

**VistA Scheduling Enhancements (VSE)**  
**Deployment, Back-Out, and Rollback Guide**



**December 2017**

**Version 4.0**

**Department of Veterans Affairs**  
**Office of Information and Technology (OI&T)**

## Revision History

Date	Version	Description	Author
12/2017	4.0	Updates for Release 1.4	VSE Team
11/2017	3.0	Updates for Release 1.3.2	VSE Team
6/2017	2.0	Updates for Release 1.3.1	VSE PMO
1/3/2017	1.0	Initial Baseline	Amy Smith VSE PMO, Robert Schmidt VA OI&T PM

## Artifact Rationale

This document describes the Deployment, Installation, Back-out, and Rollback Plan for new products going into the VA Enterprise. The plan includes information about system support, issue tracking, escalation processes, and roles and responsibilities involved in all those activities. Its purpose is to provide clients, stakeholders, and support personnel with a smooth transition to the new product or software, and should be structured appropriately, to reflect particulars of these procedures at a single or at multiple locations.

Per the Veteran-focused Integrated Process (VIP) Guide, the Deployment, Installation, Back-out, and Rollback Plan is required to be completed prior to Critical Decision Point #2 (CD #2), with the expectation that it will be updated throughout the lifecycle of the project for each build, as needed.

## Table of Contents

<b>1</b>	<b>Introduction</b> .....	<b>1</b>
<b>2</b>	<b>Background</b> .....	<b>1</b>
<b>3</b>	<b>Dependencies</b> .....	<b>24</b>
<b>4</b>	<b>Constraints</b> .....	<b>24</b>
<b>5</b>	<b>Roles and Responsibilities</b> .....	<b>35</b>
<b>6</b>	<b>Deployment</b> .....	<b>35</b>
<b>7</b>	<b>Timeline</b> .....	<b>46</b>
<b>8</b>	<b>Site Readiness Assessment</b> .....	<b>46</b>
8.1	Deployment Topology (Targeted Architecture) .....	46
8.2	Site Information (Locations, Deployment Recipients) .....	56
8.3	Site Preparation .....	57
8.4	Resources .....	57
<b>9</b>	<b>VistA Server Requirements</b> .....	<b>57</b>
<b>10</b>	<b>Client PC Requirements</b> .....	<b>57</b>
<b>11</b>	<b>Communications</b> .....	<b>67</b>
<b>12</b>	<b>Back-Out Procedure</b> .....	<b>79</b>
12.1	Back-Out Strategy .....	79
12.2	Back-Out Considerations .....	79
12.3	Load Testing .....	79
12.4	Back-Out Criteria .....	79
12.5	Back-Out Risks .....	79
12.6	Authority for Back-Out .....	840
12.7	Back-Out Procedure .....	840
12.8	Back-out Verification Procedure .....	840
<b>13</b>	<b>Rollback Procedure</b> .....	<b>911</b>
13.1	Rollback Considerations .....	911
13.2	Rollback Criteria .....	911
13.3	Rollback Risks .....	911
13.4	Authority for Rollback .....	911
13.5	Rollback Procedure .....	911
13.6	Rollback Verification Procedure .....	1042
<b>14</b>	<b>Appendix</b> .....	<b>1113</b>
14.1	SD*5.3*669 Patch Description .....	1843
14.2	SD*5.3*671 Patch Description .....	1124

VistA Scheduling Enhancements (VSE)

**14.3Deployment Locations.....2829**

# 1 Introduction

This document describes how to deploy, install, back-out and roll back the Veterans Health Information System and Technology Architecture (VistA) Scheduling (VS) Graphical User Interface (GUI) and associated patches for VSE Release 1.4. This document is a companion to the Project Charter and Management Plan, User and Installation Guide for this effort.

## 2 Background

The VistA Scheduling Enhancements (VSE) project provides critical, near-term enhancements to the existing VA scheduling system while allowing the VA time to integrate the long-term Commercial off the Shelf (COTS) enterprise solution. The purpose of VSE is to provide immediate relief to the scheduling clerks by improving how information is presented. VSE provides a GUI developed in C# and installed on every desktop (thick client) and interfaces with Legacy VistA. The VSE project will continue to deliver a series of enhancements to legacy VistA Scheduling v5.3.

The VS GUI Release 1.4 includes the Personal Identity Verification (PIV) functionality along with 11 sustainment patch ticket fixes. The table below provides summary data for the tickets.

### VSE 1.4 Sustainment Tickets

Incident #	Summary
I10959194FY17	Clinic Group would not display for second patient without searching for a different clinic group first.
I11259063FY17	Unable to disposition Wait List from RM Grid.
I12362398FY17	Scheduling Grid continues to display OVERBOOK capability (TEAL color) when a FULL DAY cancelation has been entered.
I12487403FY17	An Unhandled Exception occurs in VS GUI when attempting to use drag and drop for a consult appointment.
I12529073FY17	In VS GUI, Slots in the Grid and the Available Slot Numbers Change Depending on Where I Clicked on the Grid.
I12602010FY17	Patient with a Date of Death can add a new Appointment Request.
I12748395FY17	Cancel by clinic in VS GUI allows the CID/Preferred date to be changed.
I12871937FY17	VS GUI Audit Report has conflicting counts when displaying by user vs displaying ALL users.
I13212697FY17	Appointments scheduled in VS GUI with past date do not display in CPRS coversheet.
I13233499FY17	Issue in VS GUI when selecting 'Follow-up Needed' when checking out an appointment.
R14380532FY17	SDRR CLINIC LETTER REPORT option will not run properly due to bad data.

### 3 Dependencies

The following activities are dependencies for the VSE project:

- Sites should have VSE Release 1.3.2 deployed on the machines upgrading to this release or they will need to do so prior.

The table below contains the VistA Patch dependencies for GUI Release 2.0.0.14.

Patch Name	Application Name	Purpose or Need
SD*5.3*671	VistA Scheduling	Needs to be installed prior to 672
SD*5.3*672	VistA Scheduling	Supports the 11 tickets

### 4 Constraints

#### Section 508 Requirements

VS GUI complies with all Section 508 requirements. The Veterans Health Administration (VHA) recognizes that these cross-cutting legal requirements apply across the Enterprise for all developed Electronic and Information Technology (IT). Enterprise-level requirements maintained by VHA Health IT, Software Engineering and Integration, and Enterprise Requirements Management ensure the compliance of these requirements.

## 5 Roles and Responsibilities

Deployment and installation activities are performed by representatives from the teams listed in the following table. This phase begins after the solution design.

**Table 1: Roles and Responsibilities**

Team	Phase / Role	Tasks
VSE Project Manager (PM)	Deployment	Plan and schedule deployment (including orchestration with vendors)
Test Sites	Production Testing	Test for operational readiness and provide concurrence
Veteran-focused Integration Process (VIP) Release Readiness Team	Deployment	Ensure collection of artifacts required for deployment
VSE Implementation Manager (IM)	Deployment	Confirm project is ready for national release
Facility OI&T Staff	Installation	Facilities will install the associated patches that pair with the VS GUI. In some instances they may install the VS GUI on users' Desktops as well.
Enterprise Services Engineering (ESE) and Desktop Device Engineering Client Services Group	Installation	Prepare the SCCM package for VS GUI installation
Office of Veteran Access to Care (OVAC)	Installation	Coordinate training

## 6 Deployment

This deployment plan describes the VS GUI and associated patches to successfully deploy and install the software. The scope of this deployment consists of VistA Scheduling (VS) patch and the VistA Scheduling GUI. The patch descriptions can be found in Appendix A.

Deployment of the patch, along with the VS GUI, is planned as a national release roll out with the release of the VistA patch for Legacy VistA via FORUM and the GUI executable via Systems Center Configuration Manager (SCCM) process. Load time will vary by location ranging from minutes to a few hours. IT Operations and Service (ITOPS) will provide support to the local sites.

VistA Scheduling Enhancements (VSE)

The deployment of this release will be supported by a compliance period no later than (NLT) ~~20~~ ~~8 January-February~~ 2018.

The VSE schedule and milestones for the deployment can be found on the VSE SharePoint site: [http://vaww.oed.portal.va.gov/pm/iehr/vista\\_evolution/enhancements/Scheduling/Forms/AllItems.aspx](http://vaww.oed.portal.va.gov/pm/iehr/vista_evolution/enhancements/Scheduling/Forms/AllItems.aspx)

## 7 Timeline

The deployment and installation is scheduled to run for approximately 4 weeks as depicted in the project schedule. The patch and GUI identified earlier should be installed in the pre-production environment first. Once the site has successfully installed and deployed the software in the pre-production environment and user desktops, the location should start installing the software in their production environment. The plan is for sites to actively request deployment of the new GUI and patch; this will require coordination with the regional Enterprise Service Line (ESL) team and the SCCM deployment team. All locations should have the VS GUI and the associated patch installed in their production environments NLT ~~820 February~~ ~~January~~ 2018.

### Assumptions

The following conditions will be assumed for the VSE Release 2.0.0.14:

- All facilities deploying this application will have a fully patched VistA account.
- VSE Release patches will be installed by the NLT ~~820 February~~ ~~January~~ 2018 compliance date.
- ESE will provide the SCCM package needed for VS GUI release
- OVAC will provide a training plan prior to deployment.

## 8 Site Readiness Assessment

All field locations will receive the Vista Scheduling patches from FORUM and the GUI executable via the SCCM process.

### 8.1 Deployment Topology (Targeted Architecture)

The VistA Scheduling GUI v2.0.0.14 package consists of both VistA M code and Windows workstation executable files.

The Windows executable, which will become the graphical front-end of the legacy VistA Scheduling application, will be automatically installed via SCCM on each end-users' workstation. The distribution of access to the executable is the responsibility of the OI&IT leadership at the VistA parent facility.

VistA Scheduling Enhancements (VSE)



## 8.2 Site Information (Locations, Deployment Recipients)

Site information such as the Internet Protocol (IP) address, port number, and namespace of the production environment will be different at each VistA instance. Local site OI&T personnel, working with local scheduling representatives, will determine the recipients of the VS GUI software. The expectation is for the VSE software to be deployed to all scheduling representative computers at each facility. A list of the local sites can be found in the Appendix.

## 8.3 Site Preparation

The Release 1.4 Patch Descriptions and Release Notes, which includes a list of the patch and a summary of the Installation Order, will prepare each site for installation. Patches will be released on the same day and in the installation order stated in the Release Notes document. A list of prerequisites for the VistA Scheduling GUI v2.0.0.14 installation are listed in the VistA Scheduling GUI v2.0.0.14 Installation Guide which will be distributed to appropriate site staff prior to the deployment date. The Release Notes document will be posted on the VA Software Document Library (VDL).

## 8.4 Resources

There will be a daily call setup for sites that are having install/deployment issues. If a site experiences issues, an Enterprise Service Desk (ESD) ticket must be submitted. Once that ticket is submitted, the vendor will be able to support with troubleshooting during the daily call. The call will be scheduled for 3pm EST.

## 9 VistA Server Requirements

- Cache version 5.0
- Kernel version 8
- Patient Information Management System (PIMS) version 5.3 patch 1012

## 10 Client PC Requirements

- Microsoft Windows XP or Windows 7
- Microsoft .NET Framework 4.0
- Microsoft Data Access Components (MDAC) current version

VistA Scheduling Enhancements (VSE)

# 11 Communications

The primary objective of the communication plan is to ensure timely information is disseminated across the VSE team and our stakeholders. Communication is needed to ensure schedules are aligned and project milestones are met.

Project milestones and information is also required to be shared with VA executives and external organizations. The goal is to notify the right audience, at the right time, using the appropriate communication method(s).

The following table identifies key project communication along with the owner, communication recipients and the method(s) to disseminate the information.

Key Communication	Goal/Description	Initiator/Owner	Audience	Communication Method(s)
Install Instructions & Support	Provide site requirements, instructions & install support (HW/SW/patches etc.)	AbleVets & VHA developers	IT/Operation site managers	VA Pulse, Daily deployment call, Initial Operating Capacity (IOC) email group
Deployment schedule	Identify by site key dates/milestones	OVAC	Project team & stakeholders	Update schedule online bi-weekly - dates are also discussed on daily deployment call
Training	Communicate status of training development, who is being trained and when.	OVAC	Project team & stakeholders	VA Pulse, daily deployment call, deployment schedule

## 12 Back-Out Procedure

The VS GUI executable is the software component that requires a back out procedure. Section 13 - Rollback plan addresses any data changes that would need to occur for the VistA patches. The GUI can be installed via Systems Center Configuration Manager (SCCM) deployment process or manually. This procedure covers the back out of the software via the manual process. Schedulers who may have the GUI installed on their desktops and want it removed should follow the procedure set at their local facility for software removal. This may consist of submitting a ticket to the ESD.

### 12.1 Back-Out Strategy

There is no back-out strategy for the VS GUI executable. Contact ESD and open a ticket for assistance.

### 12.2 Back-Out Considerations

Following are checkpoints to consider when determining if the software needs to be backed out:

- The software functionality would be validated in pre-production (Mirror/Test) environment at the Initial Operating Capabilities (IOC) sites.
- The software has to be validated in the pre-production environments at the VA Medical centers prior to production install.
- Insure that the associated patch installations were conducted in the proper sequence.
- Review the steps in install guide to be sure that the software was installed correctly.
- Review the Patch descriptions, Release notes and or the User Guide to determine if the software is functioning properly.

### 12.3 Load Testing

There was no load testing performed for the VS GUI. Limited performance testing was included as part of the end user's testing.

### 12.4 Back-Out Criteria

There is no back out criteria due to the fact the software is mandated. See ESD for site support to address any issues.

### 12.5 Back-Out Risks

- The following are the risks of backing out VS GUI: Previous versions of the GUI may not remove all associated files and remains under the Add/Remove section of Windows.

VistA Scheduling Enhancements (VSE)

- Patch installation not conducted in the correct order.

## 12.6 Authority for Back-Out

Site local OI&IT administrator has the credentials to uninstall the VS GUI for users' desktops.

## 12.7 Back-Out Procedure

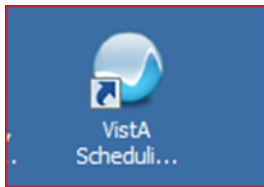
The VS GUI can be uninstalled via the following steps:

1. Click on Control Panel
2. Click on Programs
3. Click on the uninstall program link
4. Find the VistA Scheduling GUI program
5. Right click on the VistA Scheduling GUI
6. Then select uninstall

## 12.8 Back-out Verification Procedure

On the desktop, the VistA Scheduling - Shortcut icon will no longer be displayed. The image VistA Scheduling – Shortcut icon is show in figure 1 below.

**Figure 1: VistA Scheduling GUI – Shortcut**



## 13 Rollback Procedure

While a site can run the standard patch removal tool to back-out the patches, these patches contain changes to a Data Dictionary which can't be automatically backed out. In the event that a site determines rollback is required, the site should submit a ticket with the ESD and have the development support team assist with the rollback.

### 13.1 Rollback Considerations

Following are checkpoints to consider when determining if the software needs to be backed out:

- Conduct a check on the Transport Global backup
- Conduct a validation of the Check sum(s)
- Check the CA Service Desk Manager (SDM) for the submission of previous ESD ticket resolutions

### 13.2 Rollback Criteria

The following are the rollback criteria:

- Transport Global check failures
- Check sum(s) check failures
- Patch installations not conducted in the proper order

### 13.3 Rollback Risks

The following are the rollback risks:

- Manually deleting the incorrect file(s)
- Restoring the incorrect file(s)
- Housing used tables in the database

### 13.4 Authority for Rollback

The site programmer has the authority to conduct a roll back. Sites with no OI&T programmer support should contact their regional OI&T support person.

### 13.5 Rollback Procedure

The following are the steps to follow for the rollback procedure:

1. Locate the results from your site's Transport Global backup which was done prior to installing the patches. The Transport Global backup creates a backup message of any

routines exported with the installed patches. It will not backup any other changes such as Data Dictionaries (DD) or templates.

2. Locate the backup or copy of the modified files prior to the patch installations. The table below identifies all the databases that will be created, replaced, interfaced with, or whose structure will be modified (i.e., add or delete tables or add or delete columns to a table) as part of this effort.

**Table 1: Database Inventory**

<b>FILE Name</b>	<b>Description</b>	<b>Type</b>
SDEC CONTACT	This file [409.86] is used by the VSE VS GUI. The file contains patient contact information regarding appointment follow up each time a patient is contacted.	CREATE

3. Once the backups are located the OI&T programmer should extract and restore routines and modified files back to their pre-patch installations state. The modified files are listed in the table above.
4. All SDEC entries created in the REMOTE PROCEDURE: (#8994) file should be deleted.
5. Delete all new routines associated with SD\*5.3\*671 and SD\*5.3\*672.

## **13.6 Rollback Verification Procedure**

Once the roll back procedure has been completed, the OI&T programmer should manually verify that the data rollback has successfully taken place. This is can only be done by looking at each data element individually.

# 14 Appendix

## 14.1 SD\*5.3\*671 Patch Description

=====

Run Date: OCT 26, 2017	Designation: SD*5.3*671
Package : SD - SCHEDULING	Priority: Mandatory
Version : 5.3	Status: Released

=====

Associated patches: (v)SD\*5.3\*669 <=< must be installed BEFORE `SD\*5.3\*671`

Subject: VSE Return to Clinic

Category:

- Routine
- Enhancement (Mandatory)

Description:

=====

The Vista Scheduling (VS) Graphical User Interface GUI v2.0.0.13 and this patch provide additional enhancements to the (VS)(GUI) v2.0.0.8. This patch addresses the following issues:

Return to Clinic - The GUI must auto-populate the Clinically Indicated Date (CID) from the Return to Clinic (RTC) orders in CPRS.

Mismatched grids/overwriting appointments instead of canceling in Appointment Management.

Inactive patient flags showing as active in the VS GUI.

Delete checkout removes encounter info and not directly tied to SD SUPERVISOR key. User must have SD SUPERVISOR key to perform this option.

Note: This patch SD\*5.3\*671 and OR\*3\*434 are independent patches. The patches do share functionality and it is recommended that they be installed together.

Patch Components:

-----

VistA Scheduling Enhancements (VSE)

Files & Fields Associated:

File Name (#)	Field Name (#)	New/Modified/Deleted
SDEC APPT REQUEST (#409.85)	ORDER ID(#46)	New
SDEC APPT REQUEST (#409.85)	NO LATER THAN(#47)	New
SDEC APPT REQUEST (#409.85)	PREREQUISITE(#48)	New

Forms Associated:

Form Name	File #	New/Modified/Deleted
N/A		

Mail Groups Associated:

Mail Group Name	New/Modified/Deleted
N/A	

Options Associated:

Option Name	Type	New/Modified/Deleted
SDECRPC	Broker (Client/Server)	Modified

Parameter Definitions Associated:

Parameter Name	New/Modified/Deleted
N/A	

Protocols Associated:

Protocol Name	New/Modified/Deleted
SD EVSEND OR	New
SD RECEIVE OR	New

Remote Procedures Associated:

RPC Name	New/Modified/Deleted
SDEC GETPRER	New

VistA Scheduling Enhancements (VSE)



SDEC EDIT RETURN

New

Security Keys Associated:

Security Key Name

-----

N/A

Templates Associated:

Template Name	Type	File Name (#)	New/Modified/Deleted
---------------	------	---------------	----------------------

-----

N/A

New Service Requests (NSRs):

-----

20141109 - National Return to Clinic Order

Additional Information:

-----

N/A

Patient Safety Issues (PSIs):

-----

N/A

Defect Tracking System Ticket(s) & Overview:

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I15863501FY17

I12719561FY17

R15961555FY17

R15212234FY17

R15563148FY17

Test Sites:

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Salt Lake City VA Medical Center

Tomah VA Medical Center

Software and Documentation Retrieval Instructions:

-----

Software being released as a host file and/or documentation describing the new functionality introduced by this patch are available.

The preferred method is to retrieve files from [download.vista.med.va.gov](http://download.vista.med.va.gov).

This transmits the files from the first available server. Sites may

VistA Scheduling Enhancements (VSE)

also elect to retrieve files directly from a specific server.

Sites may retrieve the software and/or documentation directly using Secure File Transfer Protocol (SFTP) from the ANONYMOUS.SOFTWARE directory at the following OI Field Offices:

Hines: fo-hines.med.va.gov

Salt Lake City: fo-slc.med.va.gov

Documentation can also be found on the VA Software Documentation Library at:

<http://www4.va.gov/vdl/>

VS GUI 1.3.1 Technical Manual

VS GUI 1.3.1 User Guide

Patch Installation:

-----

Post Installation Overview:

-----

The post-init routine SDEC671 will transfer from SDEC APPT REQUEST (#409.85) file the Patient Contact (#44) field multiple to the SDEC CONTACT (#409.86). No data will be deleted or fields removed at this time.

IF RESTART IS REQUIRED:

NOTE: The following procedures require someone with programmer access and knowledge.

The post-init routine sets the XTMP global, to record the last entry transferred. If the routine stops for any reason it can be re-started by doing the following:

D RESTART^SDEC671

Also entries in the file SDEC APPOINTMENT (#409.84) that have no corresponding entry in the PATIENT (#2) will be displayed and deleted. The entries are also saved in the XTMP("671SDEC") global.

THIS PROCEDURE CAN BE RE-STARTED BY DOING THE FOLLOWING:

D PORT2^SDEC671

VistA Scheduling Enhancements (VSE)

Pre-Installation Instructions:

-----

This patch should not be installed with VistA Scheduling GUI users on the system and it is recommended that it be installed during non-peak hours to minimize potential disruption to other users. This patch should take less than 5 minutes to install.

The following options should be disabled to ensure that no processing takes place during the install:

Clinical Scheduling Procedure Calls	[SDECRPC]
Scheduling Manager's Menu	[SDMGR]
Supervisor Menu	[SDSUP]
Scheduling Menu	[SDUSER]
Set up a Clinic	[SDBUILD]

Installation Instructions:

-----

This installation will update routines that support VistA Scheduling GUI APIs.

1. Choose the PackMan message containing this patch.
2. Choose the INSTALL/CHECK MESSAGE PackMan option.
3. From the Kernel Installation and Distribution System Menu, select the Installation Menu. From this menu, you may elect to use the following options. When prompted for the INSTALL NAME enter the patch SD\*5.3\*671
  - a. Backup a Transport Global - This option will create a backup message of any routines exported with this patch. It will not backup any other changes such as DDs or templates.
  - b. Compare Transport Global to Current System - This option will allow you to view all changes that will be made when this patch is installed. It compares all components of this patch (routines, DDs, templates, etc.).
  - c. Verify Checksums in Transport Global - This option will allow you to ensure the integrity of the routines that are in the transport global.
4. From the Installation Menu, select the Install Package(s) option and choose the patch to install.

VistA Scheduling Enhancements (VSE)

5. When prompted 'Want KIDS to Rebuild Menu Trees Upon Completion of Install? NO//' Respond with 'NO'
6. When prompted 'Want KIDS to INHIBIT LOGONs during the install? NO//' Respond with 'NO'
7. When prompted 'Want to DISABLE Scheduled Options, Menu Options, and Protocols? NO//' Respond with 'YES' Option to mark as out of order:

Clinical Scheduling Procedure Calls	[SDECRPC]
Scheduling Manager's Menu	[SDMGR]
Supervisor Menu	[SDSUP]
Scheduling Menu	[SDUSER]
Set up a Clinic	[SDBUILD]

Routine Information:

=====

The second line of each of these routines now looks like:

```
;;5.3;Scheduling; **[Patch List]**; Aug 13, 1993; Build 24
```

The checksums below are new checksums, and can be checked with CHECK1^XTSUMBLD.

Routine Name: SDEC07

Before: B186068449 After: B187944035 \*\*627,642,651,658,665,669,671\*\*

Routine Name: SDEC25

Before: B108318139 After: B115273682 \*\*627,665,671\*\*

Routine Name: SDEC55A

Before: B79593054 After: B80956414 \*\*627,671\*\*

Routine Name: SDEC671

Before: n/a After: B40695301 \*\*671\*\*

Routine Name: SDECAR

Before: B92353393 After: B90430673 \*\*627,642,671\*\*

Routine Name: SDECAR2

Before: B158474911 After: B191968590 \*\*627,642,658,671\*\*

Routine Name: SDECELG

Before: B1142489 After: B3245996 \*\*669,671\*\*

Routine Name: SDECEPT

Before: B134242125 After: B129602604 \*\*669,671\*\*

Routine Name: SDECHL7

Before: n/a After: B3330551 \*\*671\*\*

Routine Name: SDECU2

Before: B12359142 After: B12464546 \*\*627,658,671\*\*

Routine Name: SDHL7

Before: n/a After: B103204707 \*\*671\*\*

Routine Name: SDHL7BLD

VistA Scheduling Enhancements (VSE)

Before: n/a After: B15632226 \*\*671\*\*  
Routine Name: SDM2  
Before: B24545266 After: B24069088 \*\*32,132,168,356,434,467,478,671\*\*

Routine list of preceding patches: 478, 669

=====  
User Information:

Entered By : REESE,DARRYL M            Date Entered : MAY 25, 2017

Completed By:                            Date Completed:

Released By :                            Date Released :

=====

Packman Mail Message:

=====

## 14.1SD\*5.3\*672 Patch Description

=====  
Run Date: SEP 26, 2017                      Designation: SD\*5.3\*672  
Package : SD - SCHEDULING                  Priority: Mandatory  
Version : 5.3                                  Status: IOC Testing  
=====

Associated patches: (u)SD\*5.3\*671 <=< must be installed BEFORE `SD\*5.3\*672'

Subject: VISTA SCHEDULING GRAPHICAL USER INTERFACE SUSTAINMENT

Category:  
- Routine

Description:

=====

This patch addresses the following issues:

1. I10959194FY17 - Clinic Group would not display for second patient without searching for a different clinic group first.
2. I11259063FY17 - Unable to disposition Wait List from RM Grid.
3. I12362398FY17 - Scheduling Grid continues to display OVERBOOK capability (TEAL color) when a FULL DAY cancelation has been entered.
4. I12487403FY17 - An Unhandled Exception occurs in VS GUI when attempting to use drag and drop for a consult appointment.
5. I12529073FY17 - In VS GUI, Slots in the Grid and the Available Slot Numbers Change Depending on Where I Clicked on the Grid.
6. I12602010FY17 - Patient with a Date of Death can add a new Appointment Request.
7. I12748395FY17 - Cancel by clinic in VS GUI allows the CID/Preferred date to be changed.
8. I12871937FY17 - VS GUI Audit Report has conflicting counts when displaying by user vs displaying ALL users.
9. I13212697FY17 - Appointments scheduled in VS GUI with past date do not display in CPRS coversheet.
10. I13233499FY17 - Issue in VS GUI when selecting 'Follow-up Needed' when checking out an appointment.
11. R14380532FY17 - SDRR CLINIC LETTER REPORT option will not run properly due to bad data.

Patch Components:

-----

VistA Scheduling Enhancements (VSE)

Files & Fields Associated:

File Name (#)	Field Name (#)	New/Modified/Deleted
-----	-----	-----
N/A		

Forms Associated:

Form Name	File #	New/Modified/Deleted
-----	-----	-----
N/A		

Mail Groups Associated:

Mail Group Name	New/Modified/Deleted
-----	-----
N/A	

Options Associated:

Option Name	Type	New/Modified/Deleted
-----	-----	-----
N/A		

Protocols Associated:

Protocol Name	New/Modified/Deleted
-----	-----
N/A	

Security Keys Associated:

Security Key Name
-----
N/A

Templates Associated:

VistA Scheduling Enhancements (VSE)

Template Name	Type	File Name (Number)	New/Modified/Deleted
-----	---	-----	-----
N/A			

Additional Information:  
N/A

New Service Requests (NSRs):  
-----  
N/A

Patient Safety Issues (PSIs):  
-----  
N/A

Defect Tracking System Ticket(s) & Overview:  
-----

1. I10959194FY17 - Clinic Group would not display for second patient without searching for a different clinic group first.

Problem: -----

In the VistA Scheduling Graphical User Interface (VS GUI), after searching for a Clinic Group for a patient, then selecting a new patient and searching for the same Clinic Group, it did not display until the user searched for a different clinic group, and searched again for the 1st clinic group.

Resolution:

-----  
The code managing Clinic, Provider and Clinic Group schedules has been corrected so that when the control gets focus, any existing text is not removed. When a Clinic, Provider or Clinic Group has been previously selected the user can press the enter key when the control has focus and the schedule for the selected item will be open.

2. I11259063FY17 - Unable to disposition Wait List from Request Management (RM) Grid.

Problem:

-----

A Wait List Request continues to be displayed in the VS GUI RM Grid even though the status in VistA reflects it is closed.

Resolution:

-----

The VS GUI Client has been corrected to correctly use the disposition return  
VistA Scheduling Enhancements (VSE)



piece of the SDEC WLGET remote procedure.

3. I12362398FY17 - Scheduling Grid continues to display OVERBOOK capability (TEAL color) when a FULL DAY cancelation has been entered.

Problem:

-----

Scheduling Grid in VS GUI continues to display Overbook capability (teal color) when a full day cancelation has been entered. A message needs to display to the user indicating this is an Overbook.

Resolution:

-----

Added message to user when attempting to book appointment on cancelled clinic availability.

4. I12487403FY17 - An Unhandled Exception occurs in VS GUI when attempting to use drag and drop for a consult appointment.

Problem:

-----

When attempting to use drag and drop for a consult appointment, an unhandled exception occurs.

Resolution:

-----

This error occurred when dropping the appointment on an 'unavailable' position. The VS GUI client has been corrected to not allow this to happen.

5. I12529073FY17 - In VS GUI, Slots in the Grid and the Available Slot Numbers Change Depending on Where I Clicked on the Grid.

Problem:

-----

I noticed that the available slots in the grid and the available slot numbers changed depending on where I clicked on the grid. First I opened ash/dermatology md1: Clicked on the date of the appt in the calendar 1/30: 60 min appt scheduled shows 10:00 slot (0), 10:30 slot (1) Clicked on 1/10 in calendar, then came back to 1/30 by clicking date on calendar: Now same 60min appt shows availability at 10:00 (0) and blank at 10:30. I then clicked on 1/31 grid and availability for the 1/30 appt changed back to 10:00 (0) and 10:30 (1) In addition, I found that when I clicked on 1/27, 1/28 or 1/29 (days with no availability) the slots on the weekdays moved around. The slot count is showing (1) at 9:15, should be a (0).

Resolution:

Vista Scheduling Enhancements (VSE)

-----

The VS GUI Client has been corrected to keep the slot counts aligned with the correct slot (line).

6. I12602010FY17 - Patient with a Date of Death can add a new Appointment Request.

Problem:

-----

When adding a new appointment request in the VistA Scheduling Graphical User Interface (VS GUI), the user should be given a message and the system should not allow a new appointment request to be added if the patient has a Date of Death defined.

Resolution:

-----

The VS GUI client has been corrected to recognize the Date of Death definition when adding a new appointment request.

7. I12748395FY17 - Cancel by clinic in VS GUI allows the CID/Preferred date to be changed.

Problem:

-----

User is able to change Clinically Indicated Date (CID)/Preferred ate on appointment by selecting:

Cancelled by patient

Changed the CID/Preferred date from e.g. 4/12/17 to 6/16/17

Select Cancelled by clinic - new CID/preferred is retained

Resolution:

-----

The VS GUI client has been corrected to insure the CID\Preferred Date displays correctly and cannot be modified or Cancelled by Clinic and Cancelled by Patient.

8. I12871937FY17 - VS GUI Audit Report has conflicting counts when displaying by user vs displaying ALL users.

Problem:

-----

Audit Report count is changing when using all versus selecting an individual scheduler. The date range used is not changed so the count should be the same.

VistA Scheduling Enhancements (VSE)

Resolution:

-----

These counts have been corrected in the SDEC SUMMGET remote procedure.

9. I13212697FY17 - Appointments scheduled in VS GUI with past date do not display in CPRS coversheet.

Problem:

-----

Appointments that have been scheduled via VS GUI, have reached a PAST status and are not in checked out, cancelled, or no-show status do not display in the Computerized Patient Record System (CPRS) in the Encounter pane or on Cover Sheet.

Resolution:

-----

After the appointment has been filed, SDAM will make an evaluation to determine if the check-in and/or checkout prompt needs to display. Even if the user does not check-in or checkout, an entry is added to the OUTPATIENT ENCOUNTER file (#409.68).

This similar logic has been added to the SDEC APPADD remote procedure so that the OUTPATIENT ENCOUNTER file is updated and the encounter will display in CPRS.

10. I13233499FY17 - Issue in VS GUI when selecting 'Follow-up Needed' when checking out an appointment.

Problem:

-----

When user selects 'Follow-Up Needed' in the checkout dialog, selects a date, and then clicks OK an APPT Request is not displaying so the user can create a request for follow up appointment.

Resolution:

-----

The VS GUI client has been corrected by fixing a logic error preventing the new request dialog from displaying after a checkout with Follow-up.

11. R14380532FY17 - SDRR CLINIC LETTER REPORT option will not run properly due to bad data.

Problem:

-----

If there is an entry in the RECALL REMINDERS file (#403.5) that is missing a patient Identifier (ID), RECALL DATE, CLINIC ID, or if the Clinic record does not contain VistA Scheduling Enhancements (VSE)

a name, the SDRR CLINIC LETTER REPORT option will throw an error.  
The specific error reported happened because the RECALL REMINDERS entry did not contain a patient ID:

```
Walla Walla error trap:$ZE= <SUBSCRIPT>SORT+9^SDRRREP ^DPT("")  
S SSN=$E($P(^DPT(DFN,0),"^",9),6,9) S:SSN="" SSN=0
```

Resolution:

-----

The Clinic Letter Report option [SDRR CLINIC LETTER REPORT] has been updated to catch and skip records that contain missing required data.

Test Sites:

-----

VA Salt Lake City Health Care System  
Tomah VA Medical Center

Software and Documentation Retrieval Instructions:

-----

Software being released as a host file and/or documentation describing the new functionality introduced by this patch are available.

The preferred method is to retrieve files from [download.vista.med.va.gov](http://download.vista.med.va.gov). This transmits the files from the first available server. Sites may also elect to retrieve files directly from a specific server.

Sites may retrieve the software and/or documentation directly using Secure File Transfer Protocol (SFTP) from the ANONYMOUS.SOFTWARE directory at the following OI Field Offices:

Albany: [fo-albany.med.va.gov](http://fo-albany.med.va.gov)  
Hines: [fo-hines.med.va.gov](http://fo-hines.med.va.gov)  
Salt Lake City: [fo-slc.med.va.gov](http://fo-slc.med.va.gov)

Documentation can also be found on the VA Software Documentation Library at: <http://www4.va.gov/vdl/>

Title	File Name	FTP Mode
VistA Scheduling Enhancements GUI User Guide	VSE_VA_GUI_UG.PDF	Binary
VistA Scheduling Enhancements Technical Manual	VSE_TM.PDF	Binary

VistA Scheduling Enhancements (VSE)

## Patch Installation:

### Pre/Post Installation Overview:

-----

This patch contains no PRE Installation processing.

This patch contains no POST Installation processing.

### Pre-Installation Instructions:

-----

This patch should not be installed with VistA Scheduling GUI users on the system and it is recommended that it be installed during non-peak hours to minimize potential disruption to other users. This patch should take less than 5 minutes to install.

The following options should be disabled to ensure that no processing takes place during the install:

Clinical Scheduling Procedure Calls	[SDECRPC]
Scheduling Manager's Menu	[SDMGR]
Supervisor Menu	[SDSUP]
Scheduling Menu	[SDUSER]
Clinic Letter Report	[SDRR CLINIC LETTER REPORT]

### Installation Instructions:

-----

This installation will update routines that support VistA Scheduling GUI Application Programming Interfaces (APIs).

1. Choose the PackMan message containing this patch.
2. Choose the INSTALL/CHECK MESSAGE PackMan option.
3. From the Kernel Installation and Distribution System Menu, select the Installation Menu. From this menu, you may elect to use the following options. When prompted for the INSTALL NAME enter the patch # SD\*5.3\*672:
  - a. Backup a Transport Global - This option will create a backup message of any routines exported with this patch. It will not backup any other changes such as DDs or templates.
  - b. Compare Transport Global to Current System - This option will allow you to view all changes that will be made when this patch is installed. It compares all components of this patch (routines,

VistA Scheduling Enhancements (VSE)

DDs, templates, etc.).

c. Verify Checksums in Transport Global - This option will allow you to ensure the integrity of the routines that are in the transport global.

4. From the Installation Menu, select the Install Package(s) option and choose the patch to install.
5. When prompted 'Want KIDS to Rebuild Menu Trees Upon Completion of Install? NO//'  
Respond with 'NO'
6. When prompted 'Want KIDS to INHIBIT LOGONs during the install? NO//'  
Respond with 'NO'
7. When prompted 'Want to DISABLE Scheduled Options, Menu Options, and Protocols? NO//'  
Respond with 'YES'  
Options to mark as out of order:  
Clinical Scheduling Procedure Calls [SDECRPC]  
Scheduling Manager's Menu [SDMGR]  
Supervisor Menu [SDSUP]  
Scheduling Menu [SDUSER]  
Clinic Letter Report [SDRR CLINIC LETTER REPORT]
8. If prompted 'Delay Install (Minutes): (0 - 60): 0//' respond 0.

Post-Installation Instructions:

-----  
N/A

Routine Information:

=====

The second line of each of these routines now looks like:

```
;;5.3;Scheduling; **[Patch List]**; Aug 13, 1993; Build 9
```

The checksums below are new checksums, and can be checked with CHECK1^XTSUMBLD.

Routine Name: SDEC

Before: B129056425 After: B129523309 \*\*627,643,642,651,658,665,672\*\*

Routine Name: SDEC01A

Before: B116433919 After: B123678452 \*\*627,642,658,665,672\*\*

Routine Name: SDEC02

Before: B53389862 After: B68680067 \*\*627,642,658,672\*\*

VistA Scheduling Enhancements (VSE)

Routine Name: SDEC07  
Before: B186068449 After: B193088585 \*\*627,642,651,658,665,669,671,672\*\*  
Routine Name: SDEC32  
Before: B103453639 After: B114220847 \*\*627,643,642,658,665,672\*\*  
Routine Name: SDEC50  
Before: B97773017 After: B102324779 \*\*627,658,665,672\*\*  
Routine Name: SDEC54A  
Before: B83794184 After: B86091542 \*\*627,642,658,665,672\*\*  
Routine Name: SDEC56  
Before: B59961693 After: B65059855 \*\*627,642,651,665,672\*\*  
Routine Name: SDECWL  
Before: B99990256 After: B102048711 \*\*627,642,665,672\*\*  
Routine Name: SDRRREP  
Before: B9249872 After: B11839336 \*\*643,672\*\*

Routine list of preceding patches: 671

=====  
=====  
User Information:  
Entered By : THIMMES,STEVEN                      Date Entered : JUL 25, 2017  
Completed By:                                      Date Completed:  
Released By :                                      Date Released :  
=====  
=====

Packman Mail Message:

---

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## 14.2 Deployment Locations

R	VISN	VAMC
1	1	Togus VA Medical Center
1	1	White River Junction VA Medical Center
1	1	Edith Nourse Rogers Memorial Veterans Hospital
1	1	Boston Healthcare System - Jamaica Plain Campus
1	1	West Roxbury
1	1	Brockton
1	1	Manchester VA Medical Center
1	1	VA Central Western Massachusetts Healthcare System (Edward P. Boland)
1	1	Providence VA Medical Center
1	1	VA Connecticut Healthcare System, West Haven Campus
1	1	Newington
1	2	VA Western New York Healthcare System at Buffalo
1	2	Batavia
1	2	Canandaigua VA Medical Center
1	2	Bath VA Medical Center
1	2	Syracuse VA Medical Center
1	2	Samuel S. Stratton Albany VA Medical Center
1	3	James J. Peters VA Medical Center - Bronx
1	3	VA New Jersey Health Care System East Orange Campus
1	3	Lyons
1	3	VA Hudson Valley Health Care System - Franklin Delano Roosevelt Campus
1	3	Castle Point
1	3	VA NY Harbor Healthcare System
1	3	Brooklyn
1	3	St. Albans
1	3	Northport VA Medical Center
1	4	Wilmington VA Medical Center
1	4	James E. Van Zandt VA Medical Center
1	4	VA Butler Healthcare
1	4	Coatesville VA Medical Center
1	4	Erie VA Medical Center
1	4	Lebanon VA Medical Center
1	4	Philadelphia VA Medical Center

VistA Scheduling Enhancements (VSE)



R	VISN	VAMC
1	4	VA Pittsburgh Healthcare System, University Drive Campus
1	4	Heinz
1	4	Wilkes-Barre VA Medical Center
1	5	Baltimore VA Medical Center
1	5	Perry Point VA Medical Center
1	5	Beckley VA Medical Center
1	5	Louis A. Johnson VA Medical Center
1	5	Huntington VA Medical Center
1	5	Martinsburg VA Medical Center
1	5	Washington DC VA Medical Center
1	6	Durham VA Medical Center
1	6	Fayetteville VA Medical Center
1	6	Hampton VA Medical Center
1	6	Asheville VA Medical Center
1	6	Hunter Holmes McGuire VA Medical Center
1	6	Salem VA Medical Center
1	6	Salisbury - W.G. "Bill" Hefner VA Medical Center
2	7	Atlanta VA Medical Center
2	7	Carrollton
2	7	Charlie Norwood VA Medical Center -Augusta Downtown
2	7	Augusta Uptown
2	7	Birmingham VA Medical Center
2	7	Ralph H. Johnson VA Medical Center
2	7	Wm. Jennings Bryan Dorn VA Medical Center
2	7	Carl Vinson VA Medical Center - Dublin
2	7	Central Alabama Veterans Health Care System, West Campus
2	7	Tuskegee
2	7	Tuscaloosa VA Medical Center
2	8	Bay Pines VA Health Care System (C.W.Bill Young)
2	8	Miami VA Medical Center (Bruce W. Carter)
2	8	West Palm Beach VA Medical Center
2	8	Malcom Randall VA Medical Center & N FL S GA VHS - Gainesville
2	8	Lake City VA Medical Center
2	8	VA Caribbean Healthcare System (San Juan)
2	8	Mayaguez Outpatient Clinic
2	8	James A. Haley VA Medical Center

VistA Scheduling Enhancements (VSE)

R	VISN	VAMC
2	8	Orlando VA Medical Center (Lake Nona)
2	9	Lexington VA Medical Center -Leestown
2	9	Lexington - Cooper
2	9	Robley Rex VA Medical Center
2	9	Memphis VA Medical Center
2	9	Mountain Home VA Medical Center/Johnson City (James H. Quillen)
2	9	Tennessee Valley Healthcare System - Nashville Campus
2	9	Murfreesboro
3	10	Chillicothe VA Medical Center
3	10	Cincinnati VA Medical Center
3	10	Cincinnati - Fort Thomas
3	10	Louis Stokes VA Medical Center
3	10	Dayton VA Medical Center
3	10	Chalmers P. Wylie Ambulatory Care Center
3	10	Ann Arbor VA Healthcare System
3	10	Battle Creek VA Medical Center
3	10	John D. Dingell VA Medical Center
3	10	Richard L. Roudebush VA Medical Center
3	10	VA Northern Indiana Health Care System - Marion
3	10	Fort Wayne
3	10	Aleda E. Lutz VA Medical Center
3	12	Jesse Brown VA Medical Center
3	12	Danville VA (Illiana) Health Care System
3	12	Captain James A. Lovell Federal Health Care Center
3	12	Edward Hines, Jr., VA Hospital
3	12	Oscar G. Johnson VA Medical Center
3	12	William S. Middleton Memorial Veterans Hospital
3	12	Tomah VA Medical Center
3	12	Clement J. Zablocki VA Medical Center
3	15	Kansas City VA Medical Center
3	15	Harry S. Truman Memorial Veterans' Hospital
3	15	Topeka - VA Eastern Kansas Health Care System - Colmery-O'Neil VA Medical Center
3	15	Leavenworth
3	15	Wichita - Robert J. Dole VA Medical Center
3	15	St.Louis - VA St. Louis Health Care System - John Cochran
3	15	St.Louis-Jefferson Barracks

VistA Scheduling Enhancements (VSE)

R	VISN	VAMC
3	15	John J. Pershing VA Medical Center - Poplar Bluff
3	15	Marion VA Medical Center
3	23	Fargo VA Health Care System
3	23	Royal C. Johnson Veterans Memorial Medical Center
3	23	VA Black Hills Health Care System - Fort Meade Campus
3	23	Hot Springs
3	23	Minneapolis VA Health Care System
3	23	Omaha - VA Nebraska-Western Iowa Health Care System
3	23	Lincoln - VA Nebraska-Western Iowa Health Care System
3	23	Grand Island
3	23	Des Moines - VA Central Iowa Health Care System
3	23	Iowa City VA Medical Center
3	23	St. Cloud VA Health Care System
4	16	Alexandria- Pineville VA Medical Center
4	16	Biloxi - Gulf Coast Veterans Health Care System
4	16	Fayetteville VA Medical Center - Ozarks
4	16	Houston - Michael E. DeBakey VA Medical Center
4	16	G.V. "Sonny" Montgomery VA Medical Center
4	16	Central Arkansas Veterans Healthcare System, John L. McClellan Memorial Veterans Hospital
4	16	North Little Rock
4	16	New Orleans - Southeast Louisiana Veterans Health Care System
4	16	Shreveport - Overton Brooks VA Medical Center
4	17	Amarillo - Thomas E. Creek VA Medical Center
4	17	Big Spring - George O'Brien Jr./West Texas HCS
4	17	Dallas VA Medical Center & VA North Texas Health Care System
4	17	Sam Rayburn Memorial Veterans Center
4	17	South Texas Veterans Health Care System / Audie L. Murphy Memorial VA Hospital
4	17	Kerrville VA Medical Center
4	17	Temple - Central Texas Veterans Health Care System / Olin E. Teague Veterans' Medical Center
4	17	Waco
4	17	Harlingen VA Health Care Center & VA Texas Valley Coastal Bend Health Care System
4	17	El Paso VA Medical Center
4	19	Fort Harrison - VA Montana Health Care System
4	19	Miles City
4	19	Billings

Vista Scheduling Enhancements (VSE)

R	VISN	VAMC
4	19	Cheyenne VA Medical Center
4	19	Denver- Eastern Colorado VA Medical Center
4	19	Grand Junction VA Medical Center
4	19	Jack C. Montgomery VA Medical Center - Muskogee
4	19	Oklahoma City VA Medical Center
4	19	Salt Lake City Health Care System / George E. Wahlen VA Medical Center
4	19	Sheridan VA Medical Center
5	18	Albuquerque - New Mexico VA Health Care System (Raymond G. Murphy)
5	18	Carl T. Hayden VA Medical Center
5	18	Prescott - Northern Arizona VA Health Care System (Bob Stump)
5	18	Tucson - Southern Arizona VA Health Care System
5	20	Anchorage - Alaska VA Health Care System
5	20	Boise VA Medical Center
5	20	Portland VA Medical Center & HCS 7 Vancouver Campus
5	20	Portland - Vancouver
5	20	VA Roseburg Healthcare System
5	20	Seattle - Puget Sound VA Health Care System
5	20	American Lake
5	20	Spokane - Mann-Grandstaff VA Medical Center
5	20	Walla Walla - Jonathan M. Wainwright Memorial VA Medical Center
5	20	White City VA Medical Center- Southern Oregon Rehabilitation Center & Clinics
5	21	Honolulu - VA Pacific Islands Health Care System (Spark M Matsunaga)
5	21	Fresno - VA Central California Health Care System
5	21	Las Vegas - VA Southern Nevada Health Care System
5	21	VA Northern California Health Care System - Martinez/East Bay Division
5	21	Sacramento
5	21	Palo Alto Health Care System
5	21	Palo Alto- Menlo Park
5	21	Palo Alto- Livermore
5	21	Reno - Ioannis A. Lougaris Medical Center, VA Sierra Nevada Health Care System
5	21	San Francisco VA Medical Center
5	21	Philippines
5	22	VA Long Beach Healthcare System
5	22	VA Loma Linda Healthcare System
5	22	VA San Diego Healthcare System
5	22	VA Greater Los Angeles Healthcare System (GLA) / West LA

VistA Scheduling Enhancements (VSE)

R	VISN	VAMC
5	22	Sepulveda

## Template Revision History

Date	Version	Description	Author
March 2016	2.2	Changed the title from Installation, Back-Out, and Rollback Guide to Deployment and Installation Guide, with the understanding that Back-Out and Rollback belong with Installation.	VIP Team
February 2016	2.1	Changed title from Installation, Back-Out, and Rollback Plan to Installation, Back-Out, and Rollback Guide as recommended by OI&T Documentation Standards Committee	OI&T Documentation Standards Committee
December 2015	2.0	The OI&T Documentation Standards Committee merged the existing "Installation, Back-Out, Rollback Plan" template with the content requirements in the OI&T End-user Documentation Standards for a more comprehensive Installation Plan.	OI&T Documentation Standards Committee
February 2015	1.0	Initial Draft	Lifecycle and Release Management

*The Template Revision History pertains only to the format of the template. It does not apply to the content of the document or any changes or updates to the content of the document after distribution. It can be removed at the discretion of the author of the document.*