

Voluntary Service System (VSS) Enhancements

Technical Manual



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

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12/2016	1.5	Technical Review.	VSS Technical Team
10/2016	1.4	Updated to consolidate, to security and technical manual; Installation guide is now separate	Shawnta Davis
01/2016	1.3	Updated draft with revision	VSS Technical Team
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1. Background

The Voluntary Service System (VSS) is an Enterprise web application that tracks volunteers, assignments, schedules, hours, and the affiliated organizations. The VSS enhancement project will track donations and provide information regarding volunteer data for a variety of purposes. Mandatory requirements for on-boarding volunteers (including security) have increased and significant improvements are needed to meet these demands. The current VSS does not support the tracking of these important groups of volunteers.

2. Purpose

The purpose of this document is as a guideline for the installation, security and technical requirements of the VSS enhancement project. The intended audience is the members of Product Support in the Office of Information and Technology (OI&T).

3. Scope

The scope of this document covers the enhancements to the VSS that track nationwide volunteer data and donations received by the Department of Veterans Affairs (VA). These enhancements include new interfaces and a migration of the current external databases into a consolidated VSS solution.

4. VSS Overview

The VSS*5*1 Enhancements will make a significant impact on field staff and anticipates a reduction in administrative costs. These enhancements track reports on mandatory requirements for volunteers and include: the elimination of manual processes and workarounds required for volunteer on-boarding; the provision of an “ad-hoc” reporting system to customize report templates; and automated reporting capability for a variety of business reporting purposes.

In order to provide the structured volunteer program, the Department of Veterans Affairs (VA) Voluntary Service (VAVS) must meet the mandatory requirements outlined in Veterans Health Administration (VHA) Handbook 1620.01 Voluntary Service Procedures, VHA Handbook 4721 VHA General Post Fund, and VHA Handbook 1620.02 Volunteer Transportation Network.

Table 1 identifies the VSS information.

Table 1: VSS Information

VSS Information	
System Name:	Voluntary Service System (VSS*5*1)
System Type:	Enterprise Web Application
Hosting Type:	Enterprise Operations (EO) Managed
Information Security Officer:	Robert Caldwell, robert.caldwell@va.gov

5. Installation

VSS is an Enterprise web application and does not require a client installation. Sites do not need to install any software. However, VA network access and the VA standard desktop configuration with an approved internet browsers is required.

6. Security

Since the software will run completely under the VA Network, currently there are no specific security requirements. All users will be required to authenticate VSS with current credentials (User ID and VA standard Password).

A System Security Plan (SSP) is required for this application and will provide an overview of the security requirements of the system and describe the controls in place. The SSP delineates responsibilities and expected behavior of all individuals who access the system. The SSP is being developed and will be stored in Risk Vision.

A minimum set of management controls directed at individual information technology (IT) users is required to protect IT resources, and technical and operational controls that support the management controls. Management controls focus on the management of the computer security system and the management of risk for a system.

The types of control measures must be consistent with the need for protection of the system or application. Examples of management controls include risk assessment and management, security controls assessments, signed rules of behavior documents and “authority to operate” (ATO) decisions. ATO decisions can be found in [Risk Vision](#).

7. Technical

The adherence to the Technical Reference Model (TRM) and Standards Profile will be followed and described in more details when all the technology components for this project are selected. VSS will promote interoperability, portability, adaptability within systems, quality assurance and will utilize current technology to provide a framework for IT application and infrastructure development.

All software development by VSS developers shall conform to technology standards as defined in the [One-VA Technical Reference Model \(TRM\)](#).

Refer to Section 4.5 in the System Design Document (SDD) for the TRM Status table:
[VSS_SDD_Incr01](#)

The technical requirement for VSS is a conversion from a .NET 2.0 environment to a Java application. The database will be upgraded from SQL Server 2008 to SQL Server 2012 SPI. VSS uses a variety of stored procedures and user defined functions to provide data to the dependent VSS reports.

Included in this document are the technical requirements that consist of the installation of hardware, software, or assets to be used for the establishment of a system or the improvement of an existing system or control.

Table 2: Technology Components and Location

Technology Component Production 1	Location	Usage
Microsoft Windows Server 2012	Austin Information Technology Center (AITC)	Operating for Database and Reporting servers.
Structured Query Language (SQL) Server 2012	AITC	The Enterprise database containing VSS application data.
Wildfly 10 Application Server (JBoss)	AITC	The Java-based web service adapter supports the Veterans Point of Service (VPS) Kiosk user interface (UI) and Java-based application server hosting the VSS application.

7.1. Overview of the Technical Requirements

The following technical requirements are detailed in the corresponding VSS Enhancements Requirements Specification Document (RSD) for this effort. For additional information refer to the RSD in the Technical Service Project Repository (TSPR) located in the following link: [http://tspr.vista.med.va.gov/warboard/ProjectDocs/Voluntary_Services_System\(VSS\)_Enhancements/VSS%20RSD%20Incr01%20v2.docx](http://tspr.vista.med.va.gov/warboard/ProjectDocs/Voluntary_Services_System(VSS)_Enhancements/VSS%20RSD%20Incr01%20v2.docx)

7.2. Enterprise Architecture

VSS adheres to the Technical Reference Model (TRM) required by the VA Enterprise. VSS promotes interoperability, portability, adaptability within systems, quality assurance and utilizes current technology to provide a framework for IT application and infrastructure development. For additional information refer to the SDD in the TSPR.

7.3. CRUD Matrix

VSS will utilize user access roles to control access to application functionality. Each user access role has a set of predefined permissions associated to it. Also, each VSS user must be assigned a user access role before they can use the VSS application.

For more information on the access roles, refer to the CRUD Matrix in Appendix A within this document.

7.4. Performance, Capacity, and Availability Requirements

VSS enhancements will be fully tested for functionality and performance. For additional information on performance, capacity and availability requirements refer to Tables 3, 4 and 5.

Table 3: Performance

If this is a system modification, how many users does the current system support?
There are 317 Kiosks (most volunteers sign in using the kiosk) and 778 staff users. Signing-in is not necessarily done simultaneously. The current system's peak time is between 7:30 a.m. and 11:30 a.m. (all time zones). There are approximately 4,000 transactions in a 4 hour period.
How many users will the new system (or system modification) support?
This should be the same number of users; numbers are approximate.
What is the predicted annual growth in the number of system users?
Staff user numbers will remain stable; number of volunteers should stay the same.

Table 4: Capacity

What is the predicted size (average) of a typical business transaction?
The average full cycle transaction for volunteers is roughly 100KB. The average transaction for staff (who run mostly reports) is closer to 500KB.
What is the predicted number of transactions per hour (day, or other time period)?
The average volunteer will only perform one full cycle transaction (log in, record time, print meal ticket). The average number of daily volunteers is around 3,000. This equates to an estimated 3,000 transactions per day. The staff transactions are more frequent and will peak at ~500 an hour during End of Year reporting.
Is the transaction profile expected to change (grow) over time?
This transaction profile is expected to stay static over time.
What is the process for planning/adjusting capacity?
VA EO at the AITC facility manages and monitors the capacity, servers, and bandwidth.
Does the update require a surge capacity that would be different from the base application?
No

Table 5: Availability Requirements

Describe when the envisioned system will need to be available (business hours only, weekends, holidays, etc.) to support the business.
The systems needs to be available 24/7/365 days a year in all time zones: 10 p.m. to 4 a.m. may be the slowest hours of use (in all time zones).

7.5. Data Definition

The Data Dictionary (DD) Definition is a collection of the descriptions of the data objects available in the VSS database and the elements in the VSS data model.

The data type describes the type of element, elements characteristic or values that are contained and stored in the database. For additional information on the DD, refer to the following link:

[http://tspr.vista.med.va.gov/warboard/ProjectDocs/Voluntary_Services_System\(VSS\)_Enhancements/VSS%20Data%20Definitions%20Incr01%20v2.docx](http://tspr.vista.med.va.gov/warboard/ProjectDocs/Voluntary_Services_System(VSS)_Enhancements/VSS%20Data%20Definitions%20Incr01%20v2.docx)

8. Considerations

8.1. Assumptions

This guide was written with the following VSS assumptions:

- VSS*5*1 will incorporate Standard Data Services lookup tables so that all current sites such as the Veterans Integrated Service Network's (VISN's), Veterans Affairs Medical Center's, and Community Based Outpatient Clinic's (CBOC) will become available for users and updated periodically without end users' involvement.
- Military time will be the standard for UI input; the user may have the ability to set preferences which customizes the output display.
- All times will be entered and displayed in the user's local time zone, which is synchronized with the user's session on login to the application.
- The VA standard inactive period of 15 minutes applies to this system, and the user will be automatically logged out unless they choose to remain active. The VSS application (and its interfaces) will be running on the most current platform supported by OI&T.
- The SQL Extensible Mark-up Language 3.0 functionality will be replaced. According to EO, when everyone is moved off of the SQL Server 2008 to SQL Server 2012, the functionality will not be supported.

8.2. Dependencies

- VSS must be enhanced for on-boarding volunteer applicants by auto-matching applicant names against the List of Excluded Individuals and Entities (LEIE)
- Veterans Administration Central Office (CO).

Table 6: Interface Types

VSS Interface Types	
Application Name	Description
Pay.gov	Provide the ability to interface VSS database and pay.gov (Department of Treasury for e-donations).
HHS LEIE	List of Excluded Individuals and Entities.

Figure 1: High-Level Application Design: VSS High-Level Application Design

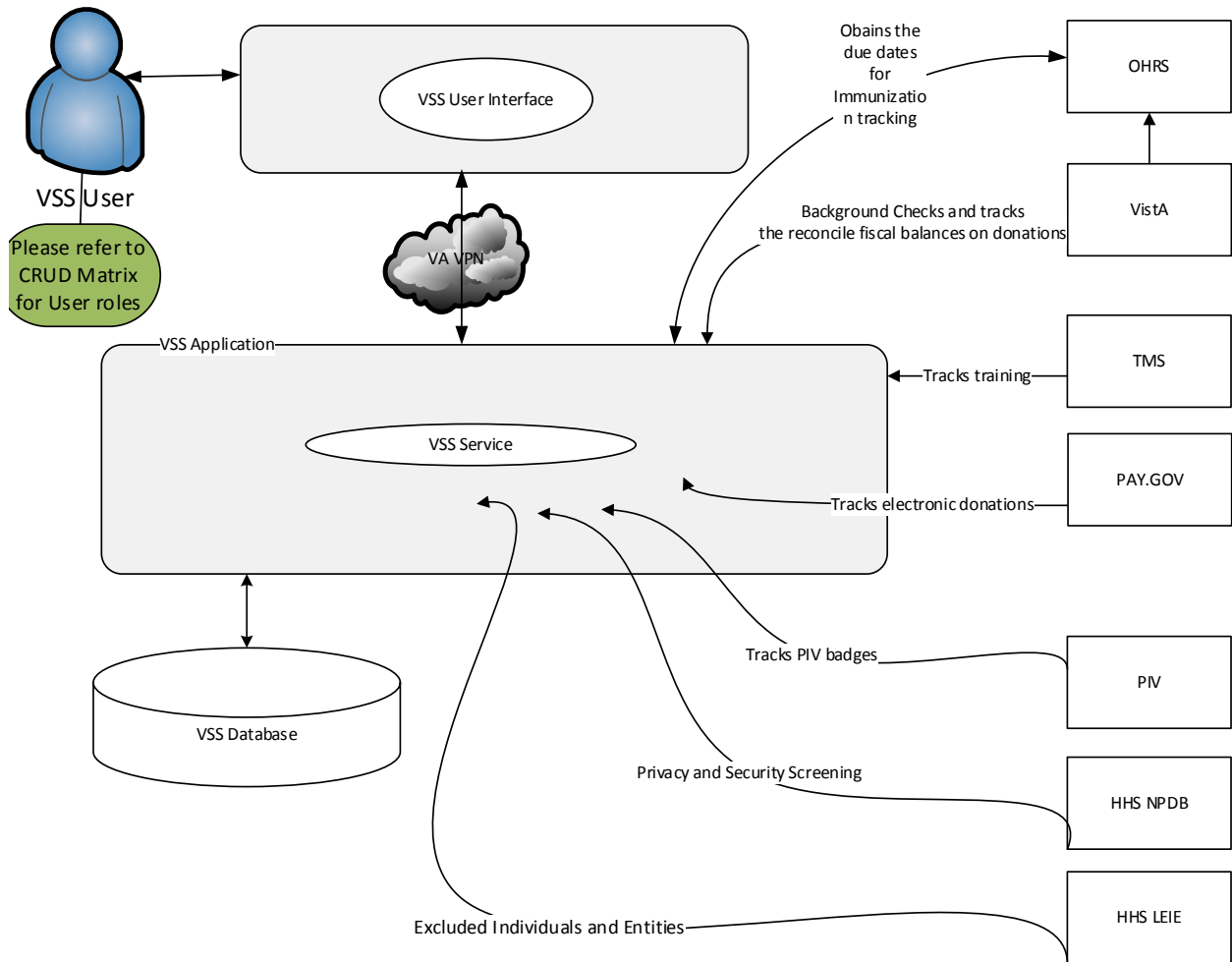
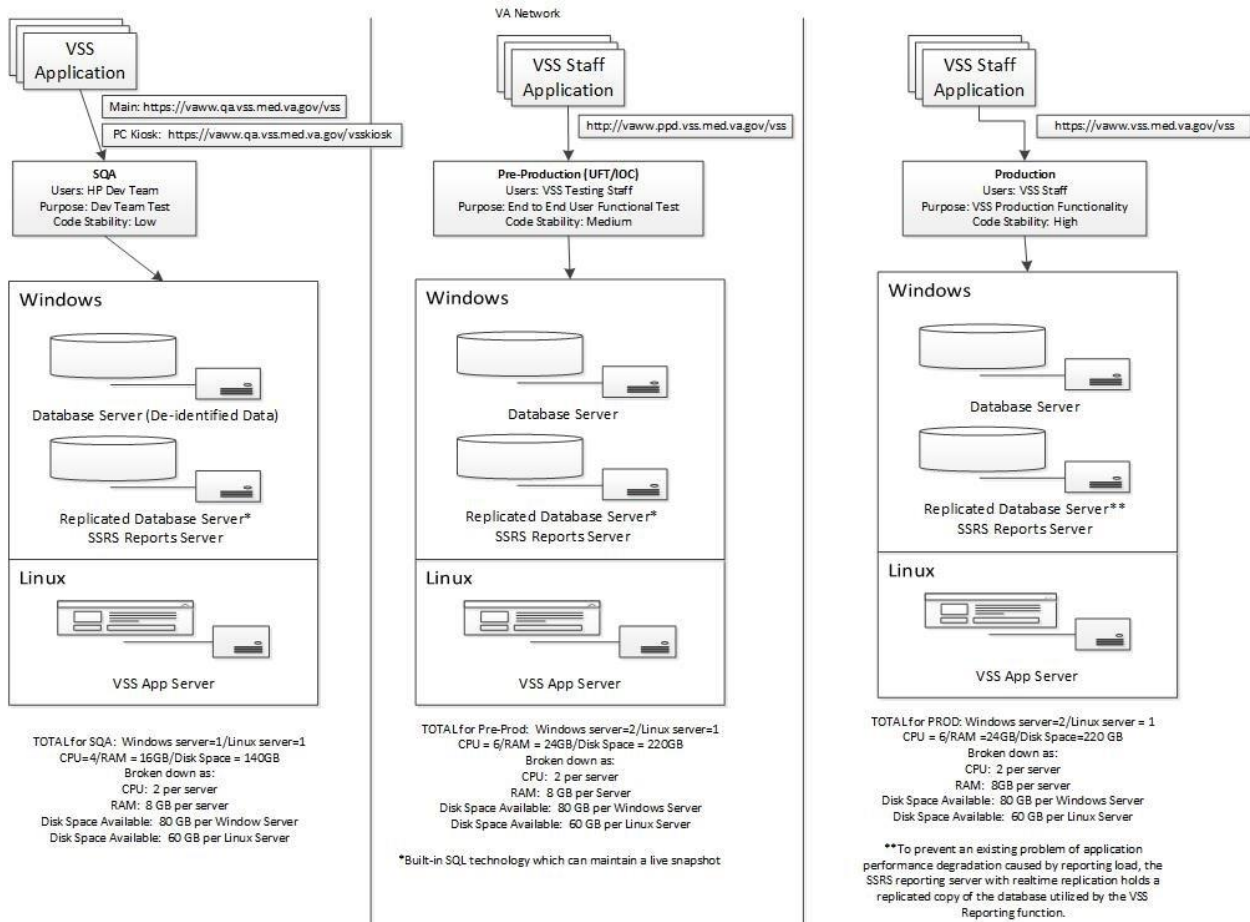


Figure 1 reflects a diagram of the VSS Environments.

Figure 2: VSS Environments



The VSS project provides the capability to receive and store volunteer information, in a secure VA hosted environment.

9. Appendix A- VSS CRUD Matrix

The complete VSS Crude Matrix is below:



VSS_CRUD_Matrix.xlsx

Table 7: VSS Current Roles

Role Name	Technical Role Name	Description
National Administrator Role	VtkNationalAdministrator	Person responsible for nationwide VSS administration including granting all levels of user access and maintaining all national lists and reports.
CO User Role	VtkCOUser	Person responsible for assisting with nationwide VSS administration. Has read access to all of VSS but write access only to National Advisory Committee and Program Manager Databases.
CO User Administrator Role	VtkCOUserAdministrator	N/A – Not used
FacilityManager Role	VtkSiteManager	Person responsible for site level VSS administration to include granting user access at their site, maintaining lists for their site, volunteer management at their site and donation tracking.
FacilityUser Role	VtkSiteUser	Person responsible for timekeeping and Donation Tracking at their site. Has read and write access to timekeeping and donation records and reports and read only access to volunteer records.
FacilityUser Administrator Role	VtkSiteUserAdministrator	Person responsible for assisting with site level VSS administration for a National Games or other Special Event site. Has read and write access to volunteer, timekeeping, and donation records and reports.
Games Manager Role	VtkGamesManager	Person responsible for TBD during Increment 1

Table 8: VSS Proposed Roles

Role Name	Technical Role Name	Description
National Administrator	National_Administrator	Person responsible for nationwide VSS administration including granting all levels of user access and maintaining all national lists and reports.
National Specialist	National_Specialist	Person responsible for nationwide VSS administration including granting all levels of user access. Person responsible for assisting with nationwide VSS administration. Has read access to all of VSS but write access only to National Advisory Committee and Program Manager Databases.
National User	National_User	Person responsible for nationwide VSS administration.

Role Name	Technical Role Name	Description
FacilityFacilityAdministrator	Facility_Administrator	Person responsible for granting access at their Facility, maintaining lists for their Facility, volunteer management at their Facilityand donation tracking.
FacilityFacilitySpecialist	Facility_Specialist	Person responsible for timekeeping and Donation Tracking at their Facility.
FacilityFacilityUser	Facility_User	Person responsible for timekeeping and Donation Tracking at their Facility.
Volunteer	Volunteer	Person responsible for logging their own volunteer hours and printing their own meal ticket at their assigned site(s).
Games Administrator	Games_Administrator	Person responsible for site level VSS administration for a National Games or other Special Event site, to include granting user access at their site, maintaining lists for their site, volunteer management at their site and donation tracking.
Games Specialist	Games_Specialist	Person responsible for assisting with site level VSS administration for a National Games or other Special Event site. Has read and write access to volunteer, timekeeping, and donation records and reports.
Games User	Games_User	Person responsible for timekeeping and Donation Tracking for a National Games or other Special Event site. Has read and write access to timekeeping and donation records and reports and read only access to volunteer records.

Table 9: VSS Proposed Access Levels

New VSS Role Name	Granted Permission
National Administrator	CO Reports Menu: Committee Attendance Listing
National Administrator	CO Reports Menu: National Organizations
National Administrator	CO Reports Menu: Regular Scheduled and Occasional Hours VHA37 Part 1
National Administrator	CO Reports Menu: Regular Scheduled and Occasional Hours VHA37 Part 2
National Administrator	CO Reports Menu: Regular Scheduled and Occasional Hours VS01 Part 1
National Administrator	CO Reports Menu: Regular Scheduled and Occasional Hours VS01 Part 2

New VSS Role Name	Granted Permission
National Administrator	CO Reports Menu: Utilizing Services and Subdivisions
National Administrator	CO Reports Menu: Volunteers By Organization Data View
National Administrator	CO Reports Menu: VS01 Data View
National Administrator	CO Reports Menu: VSS Potential Matches to LEIE
National Administrator	CO Reports Menu: VSS Volunteer Matches with VACO Upload
National Administrator	Donation CO Reports Menu: Donation Reference Search
National Administrator	Donation CO Reports Menu: Donations Data View
National Administrator	Donation CO Reports Menu: Total Donations By Station
National Administrator	Event Lists Menu: Daily Work Schedule
National Administrator	Event Lists Menu: Grand Totals By Assignment List
National Administrator	Event Lists Menu: Master Registration List
National Administrator	Event Lists Menu: Service Assignment Schedule
National Administrator	Event Lists Menu: Sign In Roster
National Administrator	Event Lists Menu: Uniform Issue List
National Administrator	Monthly Processing Reports: Regular Scheduled and Occasional Hours VS01 Part 1
National Administrator	Monthly Processing Reports: Regular Scheduled and Occasional Hours VS01 Part 2
National Administrator	Monthly Processing Reports: VSS Potential Matches to LEIE
National Administrator	National Officials Reports Menu: Annual Joint Review
National Administrator	National Officials Reports Menu: Labels
National Administrator	National Officials Reports Menu: National Officials Data View
National Administrator	Run Any Time Reports: National Organizations
National Administrator	Station Edit: National Award Codes
National Administrator	Station Edit: National Officials Edit
National Administrator	Station Edit: National Organization Codes

New VSS Role Name	Granted Permission
National Administrator	Station Edit: National Programs
National Administrator	Station Edit: National Schedule Codes
National Administrator	Station Edit: National Service Codes
National Administrator	Station Edit: National Staff Titles
National Administrator	Station Edit: Stations
National Administrator	User Administration Menu: User Management
National Administrator	User Administration Menu: User Reports
National Administrator	Voluntary Service Directory Reports Menu: Directory Labels
National Administrator	Voluntary Service Directory Reports Menu: Service Chiefs
National Administrator	Voluntary Service Directory Reports Menu: Service Directory
National Administrator	Voluntary Service Directory Reports Menu: Station Information Contact List
National Administrator	Voluntary Service Directory Reports Menu: Station Information Detail
National Administrator	Voluntary Service Directory Reports Menu: Supervised Programs
National User	CO Reports Menu: Regular Scheduled and Occasional Hours VS01 Part 1
National User	CO Reports Menu: Regular Scheduled and Occasional Hours VS01 Part 2
National User	Donation CO Reports Menu: Donation Reference Search
National User	Donation CO Reports Menu: Donations Data View
National User	Donation CO Reports Menu: Total Donations By Station
National User	Event Lists Menu: Daily Work Schedule
National User	Event Lists Menu: Grand Totals By Assignment List
National User	Event Lists Menu: Master Registration List
National User	Event Lists Menu: Service Assignment Schedule
National User	Event Lists Menu: Sign In Roster
National User	Event Lists Menu: Uniform Issue List

New VSS Role Name	Granted Permission
National User	Monthly Processing Reports: Regular Scheduled and Occasional Hours VS01 Part 1
National User	Monthly Processing Reports: Regular Scheduled and Occasional Hours VS01 Part 2
National User	Monthly Processing Reports: VSS Potential Matches to LEIE
National User	National Officials Reports Menu: Annual Joint Review
National User	National Officials Reports Menu: Labels
National User	National Officials Reports Menu: National Officials Data View
National User	Run Any Time Reports: National Organizations
National User	Voluntary Service Directory Reports Menu: Directory Labels
National User	Voluntary Service Directory Reports Menu: Service Chiefs
National User	Voluntary Service Directory Reports Menu: Service Directory
National User	Voluntary Service Directory Reports Menu: Station Information Contact List
National User	Voluntary Service Directory Reports Menu: Station Information Detail
Games Administrator	Donation Reports Menu: Generate Memo
Games Administrator	Donation Reports Menu: Generate Receipt
Games Administrator	Donation Reports Menu: Grand Total of Donations
Games Administrator	Donation Reports Menu: Total Donations By Station
Games Administrator	Donations Menu: Add Edit Donation
Games Administrator	Donations Menu: Donations Data View
Games Administrator	Donations Menu: Merge Donor
Games Administrator	Donations Menu: Thank You Letters
Games Administrator	User Administration Menu: User Management
Games Administrator	User Administration Menu: User Reports
FacilityFacilityAdministrator	User Administration Menu: User Management
FacilityFacilityAdministrator	User Administration Menu: User Reports

New VSS Role Name	Granted Permission
FacilityFacilityAdministrator	Awards Menu: Awards Processed Report
FacilityFacilityAdministrator	Awards Menu: Potential Awards Report
FacilityFacilityAdministrator	CO Reports Menu: NAC Organizations Yearly Comparison
FacilityFacilityAdministrator	CO Reports Menu: National Organizations
FacilityFacilityAdministrator	CO Reports Menu: Regular Scheduled and Occasional Hours VS01 Part 1
FacilityFacilityAdministrator	CO Reports Menu: Regular Scheduled and Occasional Hours VS01 Part 2
FacilityFacilityAdministrator	Donation CO Reports Menu: Donation Reference Search
FacilityFacilityAdministrator	Donation CO Reports Menu: Donations Data View
FacilityFacilityAdministrator	Donation CO Reports Menu: Total Donations By Station
FacilityFacilityAdministrator	Donation Reports Menu: Generate Memo
FacilityFacilityAdministrator	Donation Reports Menu: Generate Receipt
FacilityFacilityAdministrator	Donation Reports Menu: Grand Total of Donations
FacilityFacilityAdministrator	Donation Reports Menu: Total Donations By Station
FacilityFacilityAdministrator	Donations Menu: Add Edit Donation
FacilityFacilityAdministrator	Donations Menu: Donations Data View
FacilityFacilityAdministrator	Donations Menu: Thank You Letters
FacilityFacilityAdministrator	Maintenance Menu: Edit Meals
FacilityFacilityAdministrator	Maintenance Menu: Voluntary Services
FacilityFacilityAdministrator	Monthly Processing Reports: Alphabetical Volunteers
FacilityFacilityAdministrator	Monthly Processing Reports: Regular Scheduled and Occasional Hours VS01 Part 1
FacilityFacilityAdministrator	Monthly Processing Reports: Regular Scheduled and Occasional Hours VS01 Part 2
FacilityFacilityAdministrator	Monthly Processing Reports: Volunteers By Organization Summary VS27
FacilityFacilityAdministrator	Monthly Processing Reports: Volunteers By Organization VS26
FacilityFacilityAdministrator	Monthly Processing Reports: Volunteers By Using Service Summary VS29

New VSS Role Name	Granted Permission
FacilityFacilityAdministrator	Monthly Processing Reports: Volunteers By Using Service VS28
FacilityFacilityAdministrator	Monthly Processing Reports: VSS Potential Matches to LEIE
FacilityFacilityAdministrator	National Officials Reports Menu: Annual Joint Review
FacilityFacilityAdministrator	National Officials Reports Menu: Labels
FacilityFacilityAdministrator	National Officials Reports Menu: National Officials Data View
FacilityFacilityAdministrator	Post-FY Reports Menu: Annual Volunteer List
FacilityFacilityAdministrator	Run Any Time Reports: Address Labels
FacilityFacilityAdministrator	Run Any Time Reports: Daily Volunteer List
FacilityFacilityAdministrator	Run Any Time Reports: Hours By Organization
FacilityFacilityAdministrator	Run Any Time Reports: Hours By Service
FacilityFacilityAdministrator	Run Any Time Reports: Meal Ticket List/Form
FacilityFacilityAdministrator	Run Any Time Reports: National Organizations
FacilityFacilityAdministrator	Run Any Time Reports: New Volunteers
FacilityFacilityAdministrator	Run Any Time Reports: Occasional Hours By Date
FacilityFacilityAdministrator	Run Any Time Reports: Occasional Hours By Organization
FacilityFacilityAdministrator	Run Any Time Reports: Occasional Hours By Service
FacilityFacilityAdministrator	Run Any Time Reports: Organizational Code Report
FacilityFacilityAdministrator	Run Any Time Reports: Potential Termination List VS07
FacilityFacilityAdministrator	Run Any Time Reports: Service Code Report
FacilityFacilityAdministrator	Run Any Time Reports: Sign-In Code List
FacilityFacilityAdministrator	Run Any Time Reports: Telephone List
FacilityFacilityAdministrator	Run Any Time Reports: Terminated Volunteers
FacilityFacilityAdministrator	Run Any Time Reports: Volunteer Daily Review
FacilityFacilityAdministrator	Time Posting: Multiple Postings Regular Hours

New VSS Role Name	Granted Permission
FacilityFacilityAdministrator	Time Posting: Single Day Regular Hours
FacilityFacilityAdministrator	Voluntary Service Directory Reports Menu: Directory Labels
FacilityFacilityAdministrator	Voluntary Service Directory Reports Menu: Service Chiefs
FacilityFacilityAdministrator	Voluntary Service Directory Reports Menu: Service Directory
FacilityFacilityAdministrator	Voluntary Service Directory Reports Menu: Station Information Contact List
FacilityFacilityAdministrator	Voluntary Service Directory Reports Menu: Station Information Detail
FacilityFacilityAdministrator	Voluntary Service Directory Reports Menu: Supervised Programs
FacilityFacilityAdministrator	Volunteer Records: Volunteer Edit
FacilityFacilityAdministrator	Volunteer Records: Volunteer View
FacilityFacilityUser	CO Reports Menu: National Organizations
Site Administrator	Person responsible for site level VSS administration to include granting user access at their site, maintaining lists for their site, volunteer management at their site and donation tracking.
Site Specialist	Person responsible for assisting with site level VSS administration. Has read and write access to volunteer, timekeeping, and donation records and reports.
Site User	Person responsible for timekeeping and Donation Tracking at their site. Has read and write access to timekeeping and donation records and reports and read only access to volunteer records.