

VistA Scheduling Enhancements (VSE)

Technical Manual for VS GUI Release 1.7.6.1



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Artifact Rationale

A Technical Manual is a required end user document for all Office of Information and Technology (OIT) software releases. The intended audience for this document is local Information Technology (IT) support, management, and development personnel for nationally released software. It provides enough technical information about the software for developers and technical personnel to operate and maintain the software with only minimal assistance from Product Support staff.

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1. Introduction

This Technical Manual provides Department of Veterans Affairs (VA) site managers with a technical description of the Veterans Health Information System and Technology Architecture (VistA) Scheduling (VS) Graphical User Interface (GUI) routines, files, menus, cross references, globals, and other necessary information required to effectively manage the system.

1.1. Purpose

The purpose of this Technical Manual is to provide technical information about the VS GUI for developers and technical personnel to operate and maintain the VS product in the Production environment. Please see the [References](#) section for more information on additional documentation.

1.2. System Overview

The VS GUI improves VA schedulers' workflow and user experience and supports VA's commitment to consistently deliver timely and quality access to care for Veterans.

The VS GUI has the following features:

- Microsoft (MS) Windows user interface
- Graphical patient, clinic, provider, and resource scheduling
- Tight linkage to VistA patient and clinic data
- Graphical resource and clinic availability scheduling
- Printing and What You See Is What You Get (WYSIWYG) print preview of clinic schedules
- Graphical patient check-in links to VistA/Patient Care Components Plus (PCC+) check-in
- Rescheduling/manipulating appointments using standard Windows cut/paste commands
- Scheduling of multiple appointments during a time block
- Retrieval and storage of clinic availability patterns
- Viewing multiple clinic schedules simultaneously
- Resource Management reporting for viewing metrics, related clinic appointments, and patient encounters in VistA

1.3. Document Orientation

The intended audience for this document are developers and technical personnel who operate and maintain the VS product in the Production environment.

1.3.1. Disclaimers

The following subsections detail VA software and document disclaimers.

1.3.1.1. Software Disclaimers

This software was developed at VA by employees of the Federal Government in the course of their official duties. Pursuant to title 17 Section 105 of the United States Code, this software is

not subject to copyright protection and is in the public domain. VA assumes no responsibility whatsoever for its use by other parties, and makes no guarantees, expressed or implied, about its quality, reliability, or any other characteristic. We would appreciate acknowledgement if the software is used. This software can be redistributed and/or modified freely, provided that any derivative works bear some notice that they are derived from it, and any modified versions bear some notice that they have been modified.

1.3.1.2. Document Disclaimer

The appearance of external hyperlink references in this manual does not constitute endorsement by VA of the website or the information, products, or services contained therein. VA does not exercise any editorial control over the information you may find at these external locations. Such links are provided and are consistent with the stated purpose of VA.

1.3.2. References

Documentation associated with VS GUI Release 1.7.6.1 can be found on the [VA Software Document Library](#) (VDL).

2. Implementation and Maintenance

The following subsections provide details regarding the implementation and maintenance of the VS GUI.

2.1. System Requirements

The system requirements for client development and maintenance are:

- MS Windows 7 Operating System (OS) or later
- Visual Studio 2017
- VistA instance with Remote Procedure Call (RPC) Broker for unit testing
- Kernel version 8.0
- VistA Scheduling Patch SD*5.3*784

2.1.1. Hardware Requirements

Client operation requires four (4) gigabytes (GB) of random-access memory (RAM).

2.1.2. Software Requirements

Client operation requires MS Windows 7 OS or later, and .NET version 4.7.1 or higher.

2.1.3. Database Requirements

The VS GUI uses FileMan version 22.2.

2.2. System Setup and Configuration

The VistaSchedulingGUI.exe.config file is found in the application folder location, C:\Program Files (x86)\VistA Scheduling GUI_x, where _x is not present in the Visual Studio development

environment, but may be `_P` (Production Release), `_T` (Test Release), or `_RC` (Release Candidate) when VS is installed using one of the .msi files.

The config file is initialized during the installation process or by modifying the app.config file within the ClinSchd project in Visual Studio.

The config file can also be modified using a text editor such as Notepad or Notepad++.

There are two sections in the config file that may need to be configured. It is highly recommended that other sections of this file not be modified.

2.2.1. The `<appSettings>` Section

The `<appSettings>` section contains several `<add key . . . >` options that can be modified.

- `<add key="host" value="" />`: This key value holds the address or Uniform Resource Locator (URL) of the host VistA instance.
- `<add key="port" value="" />`: This key value holds the port number assigned to the VistA instance on the host machine.
- `<add key="namespace" value="" />`: This key value holds the Name Space assigned the VistA instance on the host machine.
- `<add key="MaxPatientsToReturn" value="50" />`: This key value adjusts the maximum number of patients returned by the Patient Search on the ribbon bar. The default\recommended value is 50.



NOTE: At this time, any other `<appSettings>` key pairs are ignored.

2.2.2. Command Line Parameters

The VS application allows for two command line parameters. These parameters can be added to the application shortcut as needed.

2.2.2.1. The `/trace` Command Line Parameter

When the `/trace` command line parameter is present, VS turns on and initializes trace log functionality.

2.2.2.2. The `/AutoDumpTrace` Command Line Parameter

When the `/AutoDumpTrace` command line parameter is present, VS attempts to save the current trace log to a file when exiting the application, or when the application terminates due to an error. The new location of the saved trace log file is:

- `C:\Users\[UserID]\AppData\Local\VA VistA Scheduler.`

Each successive trace log dump overwrites previous trace log dumps.

The `/trace` command line parameter is required for the `/AutoDumpTrace` functionality to work.

2.2.3. The Application Trace File

The application trace file is generated by the VS application. Successive VS executions will be recorded in the same trace file. Some error information may be present in the trace log file if VS crashes. The trace log file is always located in the end user's AppData\Local folder as:

- C:\Users\[UserID]\AppData\Local \VA VistA Scheduler\VSETraceLog.log and
- VSETraceLog – YYYYMMDD_hhmmss.xml.

3. Files

Table 1 lists the file names and numbers used by the VS GUI.

Table 1: File Names and Numbers

File Number	File Name
44	HOSPITAL LOCATION
403.5	RECALL REMINDERS
403.56	RECALL REMINDERS REMOVED
409.2	CANCELLATION REASONS
409.3	SD WAIT LIST
409.81	SDEC APPLICATION
409.822	SDEC ACCESS GROUP
409.823	SDEC ACCESS TYPE
409.824	SDEC ACCESS GROUP TYPE
409.831	SDEC RESOURCE
409.832	SDEC RESOURCE GROUP
409.833	SDEC RESOURCE USER
409.834	SDEC ADDITIONAL RESOURCE
409.84	SDEC APPOINTMENT
409.845	SDEC PREFERENCES AND SPECIAL NEEDS
409.85	SDEC APPT REQUEST
409.86	SDEC CONTACT
409.88	SDEC CANCELLATION COMMENT
409.97	SD AUDIT STATISTICS
409.98	SDEC SETTINGS

4. Routines

Table 2 lists the routines associated with the VS GUI, with their descriptions.

Table 2: Routines

Routine	Description
SD53699	SPFO/DMR SCHEDULING ENCHANCEMENTS VSE

Routine	Description
SD628PST	SD*5.3*628 Post Install Routine
SD694PO	ALB/WTC/ZEB - VISTA SCHEDULING RPCS post install for patch SD*5.3*694
SDAM2	ALB/MJK - Appt Mgt (cont.)
SDAMWI1	ALB/MJK - Walk-Ins (cont.)
SDAPIAP	ALB/MJK - Outpatient Application Programming Interface (API)/Appointments
SDB	FLA/RF,BSN/GRR - SET UP A CLINIC
SDB1	ALB/GRR - SET UP A CLINIC
SDC	MAN/GRR,ALB/LDB - CANCEL A CLINIC'S AVAILABILITY
SDCED	VSE ENCOUNTER XREF
SDCED1	VSE ENCOUNTER XREF
SDCED2	VSE ENCOUNTER XREF
SDCNP0	ALB/LDB - CANCEL APPT. FOR A PATIENT
SDCNSLT	ALB/HAG - LINK APPOINTMENTS TO CONSULTS
SDCODEL	ALB/RMO,ESW - Delete - Check Out
SDEC	ALB/SAT - VISTA SCHEDULING RPCs
SDEC01	ALB/SAT - VISTA SCHEDULING RPCs
SDEC01A	ALB/SAT - VISTA SCHEDULING RPCs
SDEC01B	ALB/SAT - VISTA SCHEDULING RPCs
SDEC02	ALB/SAT - VISTA SCHEDULING RPCs
SDEC03	ALB/SAT - VISTA SCHEDULING RPCs
SDEC04	ALB/SAT - VISTA SCHEDULING RPCs
SDEC05	ALB/SAT - VISTA SCHEDULING RPCs
SDEC06	ALB/SAT - VISTA SCHEDULING RPCs
SDEC07	ALB/SAT - VISTA SCHEDULING RPCs
SDEC07A	ALB/SAT - VISTA SCHEDULING RPCs
SDEC07B	ALB/SAT - VISTA SCHEDULING RPCs
SDEC07C	ALB/SAT - VISTA SCHEDULING RPCs added for patch SD*5.3*694
SDEC08	ALB/SAT - VISTA SCHEDULING RPCs
SDEC08A	ALB/SAT - VISTA SCHEDULING RPCs added for SD*5.3*745 (split routine)
SDEC09	ALB/SAT - VISTA SCHEDULING RPCs
SDEC1	ALB/SAT - VISTA SCHEDULING RPCs
SDEC12	ALB/SAT - VISTA SCHEDULING RPCs
SDEC13	ALB/SAT - VISTA SCHEDULING RPCs
SDEC14	ALB/SAT - VISTA SCHEDULING RPCs
SDEC15	ALB/SAT - VISTA SCHEDULING RPCs
SDEC16	ALB/SAT - VISTA SCHEDULING RPCs
SDEC17	ALB/SAT - VISTA SCHEDULING RPCs
SDEC18	ALB/SAT - VISTA SCHEDULING RPCs
SDEC19	ALB/SAT - VISTA SCHEDULING RPCs

Routine	Description
SDEC20	ALB/SAT - VISTA SCHEDULING RPCs
SDEC21	ALB/SAT - VISTA SCHEDULING RPCs
SDEC22	ALB/SAT - VISTA SCHEDULING RPCs
SDEC23	ALB/SAT - VISTA SCHEDULING RPCs
SDEC24	ALB/SAT - VISTA SCHEDULING RPCs
SDEC25	ALB/SAT - VISTA SCHEDULING RPCs
SDEC25A	ALB/SAT - VISTA SCHEDULING RPCs
SDEC25B	ALB/SAT - VISTA SCHEDULING RPCs
SDEC26	ALB/SAT - VISTA SCHEDULING RPCs
SDEC27	ALB/SAT - VISTA SCHEDULING RPCs
SDEC28	ALB/SAT - VISTA SCHEDULING RPCs
SDEC29	ALB/SAT - VISTA SCHEDULING RPCs
SDEC30	ALB/SAT - VISTA SCHEDULING RPCs
SDEC31	ALB/SAT - VISTA SCHEDULING RPCs
SDEC32	ALB/SAT - VISTA SCHEDULING RPCs
SDEC33	ALB/SAT - VISTA SCHEDULING RPCs
SDEC34	ALB/SAT - VISTA SCHEDULING RPCs
SDEC35	ALB/SAT - VISTA SCHEDULING RPCs
SDEC36	ALB/SAT - VISTA SCHEDULING RPCs
SDEC37	ALB/SAT - VISTA SCHEDULING RPCs
SDEC38	ALB/SAT - VISTA SCHEDULING RPCs
SDEC40	ALB/SAT - VISTA SCHEDULING RPCs
SDEC44	ALB/SAT - VISTA SCHEDULING RPCs
SDEC45	ALB/SAT - VISTA SCHEDULING RPCs
SDEC46	ALB/SAT - VISTA SCHEDULING RPCs
SDEC47	ALB/SAT - VISTA SCHEDULING RPCs
SDEC48	ALB/SAT - VISTA SCHEDULING RPCs
SDEC49	ALB/SAT - VISTA SCHEDULING RPCs
SDEC50	ALB/SAT - VISTA SCHEDULING RPCs
SDEC51	ALB/SAT - VISTA SCHEDULING RPCs
SDEC51A	ALB/SAT – VISTA SCHEDULING RPCs
SDEC51B	ALB/SAT – VISTA SCHEDULING RPCs
SDEC52	ALB/SAT - VISTA SCHEDULING RPCs
SDEC52A	ALB/SAT - VISTA SCHEDULING RPCs
SDEC52B	ALB/SAT - VISTA SCHEDULING RPCs
SDEC52C	ALB-SAT – VISTA SCHEDULING RPCs
SDEC52JSON	ALB/SAT – VISTA SCHEDULING RPCs
SDEC53	ALB/SAT - VISTA SCHEDULING RPCs
SDEC54	ALB/SAT - VISTA SCHEDULING RPCs

Routine	Description
SDEC54A	ALB/SAT - VISTA SCHEDULING RPCs
SDEC55	ALB/SAT - VISTA SCHEDULING RPCs
SDEC55A	ALB/SAT - VISTA SCHEDULING RPCs
SDEC56	ALB/SAT - VISTA SCHEDULING RPCs
SDEC57	ALB/SAT - VISTA SCHEDULING RPCs modified for patch SD*5.3*694
SDEC57A	ALB/SAT - VISTA SCHEDULING RPCs
SDEC63	SPFO/DMR VSE ROUTINE CLINIC GROUP LOOKUP
SDEC658	ALB/SAT VISTA SCHEDULING PRE/POST
SDEC658A	ALB/SAT/JSM - VISTA SCHEDULING PRE/POST (CONTINUED)
SDEC658B	ALB/SAT/JSM - VISTA SCHEDULING PRE/POST (CONTINUED)
SDEC744P	SPFO/DMR - PATCH 774 POST INSTALL ROUTINE
SDEC745P	ALB/CLT - PATCH 745 POST- INSTALL ROUTINE
SDEC756P	ALB/CLT - PATCH 756 POST INSTALL ROUTINE post install to update GUI Version Number, VA Video Connect (VVC) STOP CODES, and VVC URL
SDEC762P	ALB/PWC - PATCH 762 POST INSTALL ROUTINE post install to update GUI Version number to 1.7.0.2 for patch SD*5.3*762
SDECALV	ALB/SAT - VISTA SCHEDULING RPCs
SDECALV1	ALB/SAT - VISTA SCHEDULING RPCs
SDECALVR	ALB/SAT - VISTA SCHEDULING RPCs
SDECAPI	ALB/SAT - VISTA SCHEDULING RPCs
SDECAPI4	ALB/SAT - VISTA SCHEDULING RPCs
SDECAR	ALB/SAT - VISTA SCHEDULING RPCs
SDECAR1	ALB/SAT - VISTA SCHEDULING RPCs
SDECAR1A	ALB/SAT - VISTA SCHEDULING RPCs
SDECAR2	ALB/SAT - VISTA SCHEDULING RPCs
SDECAR3	ALB/SAT/JSM – VISTA SCHEDULING RPCs
SDECAR4	ALB/SAT/JSM – VISTA SCHEDULING RPCs
SDECAUD	ALB/WTC - VISTA SCHEDULING - Audit Statistics Compiler
SDECCAP	ALB/SAT - VISTA SCHEDULING RPCs
SDECCLN	ALB/RBD - VISTA SCHEDULING CLEANUP UTILITY
SDECCON	SCHEDULING ENHANCEMENTS VSE CONTACT API
SDECCON	SCHEDULING ENHANCEMENTS VSE CONTACT API
SDECCONSJSON	SCHEDULING ENHANCEMENTS VSE CONTACT API
SDECDATE	ALB/STA - VISTA SCHEDULING RPCs added for patch SD*5.3*694
SDECDEM	ALB/SAT – VISTA SCHEDULING RPCs
SDECDEV	ALB/SAT - VISTA SCHEDULING RPCs
SDECDIQ1	ALB/SAT - VISTA SCHEDULING RPCs
SDECDIS	ALB/SAT - VISTA SCHEDULING RPCs
SDECEKL	ALB/SAT - VISTA SCHEDULING RPCs

Routine	Description
SDECELG	SPFO/DMR SCHEDULING ENHANCEMENTS VSE API
SDECEP	SPFO/DMR SCHEDULING ENHANCEMENTS VSE EP API
SDECEPT	SPFO/RT SCHEDULING ENHANCEMENTS VSE EP API
SDECERR	ALB/SAT - VISTA SCHEDULING RPCs
SDECF	ALB/SAT - VISTA SCHEDULING RPCs
SDECF2	ALB/SAT - VISTA SCHEDULING RPCs
SDECFUNC	ALB/SAT - VISTA SCHEDULING RPCs
SDECGMR	ALB/SAT - VISTA SCHEDULING RPCs
SDECI2	ALB/SAT - VISTA SCHEDULING RELEASE 2 PRE/POST INSTALL
SDECIDX	ALB/SAT - VISTA SCHEDULING RPCs
SDECINI1	ALB/SAT - VISTA SCHEDULING PRE/POST INSTALL
SDECINI2	ALB/SAT - VISTA SCHEDULING PRE/POST INSTALL
SDECINIT	ALB/SAT - VISTA SCHEDULING PRE/POST INSTALL
SDECLK	ALB/SAT - VISTA SCHEDULING RPCs
SDECLOC	ALB/SAT – VISTA SCHEDULING RPCs
SDECNEW	ALB/SAT - VISTA SCHEDULING RPCs
SDECPAT	ALB/SAT - VISTA SCHEDULING RPCs
SDECPAT1	ALB/SAT - VISTA SCHEDULING RPCs
SDECPAT2	ALB/SAT - VISTA SCHEDULING RPCs
SDECPAT3	ALB/SAT - VISTA SCHEDULING RPCs
SDECPAT4	ALB/SAT - VISTA SCHEDULING RPCs
SDECPT	ALB/SAT - VISTA SCHEDULING RPCs
SDECPTCX	ALB/SAT - VISTA SCHEDULING RPCs
SDECPTPC	ALB/SAT - VISTA SCHEDULING RPCs
SDECPTPL	ALB/SAT - VISTA SCHEDULING RPCs
SDECRMG	ALB/SAT - VISTA SCHEDULING RPCs
SDECRMG1	ALB/SAT - VISTA SCHEDULING RPCs
SDECRMG2	ALB/SAT - VISTA SCHEDULING RPCs
SDECRMGP	ALB/JSM - VISTA SCHEDULING RPCs
SDECRPC	ALB/SAT - VISTA SCHEDULING RPCs
SDECRPT	ALB/BNT - SCHEDULING ENHANCEMENTS CLINIC REPORTS
SDECRPT1	ALB/JSM - SCHEDULING ENHANCEMENTS CLINIC REPORTS
SDECRT	ALB/SAT - VISTA SCHEDULING RPCs
SDECRT0	ALB/SAT - VISTA SCHEDULING RPCs
SDECRT1	ALB/SAT - VISTA SCHEDULING RPCs
SDECRT2	ALB/SAT - VISTA SCHEDULING RPCs
SDECRTCRF	ALB/SAT - VISTA SCHEDULING RPCs (<i>New in SD*5.3*745</i>)
SDECSFGR	ALB/SAT - VISTA SCHEDULING RPCs
SDECSTNG	ALB/SAT - VISTA SCHEDULING RPCs (<i>Modified in SD*5.3*694</i>)

Routine	Description
SDECSTP	VSE RESOURCE MANAGEMENT REPORT STOP CODES
SDECU	ALB/SAT - VISTA SCHEDULING RPCs
SDECU2	ALB/SAT - VISTA SCHEDULING RPCs
SDECU3	ALB/SAT - VISTA SCHEDULING RPCs
SDECU4	ALB/JSM - VISTA SCHEDULING RPCs
SDECUT1A	ALB/SAT - VISTA SCHEDULING RPCs
SDECUTL	ALB/SAT - VISTA SCHEDULING RPCs
SDECUTL1	ALB/SAT - VISTA SCHEDULING RPCs
SDECUTL2	ALB/SAT - VISTA SCHEDULING RPCs
SDECV	ALB/SAT - VISTA SCHEDULING RPCs
SDECVVC	ALB/WTC - VISTA SCHEDULING RPCS
SDECVVS	ALB/RJT SDEC AND VIDEO VISIT SERVICE (VVS) INTEGRATION
SDECWL	ALB/SAT - VISTA SCHEDULING RPCs
SDECWL1	ALB/SAT - VISTA SCHEDULING RPCs
SDECWL2	ALB/SAT - VISTA SCHEDULING RPCs
SDECWL3	ALB/SAT - VISTA SCHEDULING RPCs
SDEXML*	VSE RESOURCE MANAGEMENT REPORT XML DATA
SDEXML1	VSE RESOURCE MANAGEMENT REPORT XML DATA
SDEXML2	VSE RESOURCE MANAGEMENT REPORT XML DATA
SDEXML3	VSE RESOURCE MANAGEMENT REPORT XML DATA
SDEXML4	VSE RESOURCE MANAGEMENT REPORT XML DATA
SDEXML5	VSE RESOURCE MANAGEMENT REPORT XML DATA
SDEXUTL	VSE RESOURCE MANAGEMENT REPORT XML UTILITY
SDM1A	SF/GFT,ALB/TMP - MAKE APPOINTMENT
SDMM1	ALB/GRR - MULTIPLE BOOKINGS
SDN	SF/GFT,ALB/LDB - RECORD NO SHOWS
SDNACT	ALB/TMP - INACTIVATE A CLINIC
SDNACT1	Inactivate a Clinic (CONTINUED)
SDREACT	ALB/TMP - REACTIVATE A CLINIC
SDROUT0	BSN/GRR,PC - ROUTING SLIPS BY CLINIC
SDRRISRU	10N20/MAH; Recall Reminder Utilities
SDWLPL	IOFO BAY PINES/DMR,ESW - WAIT LIST PICK LIST

* Extensible Markup Language (XML)

5. Exported Options

Table 3 lists exported options and their descriptions.

Table 3: Exported Options

Option Name	Description
CLINICAL SCHEDULING PROCEDURE CALLS [SDECRPC]	This option hosts RPCs in the SDEC namespace. Access to this option is required for use.

6. Mail Groups, Alerts, Bulletins, and Templates

Not applicable for this release.

7. Public Interfaces

The follow subsections include information on public interfaces that are called or made available by this software.

7.1. Integration Control Registrations (ICRs)

ICRs are maintained and stored in FORUM. VS ICRs have the prefix SDEC. Running a search on 'SDEC' will return results that include VS ICRs.

Table 4: ICRs

Category	Definition
Controlled Subscription	Describes attributes/functions that must be controlled in their use. The decision to restrict the ICR is based on the maturity of the custodian package. Typically, these ICRs are created by the requesting package based on their independent examination of the custodian package's features. For the ICR to be approved the custodian grants permission to other VistA packages to use the attributes/functions of the ICR; permission is granted on a one-by-one basis where each is based on a solicitation by the requesting package. An example is the extension of permission to allow a package (e.g., Spinal Cord Dysfunction) to define and update a component that is supported within the Health Summary package file structures.
Supported Reference	This applies where any VistA application may use the attributes/functions defined by the ICR (these are also called "Public"). An example is an ICR that describes a standard API such as DIE or VADPT. The package that creates/maintains the Supported Reference must ensure it is recorded as a Supported Reference in the ICR database. There is no need for other VistA packages to request an ICR to use these references; they are open to all by default.

7.2. APIs

The VS product is a thick client. As such, there are no APIs in use.

7.3. RPCs

Table 5 provides a list and brief description of the RPCs utilized by the VS product.

For more detailed information, see the Remote Procedure file (#8994) within any VistA environment. Searching for ‘SDEC’ within the Remote Procedure file will return the list of RPCs used by VS.

Table 5: RPCs

RPC NAME	DESCRIPTION
SDEC ACCGPTYG	Get access group types
SDEC ACCGROUP	Return active entries from the SDEC ACCESS GROUP file #409.822
SDEC ACCTYPE	Return active entries from the SDEC ACCESS TYPE file 409.823
SDEC ADDACCG	Access Group IEN that was added or edited
SDEC ADDACCTY	SDEC ACCESS TYPE IEN of the entry added or edited
SDEC ADDAGI	Add access group item
SDEC ADDRES	Add/Edit Resource
SDEC ADDRESU	Add Resource
SDEC ADDRG	Add/Edit Resource Group
SDEC ADDRGI	Adds RESOURCE ID to RESOURCE GROUP entry SDEC IEN
SDEC APBLKALL	List of all appointments for all resources (<i>Deleted in SD*5.3*745</i>)
SDEC APBLKOV	Appointment Blocks Overlap (<i>Deleted in SD*5.3*745</i>)
SDEC APPADD	Add New Appointment
SDEC APPDEL	Cancel Appointment
SDEC APPIDGET	Get SDEC APPOINTMENT IEN for a given External ID
SDEC APPSDGET	Get appointment entries from SDEC APPOINTMENT file #409.84
SDEC APPSLOTS	Return global array of available appointment slots
SDEC APPT STATUS	Returns patient appointment status from the PATENT file #2
SDEC APPTVLG	PATIENT ID pointer to PATIENT file #2
SDEC APPTLETR	Print Appointment Letter. Currently supports No-Show, Cancel by Patient and Cancel by Clinic
SDEC ARCLOSE	Remove a patient from the appointment requested by setting the STATUS to CLOSED and updating the DISPOSITION fields
SDEC ARDGET	Get values for the disposition field of the SDEC APPT REQUEST file #409.85
SDEC ARGET	Appointment Request GET
SDEC ARMRTGET	Pointer to SDEC APPT REQUEST file #409.85
SDEC ARMRTSET	Set MRTC CALC PREF DATES – clears the multiple and sets the new ones that are passed in
SDEC AROPEN	Set Appointment Request Open/Re-Open
SDEC ARPCSET	Set/update patients’ contracts in SDEC APPT REQUEST file #409.85
SDEC ARSET	Appointment Request SET
SDEC AVADD	Create entry in SDEC ACCESS BLOCK
SDEC AVDEL	Cancel availability – Deletes Access Block
SDEC AVDELDT	Cancel availability in a date range

RPC NAME	DESCRIPTION
SDEC BOOKHLDY	Returns value of field 1918.5 (can book on holiday) for a clinic (file #44)
SDEC CANCKOUT	Cancel checkout appointment
SDEC CANCMT	Returns list of cancellation comments (hashtag, type and text) from the SDEC CANCELLATION COMMENT file (#409.88).
SDEC CANREAS	Return entries from the CANCELLATION REASONS file #409.2
SDEC CGET	Get active Countries form the COUNTRY CODE file #779.004
SDEC CHECKIN	Check in Appointment
SDEC CHECKOUT	Check out Appointment
SDEC CLINALL	Return the IEN and NAME for all entries in the SD WL CLINIC LOCATION file #409.32
SDEC CLINDIS	Return formatted text output of the Clinic Schedules Report between dates SDECBEG and SDECEND for each clinic in SDECCLST
SDEC CLINDISW	Return formatted text output of the Clinic Schedules Report between dates SDECBEG and SDECEND for each clinic in SDECCLST for Walk-ins only
SDEC CLINIC GROUP LOOKUP	Look up VSE Clinic Groups
SDEC CLINIC GROUP RETURN	Returns specific VSE Clinic Group
SDEC CLINLET	Return record set of patient appointments for Walk-ins only
SDEC CLINLETW	Return record set of patient appointments for Walk-ins only
SDEC CLINSET	Return CLINIC SETUP PARAMETERS for clinics that are active in the HOPSITAL LOCATION file #44
SDEC CLINSTOP	Return entries from the CLINIC STOP file #40.7
SDEC CONTACT DISPLAY	Return zero node from SDEC CONTACT file #409.86 for display in the VSE vs GUI
SDEC CONTACT DISPLAY SINGLE	Returns a single Contact Attempt (CA) from the SDEC CONTACT (#409.86) file
SDEC CONTACT MULTI-DISPLAY	Return SDEC CONTACT (#409.86) for contact multiple
SDEC CONTACT NEW	Used to enter new contact entries into the SDEC CONTACT file #409.86
SDEC CONTACT SEQUENCE SINGLE	Returns the IEN of the newly created contact record in the SDEC CONTACT (#409.86) file
SDEC CONTACT STOP CODE	Return Stop Code and Credit Stop to VSE vs GUI
SDEC CONTACT UPDATE	Updates entries in the SDEC CONTACT file #409.86 when a new contact is added to a current entry
SDEC COPYAPPT	Copy appointments from HOSPITAL LOCATION entry SDEC44 to SDEC RESOURCE entry SDECRES. Returns count of records copied and error message
SDEC CPSTAT	Copy Appointment Status
SDEC CRSCHED	Create Resource Appointment Schedule
SDEC CSLOTSCH	Resource ID pointer to SDEC RESOURCE file #409.831
SDEC CURFACG	Get current division/facility for given user

RPC NAME	DESCRIPTION
SDEC CVARAPPT	Return Boolean to represent that a clinic allows variable appointment length – RPC: 0 = Clinic does not allow; 1 = Clinic does allow
SDEC DELAG	Deletes entry having IEN SDECGRP from SDEC ACCESS GROUP file #409.822. Also deletes all entries in SDEC ACCESS GROUP TYPE file #409.824 that points to this group
SDEC DELAGI	Delete entry with the given Access Group and Access Type from the SDEC ACCESS GROUP TYPE file #409.824
SDEC DELRESGP	Deletes entry name SDECGRP from SDEC RESOURCE GROUP file #409.832
SDEC DELRGI	Deletes entry SDECIEN1 from entry SDECIEN in the SDEC RESOURCE GROUP file #409.832
SDEC EDITAPPT	Edit appointment (only 'note text' and 'appointment length' can be edited)
SDEC EHRPT	Raise patient selection event to HER
SDEC ELIG RETURN	Returns eligibility information form ELIGIBILITY file #8 and MAS ELIGIBILITY file #8.1 for the passed in IEN
SDEC ELIGIBILITY	Returns patient eligibility to the VSE vs GUI
SDEC EP CLASSIFICATION	Provide expanded entry patient classification information for display in the VS GUI
SDEC EP CLASSIFICATION	Provide expanded entry patient classification information for display in the VS GUI
SDEC EP CPT	Provides procedures performed during a patient appointment to the VS GUI
SDEC EP CPT	Provides procedures performed during a patient appointment to the VS GUI when using the expanded entry option
SDEC EP DEMOGRAPHICS	Returns patient information to display using expanded entry
SDEC EP DIAGNOSIS	Returns patient diagnosis information to display using expanded entry
SDEC EP EVENT LOG	Returns event information to display using expanded entry (check-in, check-out, no-show/cancel)
SDEC EP PROVIDER	Returns patient appointment provider information to display using expanded entry
SDEC EP PT INFO	Returns patient information to display using expanded entry
SDEC EP STOP CODE	Returns stop code information to display using expanded entry
SDEC EP WAIT TIME	Returns wait time to display using expanded entry
SDEC ETHCMGET	Return the ID, Name and Abbreviation for each entry in the RACE AND ETHNICITY COLLECTION METHOD file #10.3
SDEC ETHGET	Return all active entries from the ETHNICITY file #10.2
SDEC FACLIST	Return a list of remote facilities for patient
SDEC FAPPTGET	Get future appointments for a given patient and date range from the APPOINTMENT multiple of the PATIENT file #2
SDEC GET ICN	Returns Patient IEN
SDEC GETFAC	Return the currently assigned facilities/divisions for a given user
SDEC GETPRER	Returns all entries in the prerequisite multiple from the SDEC APPT REQUEST file #409.85

RPC NAME	DESCRIPTION
SDEC GETREGA	Returns patient information from PATIENT file #2
SDEC GETVVSMKEINFO	Get patient info, default provider info, and system info needed to make a VVS appointment
SDEC GETWLIEN	Returns Wait List Entry IEN
SDEC HIDE	Returns a list of IENs and NAMEs of the clinics that are flagged to be hidden from the display in the scheduler
SDEC HLTHSUMM	Returns the text for a Health Summary Report
SDEC HOLIDAY	Returns data for the HOLIDAY file #40.5
SDEC HOSPLOC	Returns Hospital Locations from file #44
SDEC IMHERE	Returns a simple value to client. Used to establish continued existence of the client to the server; resets the server READ timeout
SDEC NETLOC	Get data from the NETWORK LOCATION file #2005.2
SDEC NEWPERS	Return entries from the NEW PERSON file #200 that are 'active' and have PROVIDER CLASS defined
SDEC NOAVAIL	Returns whether the clinic has availability defined
SDEC NOSHOPAT	Returns NO-SHOW data for the Patient
SDEC NOSHOW	Sets appointment no-show flag in SDEC APPOINTMENT file #409.84
SDEC OVBOOK	Check if overbook is allowed for given clinic and date
SDEC PATAPPTD	Return record set of patient appointments used in listing a patient's appointments and generating patient letters
SDEC PATAPPTH	Returns the patient appointment history
SDEC PCSGET	Gets clinics for a service/specialty (clinic stop)
SDEC PCST2GET	Get patient clinic status for a service/specialty (clinic stop) for a given time frame – has the patient been seen by the given service/specialty (clinic stop) in the past 24 months
SDEC PCSTGET	Get patient clinic status for a clinic stop for a given time frame – has the patient been seen by the given Clinic Stop code in the past 24 months
SDEC PREFGET	Returns patient preferences and special needs from the SDEC PREFERENCES AND SPECIAL NEEDS file #409.845
SDEC PREFGETV	Returns all valid preference text from SDEC PREFERENCES AND SPECIAL NEEDS file #409.845
SDEC PREFSET	Set value in the SDEC PREFERENCES AND SPECIAL NEEDS file #409.845
SDEC PRIV	Returns whether this user is in the PRIVILEGED USE multiple for the clinic
SDEC PROV	Return the Providers that are assigned to a clinic
SDEC PROVALL	Returns all providers for a given clinic form the HOSPITAL LOCATION file #44
SDEC PROVCLIN	Returns the providers that are assigned to a given clinic
SDEC PTINQ	Return the data from ORWPT PTINQ in datable format
SDEC PTLOOKRS	GET patients that match the partial lookup
SDEC PTSET	SET patient demographics
SDEC PWH	Return a list of entries form the HEALTH SUMMARY PWH TYPES file
SDEC RACEGET	Return the active entries in the RACE file #10

RPC NAME	DESCRIPTION
SDEC RAISEVNT	Return raise event
SDEC REBKLIST	Return patient appointments used in listing re-booked appointments
SDEC REBNEXT	GET – find next ACCESS BLOCK in resource SDECRES after SDECSTART
SDEC RECAPGET	GET entries from the RECALL REMINDERS APPT TYPE file #403.51
SDEC RECDSET	Delete an entry to the RECALL REMINDERS file #403.5
SDEC RECGET	GET entries from the RECALL REMINDERS file #403.5 for a given Patient and Recall Date range
SDEC RECPRGET	GET entries from the RECALL REMINDERS PROVIDERS file #403.54
SDEC RECSET	SET/EDIT an entry to the RECALL REMINDERS file #403.5
SDEC REP1GET	GET clinic data for report
SDEC REQGET	GET entries with an ACTIVITY of RECEIVED, but do have an ACTIVITY of SCHEDULED from the REQUEST/CONSULTATION file #123
SDEC RESCE	Returns all active clinics
SDEC RESGPUSR	Returns all ACTIVE GROUP/RESOURCE combinations to which a user has access based on entries in SDEC RESOURCE USER file #409.833
SDEC RESGRPUS	Returns all ACTIVE resource group names to which a user has access based on entries in the SDEC RESOURCE USER file #409.833
SDEC RESLETTERS	Return RESOURCES and associated LETTERS. Used in generating rebook letters for a clinic
SDEC RESOURCE	Returns ALL RESOURCE names including inactive
SDEC RESUSER	Returns entries from the SDEC RESOURCE USER file #409.833
SDEC RSLETRF	Return formatted text output of the Resource's letter – either LETTER TEXT, NO SHOW LETTER or CLINIC
SDEC SCHUSR	Returns all users in NEW PERSON file #200 having the SDECZMENU and/or SDECZMGR keys
SDEC SEARCH VVS PROVIDERS	Search providers and get data needed to make VVS appointment
SDEC SEARCHAV	Searches availability database for availability blocks between SDECSTRT and SDECEND for each of the resources in SDECRES
SDEC SETFAC	SET the current facility/division for a given user
SDEC SETRBOOK	SET rebook date into appointment
SDEC SPACEBAR	Update ^DISV with the most recent lookup value SDECVAL from file SDECDC
SDEC SPACEBAR VVS PRO	Gets the video visit provider from the ^TMP(DUZ,"SDECPROIEN") that is stored from the GETPROINFO^SDECVVVS TAG
SDEC SUMMGET	GET audit summary for a given date range (<i>Deleted in SD*5.3*745</i>)
SDEC SUMMGET2	GET audit summary for a given data range
SDEC SUSRINGO	GET scheduling user information
SDEC SVSPALL	Return the IEN and NAME for all entries in the SD WL SERVICE/SPECIALTY file #409.31
SDEC SYSSTAT	Return system status
SDEC TPBLKOV	Return type blocks overlap

RPC NAME	DESCRIPTION
SDEC UNDOCANA	UnCancel a Cancelled appointment (<i>Deleted in SD*5.3*745</i>)
SDEC UNREGEV	Unregister client's interest in SDECEVENT
SDEC VVC_APPT	If an appointment is for a VVC clinic, return the URL of the VVC Web app.
SDEC VVS DELETE ID	This RPC deletes the Video Visit ID from the SDEC APPOINTMENT (#409.84) file
SDEC VVS GET ID	This RPC returns the VVS ID
SDEC VVS SAVE ID	This RPC saves the VVS appointment ID in the SDEC APPOINTMENT (#409.84), field (#2)
SDEC WAITLIST	Collect wait list for a given resource
SDEC WLCLOSE	Remove a patient form the wait list by setting the STATUS to CLOSED and updating the DISPOSITION fields
SDEC WLGET	GET Waitlist
SDEC WLHIDE	GET waitlist entries in which the associated clinic's HIDE FROM DISPLAY IN VSE GUI? Field is YES
SDEC WLOPEN	Returns the Waitlist ID – pointer to SD WAIT LIST file #409.3
SDEC WLPCSET	SET update patient contacts in SD WAIT LIST file #409.3
SDEC WLSET	SET Waitlist
SDEC01 CLINICS	GET clinics for a given stop code or matching stop code for a given clinic
SDEC57 OBM	GET overbook status
SDECAPP GETTYPE	GET appointment type for the given SDEC APPOINTMENT
SDECAR ARAPPT	GET appointment request for give SDEC APPOINTMENT ID
SDECAR ARMRTC	GET the number of MRTC appointments made for this request
SDECAR ARMULT	SET MULT APPTS MADE multiple in SDEC APPT REQUEST file #409.85
SDECAR AUDITGET	Pointer to SDEC APPT REQUEST file #409.85
SDECAR1 ARGUID	Returns Appointment Request data (same as SDEC ARGET) for a VA Online Scheduling (VAOS) request. Lookup is done on the GUID value
SDECAR3 AREEDIT	SET the values for Appointment Type, Requested By, Provider, Comment, Fast/Non-Fasting, Length of Appt., Clinic, and Service Specialty to the appropriate file based on the request type. Request types are Appointment Request, Electronic Wait List, and Recall Reminders
SDECCAP CAN	SET AMIE C&P EXAM TRACKING entry as cancel
SDECCAP SET	SET entries to AMIE C&P EXAM TRACKING file #396.95 and update 2507 REQUEST file #396.3
SDECCPCANC	Copy Appointment Cancel
SDECDEM MARITAL	GET Marital status entries from the MARITAL STATUS file #11
SDECDEM RELIGION	GET religious preference entries from the RELIGION file #13
SDECDEM ZIPLINK	GET linked cities/state/etc. for a given zip code
SDECDERU	Delete Resource User from SDEC RESOURCE USER file #409.833
SDECDEV DEV	GET devises of the given type
SDECDEV DEVICE	GET a list of devices in the DEVICE file that are active printers
SDECDEV PRINT	Print patient letters

RPC NAME	DESCRIPTION
SDEC DISABIL	GET rated disabilities for the given patient
SDECIDX GETREC	Returns content from the ^XTMP("SDEC","IDX" global and serves as the default start-up list
SDECIDX RECCNT	Returns the number of entries in the ^XTMP("SDEC","IDX","COUNT") node
SDECLK LOCK	Attempts to lock a request record
SDECLK UNLOCK	Unlocks the request records that was locked using SDECLK LOCK RPC
SDECLOC PRIVLOC	Returns privileged user data for hospital locations
SDECLOC UPDPRIV	Supports updating the list of privileged users for a hospital location. Will purge existing entries and populate with the passed array
SDECRMG RECCNT	Returns the number of entries in the filter call in ^TMP("SDECIDX",\$J,"COUNT") node
SDECRMG RMG	Returns data from the ^XTMP("SDECIDX",\$J,"XREF" global. It uses the filter and sort arrays passed in to return data in the desired format. Returns a list of items by a key
SDECRMG2 URGENCY	GET valid urgency protocol values that are used in the URGENCY filed #5 of the REQUEST/CONSULTATION file #123
SDECRMGP GETRMGUP	Return the value set for the user preference of the Request Manager Grid Filter, Column Order and Sort Order
SDECRMGP PUTRMGUP	Store the user's preferences for the Request Manager Grid Filer, Column Order and Sort Order
SDECSTNG HELPLINK	Returns list of Help Link display names and associated URLs from the SDEC SETTINGS file #409.98. Entry 1 in file contains National Settings and Entry 2 in file contains Local Settings
SDECU4 PUTFONT	Save the VistA Scheduling letters default font size based on Entity provided
SDECWL AUDITGET	GET entries from VS AUDIT field of SD WAIT LIST file #409.3

7.4. Health Level 7 (HL7) Messaging

VistA Scheduling uses the current HL7 code.

7.5. Web Services

Not applicable to the VS product.

8. Standards and Conventions Exemptions

There are no Standards and Conventions Committee (SACC) exemptions for the VS Product.

8.1. Internal Relationships

Not applicable to the VS product.

8.2. Software-wide Variables

Not applicable to the VS product.

9. Security

All VistA users are required to observe VA rules of behavior regarding patient privacy and the security of patient information, VA computers, and VA networks.

9.1. Security Menus and Options

Not all VistA Scheduling GUI options are available to all users. Access is based upon the security keys associated with the user's account. Contact the Site Administrator to determine or change security keys. Table 6 lists the security menu options and their descriptions.

Table 6: Security Menu Options

Menu Option	Type	Description
SDEC SETTINGS REMOTE UPDATE	Server	Used to process changes to the SDEC SETTINGS File (#409.98).
SDEC HELP PANE EDIT (LOCAL)	Edit	Used to enter or edit hyperlinks displayed in the Help pane.
SDECRPC	Broker (Client/Server)	Hosts RPCs in the SDEC namespace. CLINICAL SCHEDULING users must have access to this option in order to use CLINICAL SCHEDULING.

9.2. Security Keys and Roles

The VS GUI uses VistA security keys to limit users' ability to change system setup parameters and patient information. Table 7 details the security keys in use by the VS product.

Table 7: Security Keys

Security Key	Description
SDEC HELP	Holders of this security key can access SDEC HELP PANE EDIT [LOCAL] VS GUI Help Pane Edit option to add/edit VS GUI Help Pane links.
SDECVIEW	Indicates view-only access. Overrides the SDECZMENU and SDECZMGR keys.
SDECZMENU	Provides users with access to the application.
SDECZMGR	Assigned to users who manage the overall scheduling application. Provides access to the Scheduling Management menu option on the System tab.
SDOB	Authorizes the user to overbook a clinic to the maximum allowed, as defined in clinic setup.
SDMOB	Authorizes the user to overbook a clinic over the maximum allowed, as defined in clinic setup.
SDECZ REQUEST	Holders of this security key can access the Mobile Request Icon, the Mobile Request List and utilize the buttons within the dialog box: Request Scheduled, Request Not Available, Close.

9.3. File Security

Table 8 details file security.

Table 8: File Security

File Number	GLOBAL	READ	WRITE	LAYGO	DATA DICTIONARY	DELETE
44	^SC(D	D	D	@	@
403.5	^SD(403.5,			@	@	@
403.56	^SD(403.56,			@	@	@
409.2	^SD(409.2	D	@	@	@	@
409.3	^SDWL(409.3,		D	D	@	@
409.822	^SDEC(409.822,					
409.824	^SDEC(409.824,					
409.823	^SDEC(409.823,					
409.834	^SDEC(409.834,					
409.81	^SDEC(409.81,					
409.84	^SDEC(409.84,					
409.85	^SDEC(409.85,					
409.845	^SDEC(409.845,					
409.831	^SDEC(409.831,					
409.832	^SDEC(409.832,					
409.833	^SDEC(409.833,					
409.86	^SDEC(409.86,	@	@	@	@	@
409.88	^SDEC(409.88,		@	@	@	@
409.97	^SDAUDIT(@	@	@	@
409.98	^SDEC(409.98	@	@	@	@	@

9.4. Electronic Signatures

Not applicable to the VS product.

9.5. Secure Data Transmission

Not applicable to the VS product.

10. Archiving

There is neither archiving nor purging in this module.

11. Non-Standard Cross-References

Not applicable to the VS product.

12. Troubleshooting

During installation of the VS product for Initial Operating Capability (IOC) and while IOC testing is in progress, local site IT staff and Team Liberty are the points of contact.

Once the VS product is released nationally, end users should contact the VA Enterprise Service Desk (ESD) via the yourIT link on their desktop or by phone for assistance.

12.1. Special Instructions for Error Correction

There are no special instructions for error correction.

12.2. ESD and Organizational Contacts

During IOC, local site IT staff, and Team Liberty are the points of contact for assistance.

Once the VS product is released nationally, end users should contact the VA ESD via the yourIT link on their desktop or by phone for assistance.

A. Appendix: Acronyms and Abbreviations

Table 9 lists the acronyms and abbreviations used throughout this document, with their definition.

Table 9: Acronyms and Abbreviations

Acronym	Definition
API	Application Programming Interface
CA	Contact Attempt
ESD	Enterprise Service Desk
EWL	Electronic Wait List
GB	Gigabyte
GUI	Graphical User Interface
HL7	Health Level 7
ICR	Integration Control Registration
IOC	Initial Operating Capability
IT	Information Technology
MS	Microsoft
OS	Operating System
PCC+	Patient Care Components Plus
RPC	Remote Procedure Call
SACC	Standards and Conventions Committee
URL	Uniform Resource Locator
VA	Department of Veterans Affairs
VAOS	VA Online Scheduling
VDL	VA Software Document Library
VistA	Veterans Health Information System and Technology Architecture
VS	VistA Scheduling
VSE	VistA Scheduling Enhancements
VVC	VA Video Connect
VVS	Video Visit Service
WYSIWYG	What You See is What You Get
XML	Extensible Markup Language