIVE \* value in which at least 2 out of the 3 specimens analyzed were tested POSITIVE.  A.3 Data examined in lab API to see that in case of X3 mailer for Occult Blood, that up to 3 tests are run. Added logic in routine VEFAALR9 entry ALERTVAL to find first instance of critical mnemonic like “H\*” to get first “POSITIVE” critical resulting test ( at least 2 out of 3) to display value correctly. (later in next build). |
| CR-22 | KB Editor:  “OTHER-1.D Alerts seen and Alert Categories /notifications and Alert Type definitions have to change to match Alert Tracking entries”  Names of Alert Types need t be specific matching ones really found in Production. Also use different alert categories, related Amended/Abnormal Alert types. Continued, A. Use [OCCULT X3 MAILER] as seen in Alert Cache in Alert Tracking file as well as Abnormal Image alerts with specific names.  CHEST 2 VIEWS FRO. (Charleston). Data experiments in Sandbox with different Alert Type names to be similar to real Alert Type names to be encountered in Charleston. Edit Alert Cache Collector In routine VEFAALR9 AT ALERT2 entry for capturing allowed multiple categories correctly. Also entries ALERT and ALERT1 in routine VEFAALR1. |
| CR-23 | Tracker:  “OTHER-2.A Need to copy an Alert Type to another Alert Type in order to have different Alert categories ( but with same reminder dialog/TIU template data)”  This is an enhancement and described in Section 7.5 of this document. |
| CR-24 | Tracker: “OTHER-2.C Problem with Charleston lab configuration to generate artificial alerts that was not seen in Sandbox”  A.3 Update to LRZORD1 routine with extra line of code to handle lab report routing location. (given ALREADY to Charleston, and later in next build). Also change OPTION name from VEFA ENTER IMAGING ALERT to ZZVEFA ENTER IMAGING ALERT ( for next test routines KIDS build).  A.3 Update to LRZORD1 routine with extra line of code to handle lab report routing location. (given ALREADY to Charleston, and later in next build). Also change OPTION name from VEFA ENTER IMAGING ALERT to ZZVEFA ENTER IMAGING ALERT ( for next test routines KIDS build). |
| CR-25 | Tracker: “OTHER-2.D Problem synching up lmage Alert Generator with real imaging alert names as seen with Production Alerts”  A.4 Problem synching up lmage Alert Generator with real imaging alert names as seen with Production Alerts. Change names to those needed. CHEST 2 VIEWS FRO, and CHEST 2 VIEWS FRONT depending on whether "Abnl Imaging Alert: Needs Attn:" or "Amended/Abnormal Imaging Alert" alert category. Also [OCCULT BLOOD X43 MAILER] and [OCCULT BLOOD SINGLE CARD] are not the same as [OCCULT BLOOD] template value.  A.4 Modified RADZVEFA routine to handle 2 types of Alert types ( CHEST 2 VIEWS ) for 2 type categories where length of Alert Category string determines name and space left for Abnormal Images and Amended names as Stored in DISPLAY TEXT of the Alert Tracking file ( CHEST 2 VIEW FRONT, and CHEST 2 VIEWS FRO, respectively. Later in next build. |
| CR-26 | Tracker: “OTHER-3.A See the list of TIU Templates , and enter proper TIU Template among this list into Alert Type record field via the KB Editor”  A.1 Multiple TIU templates of same name were found in list in KB Editor for Alert Type record due to multiple attempts by different CACs.  A.1 Document warning in Vista Install Guide that this should only be done once by one CAC (in next Install document). |
| CR-30 | Tracker: Manage Log File(s) in SQL Transporter – AddedManage Log File(s) functionalities to SQL Transporter.  This is an enhancement and described in Section 7.5 of this document. |
| CR-31 | “QI Tool Report Header Alignment”  QI Tool report header fields not formatting correctly for Facility and End Date fields. All QI reports were modified for better field alignment. |

# Release Inventory

The following table provides the released material inventory, describes the method of delivery, and to where and to whom the deliverable was released. The following table lists the release inventory.

Table - Inventory of Release Components

| **Release Component** | **Description** | **Method of Delivery** | **Recipient** | **Location** |
| --- | --- | --- | --- | --- |
| AWARE\_v1.1.3.zip | AWARE Version 1.1.3 containing all files listed in Section 2 | Installation | Ralph H. Johnson VA Medical Center, Charleston, SC | VA Server VHACHAAPP11 and VA VHA Innovation Sandbox |
| T4\_AWARE\_VersionDD-V1.1.3.docx | Version Description Document and Release Notes for AWARE Version 1.1.3 | Email & upload | Blake Henderson, VA | AWARE SharePoint Site |

## Electronic Media Released

The VDD and Release Notes and other product documentation are released via email. The software builds are delivered via upload to the VA VHA Innovation Sandbox. The QI Reports are installed by Harris team members and the KIDS build is installed by OIT personnel at the Ralph H. Johnson VA Medical Center in Charleston, SC.

## Physical Media Released

Not applicable. There is no electronic media provided with this deliverable.

# Associated Supporting Documentation

The following table lists the support documents that are associated with this deliverable:

Table - Associated Supporting Documentation

| **Document Name** | **Revision** | **Date** |
| --- | --- | --- |
| AWARE Implementation Plan and Checklist | 0.04 | 07/21/2014 |
| AWARE CPRS Integration Specification | 0.02 | 05/28/2014 |
| AWARE Requirements Specification Document | 0.03 | 05/09/2014 |
| AWARE User Interface Document | 0.02 | 05/29/2014 |
| AWARE Training Plan | 0.01 | 05/15/2014 |
| AWARE System Design Document | 0.01 | 05/27/2014 |
| AWARE Master Test Plan | 0.01 | 05/27/2014 |
| AWARE Requirements Traceability Matrix | 0.01 | 05/28/2014 |
| AWARE Test Cases | 0.01 | 05/29/2014 |
| AWARE Alert Cache Viewer User Guide | 0.01 | 05/29/2014 |
| AWARE Quality Improvement (QI) Report Manager User Guide | 0.01 | 05/29/2014 |
| AWARE Knowledge Base (KB) Editor User Guide | 0.01 | 06/03/2014 |
| AWARE Kernel Installation and Distribution System (KIDS) and Cache Server Page (CSP) Installation Guide | 0.03 | 07/21/2014 |
| AWARE Server Installation Guide | 0.03 | 07/21/2014 |
| AWARE Installation, Setup, Validation and Initial Testing Guide for VistA Test Account | 0.01 | 08/26/2014 |

# Certification

The Configuration Manager for this release certifies that the contents of the packaged release defined by this VDD consist of artifacts archived in the CM environment for AWARE Version 1.1.3as recorded in CM repository on 08/26/2014.

The status of all change requests and code change requests listed in this document in the Change Record Reports section have been verified and are consistent with what is reported here.

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Signed Date

# Appendix A - Release Notes

## Introduction

The Computerized Patient Record System (CPRS) View Alerts package delivers notification of non-life threatening critical test results; however, it does not track whether providers take appropriate follow-up actions in response to the alerts. Currently, the only way to track follow-up actions on critical alerts is through manual review of individual patient records. The innovation Alerts, Watch and Response Engine (AWARE) will track and monitor follow-up actions and will identify certain critical lab and imaging test result alerts that lack timely follow-up. AWARE also consists of a web-based knowledge base editor and a quality measures reporting tool.

## Purpose

These release notes cover the new features provided to AWARE users in this release. All other documents referenced herein can be found at VA AWARE SharePoint site.

## Audience

This document targets users and administrators of the AWARE Test Build software product and applies primarily to the enhancements made to the AWARE prototype software.

## This Release

The following sections provide, in brief, the new features and functions added to AWARE Version 1.1.3.

## Features and Functionality

There were new features/enhancements added for the AWARE 1.1.3 release.

Table 4 - New AWARE Test Build Features

| **Features** |
| --- |
| Tracker: “Alert Cache Viewer – 5 minutes warning” (CR-10)  Changes were made to the Alert Cache Viewer to give the user 5 minutes warning before shutdown. The Dev account CSP time out default is now set to 15 minutes. It will show a warning dialog about 5 minutes before closing down the web page. If you continue before the 5 minutes is up, the timer counter will reset so you should have another 10 minutes before another warning. If you don’t continue after 5 minutes is up, your web page will be automatically closed. Cache has 5 minutes grace period so there are two things can happen here during the close out. 1. If you click after the 15 minutes is up but you’re still in the grace period, you will be directed to the logoff page. 2. If you click after the 15 minutes is up and you’re over the grace period then you will get the Browser error message attempting to connect to Cache. One minute intervals are used to check for timeout so the 5 minute warning may end up to be 6 minutes.  Code was updated to display a warning message. |
| Tracker: “Launching Alert Cache Viewer from CPRS” (CR-16)  The enhancement is to allow CPRS to launch Alert Cache Viewer and without reentering access/verify codes.  Added the ability to launch the AWARE Alert Cache Viewer from the CPRS Tools menu.  The design is as follow:  A. Launching Alert Cache Viewer from the browser work as is. No logic changed.  B. The following logic is used when Alert Cache Viewer is called from CPRS.  1. CPRS will pass DUZ (user) when launching Alert Cache Viewer.  2. Alert Cache Viewer will try to find the encrypted access/verify codes for the DUZ in the client w/s (stored as Cookie). If exist then it will try to login using the found access/verify codes. If successful, it will go straight to the Show Alert Cache page otherwise user must enter a/v codes.  3. For reason #2, user must enter access/verify codes in the Alert Cache Viewer at least one time, the subsequent calls will bypass the A/V dialog.  4. A/V codes stored as cookie will expire in 90 days.  5. If access or verify codes are changed, user must reenter them again in Alert Cache Viewer.  Here is what we need to test (not limited to):  1. Make sure Alert Cache Viewer works as is when launched using browser.  2. From CPRS (Tools menu), call Alert Cache Viewer.  a. If this is the first time the user calls Alert Cache Viewer from CPRS, user should be presented with Access/Verify code dialog.  b. If this is the subsequent time the user calls Alert Cache Viewer from CPRS, user should be directed to Show Alert Cache page (skipping the a/v dialog).  3. Using CPRS or VistA, change access or verify code for the same user above.  a. The user should be prompted with A/V dialog when launching Alert Cache Viewer from CPRS. |
| Tracker: “Need to copy an Alert Type to another Alert Type in order to have different Alert categories ( but with same reminder dialog/TIU template data).” (CR-23)  A.2 This same functionality was done with FileMan “Transfer” function as a workaround in Charleston test account. A.2 Enhancement. See the need for a “Copy’ Alert type function in KB Editor to go along with the EDIT, ADD, and DELETE functions. COPY for similar Alert Types with just Name difference. Example from [OCCULT BLOOD X3 MAILER] to [OCCULT BLOOD SINGLE CARD]. This is an enhancement ( later in next build). Also validate in KB. May also do KB Editor check max length of Alert Category+Alert Type no greater than 70 characters (however, this part may be in later build) |
| Tracker: “Manage Log File(s) in SQL Transporter – AddedManage Log File(s) functionalities to SQL Transporter.” (CR-30)   Rename the log file from AWARE\_SQL\_Transporter.log to AWARE\_SQL\_Transporter\_yyyyMMddhhmmss.log when its size > set size (configurable value) - Only keep the last x (configurable value) number of the log files to prevent the disk space full issue. Delete the oldest log file if the archived folder has more than x number of the log files. |

## Upgrades

Harris personnel reinstalled the new QI Manager build at Charleston by following the installation instructions in the *T4\_AWARE\_InstallGde-Server* document.

Charleston personnel reinstalled the KIDS files from the KIDS\_REMINDER\_DIALOGS\_v\_1\_2\_VMS.zip file including the updated VEFA\_ZEVH\_1\_5.KID and VEFA\_1\_0\_2.KID files using the instructions in the *T4\_AWARE\_InstallGde-Vista\_Test* document.

## Known Issues

There are no known issues specific to this release as this time.

## Product Documentation

The documents listed in Section 5, Table 3 apply to this release.

These documents were delivered to VA by email and reside in VA’s AWARE SharePoint site.