

# CNS Vital Signs®



## CNS Vital Signs Optimal Use Installation Guide

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**“Diseases of the brain commonly produce changes in behavior, including impairment of cognitive abilities and production of neuropsychiatric symptoms. Knowledge of the presence and characteristics of these changes can aid in the evaluation, management, and longitudinal care of patients with neurologic and psychiatric diseases.”** Adapted from: *Neurology* 1996;47:592-599.

**“When procedures, definitions, and data elements are standardized... comparison and analysis are enabled, thus deepening our understanding and benefiting the validity of clinical results.”**  
Adapted from ACC/AHA Committee on Data Standards.

## Contents

Installation Overview .....	3
System Requirements for Installation .....	4
Installation on a Networked Computer .....	5
Windows Operating System Set-up for Optimal Testing .....	6
Testing Data Back-up and Sync to Clients Network .....	7
Testing Data SYNC and Back-up to the CNSVS Cloud .....	8
Assessment Platform Technologies Deployment Examples .....	9

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CNS Vital Signs is a computerized neurocognitive health assessment platform that enables the **OBJECTIVE EVALUATION of COGNITION under challenge**, identifying status, symptoms, possible comorbidities, behavioral issues, and other important clinical information. The CNSVS platform is **sophisticated** (many research and clinical applications), but it is also **simple** (intuitive and easy to use in busy clinic settings). CNS Vital Signs provides the ability to deliver a 'research quality' system, to every practice, in a cost effective manner.

**What Computers and Devices can be used for testing and to collect patient data?**

There are Three Types of DEVICES and Three Types of APPLICATIONS. These tools can be custom configured to optimize the testing experience for your practice or research protocol.

**Desktop Computers**

Neurocognitive Testing and Rating Instruments



**Web Based App**  
Runs over the Web

Persistent Internet Connection Needed

**Laptop Computers**

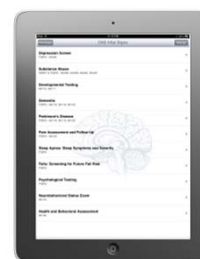
Neurocognitive Testing and Rating Instruments



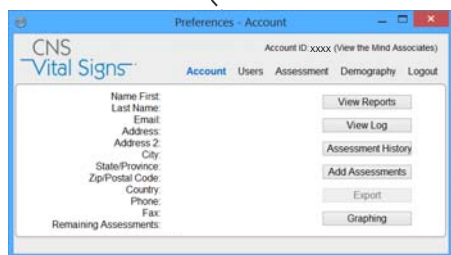
**Local Software App**  
Runs on the computer

**Tablets**

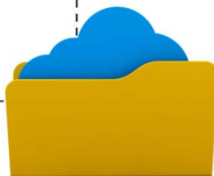
Rating Instruments



**Handheld App**  
Runs on the iPad Tablet & on other Tablets via the Web



Back-Up Data on Network Servers



Back-Up Data on CNS VS Cloud Servers

CNS Vital Signs Applications are designed to work equally well with networked e.g., hospitals, integrated multi-clinic and large practices, non-networked e.g., small and medium practices, as well as strict firewall secure environments e.g., Military, VA Medical Centers. The following Pages will help you and your practice optimize and custom configure the CNS Vital Signs testing experience for your practice and the patients.

**Operating System Requirement:**

**LOCAL Software App Assessment Platform:** CNS Vital Signs local or agent based applications requires a Windows XP, SEVEN, or EIGHT operating system. It also requires that DirectX version 7.0 or higher be installed.

**WEB-Based App Assessment Platform:** CNSVS Online [www.CNSVSONLINE.com](http://www.CNSVSONLINE.com) runs on a browser Internet Explorer (IE 6 or higher), Safari, Chrome, FireFox etc. on virtually any computer system connected to the internet.

CNS Vital Signs assessment platforms are fully functional when test sessions remain on the app counter displayed in the CNS Vital Signs initial window. A printer connection must be configured if you intend to print the reports. The application stores the testing data locally on the computers hard drive and the app can be configured to store, share, or back-up the test reports on the clinic or hospitals network or on the CNS Vital Signs server cloud. The testing data can be easily exported into a spreadsheet or database. Assessment reports can also be imported into an electronic medical record (EMR). Downloading software upgrades and purchasing additional assessment sessions can be performed by visiting [www.CNSVS.com](http://www.CNSVS.com)

**Note: You must install CNS VITAL SIGNS local software with a Windows Account that has Administrator privileges. If your computer has multiple accounts setup you will need to log in as the System Administrator or Owner to install the software.**

**Test Station Hardware:**

CNS VS software is designed to operate on laptop and desktop PC's with the following minimum configuration:

- 2GHz Pentium Class Machine
- 256M RAM
- 10MB Hard Disk Space
- Super VGA (800x600) Graphics Card with 64MB Memory

**Recommended Configuration**

- No other applications are in operation.
- No running of any background system services.
- The system is free of viruses, ad-ware and spy software.
- Any virus scanning, ad-ware scanning, or spy software scanning software should not be actively scanning during subject testing.
- The window screen saver option should not be active during subject testing.
- Power management functions should be disabled.
- "Windows Update" functionality should be set during times testing would be unlikely.

**Printing**

CNSVS software produces a report that can be printed on most standard PC printers. The report will display in your web browser, if the report extends beyond one page, change the margins in Page Setup (File>Page Setup).

CNS Vital Signs Applications are designed to work equally well with networked e.g., hospitals, integrated multi-clinic and large practices, non-networked e.g., small and medium practices, as well as strict firewall secure environments e.g., Military, VA Medical Centers.

**VERY IMPORTANT:** *Things to know if you are in a NETWORKED ENVIRONMENT when Windows Administrators, Users, and Permissions are involved. Here are the steps to avoid issues when installing and using CNS Vital Signs testing platform on a PC with Administrator and User permissions:*

### Log on as an Administrator – install only:

1. Log-in as an Administrator
  - a) Install CNS VS LOCAL App as an ADMIN
  - b) Avoid opening the Application**
  - c) Best Practices are to open and use CNS VS only as a Windows USER
2. Log-off as ADMIN.

### Log-on as a USER:

1. Open up the CNSVS LOCAL App from the USER side. This will set the permissions
2. Check to confirm the number of remaining assessments, new installs should have 5 test sessions
3. Shut down the machine
4. Boot up the machine, log-in as the USER
5. Check to confirm the # of assessments remains the same
6. Begin Testing

Important: CNS Vital Signs best practices is to Open, Test, Print, Graph, etc. from the Windows USER log-on. Avoid launching the App from both the ADMIN and USER log-ins.



We recommend the following settings for Windows computers when running CNS Vital Signs:

### **Screen Saver is set to “None”**

- Windows XP: Start / Control Panel / Display / Screen Saver
- Windows 7: Windows Flag / Appearance & Personalization / Personalization > Change Screen Saver
- Windows 8: Settings / Control Panel / Appearance & Personalization / Personalization > Change Screen Saver

### **All power options are set to “Never”**

- Windows XP: Start / Control Panel / Power Options
- Windows 7: Windows Flag / Appearance & Personalization / Personalization > Change Screen Saver / Change Power Settings / Create a Plan
- Windows 8: Settings / Control Panel / Appearance & Personalization / Personalization > Change Screen Saver / Change Power Settings / Choose when to turn off the display > Select “Never”

### **Date – set correctly**

- Windows XP – system tray, right click on the clock - Adjust Date /Time
- Windows 7 - system tray, right click on the clock - Adjust Date /Time
- Windows 8 - system tray, right click on the clock - Adjust Date /Time

### **Sticky Keys – Disabled**

- Windows XP – Start/Control Panel/Accessibility Options/Keyboard Uncheck all Boxes Sticky Keys/Settings - Shortcut – uncheck ‘Use Shortcut’ Options & Notifications – all boxes can be checked
- Windows 7 - Windows Flag/Control Panel/Ease of Access/Change how your keyboard works/Make it easier to type Uncheck Turn on Sticky Keys Click Set up Sticky Keys-uncheck boxes under Keyboard shortcut
- Windows 8 - Settings/Control Panel/Ease of Access/Change how your keyboard works/Make it easier to type. Uncheck Turn on Sticky Keys Click Set up Sticky Keys-uncheck boxes under Keyboard shortcut

### **Wired external keyboards**

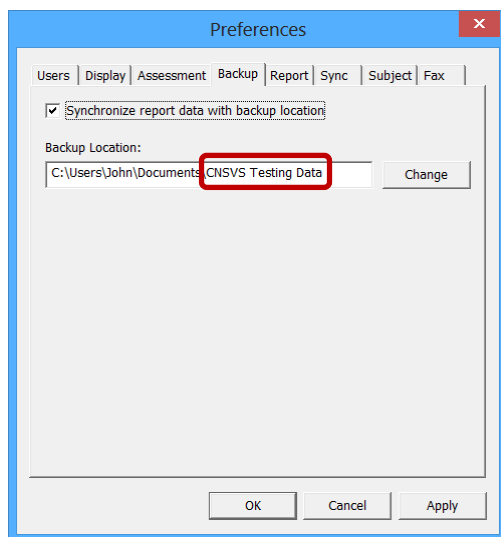
- For testing purposes USB or PS2 keyboards work best and avoid interferences by wireless infrared transmissions.
- If using CNS VS Online - Keystroke Encryption Software, if installed, must be disabled

If you are unfamiliar with these items, we suggest consulting with an local expert who can help you adjust the settings. Unfortunately, we are unable to make the changes on your desktops and laptops, for obvious reasons.

Backing-Up and Syncing (from one computer to another) test files in the CNS Vital Signs LOCAL App. Follow the steps below in sequential order. **You will need a server (clinic, hospital, etc.) an external drive, or writable CD to Back-up patient reports.** Multiple test station computers can be Synced together to store and access the same patient reports.

From Computer 1:

1. Open CNS Vital Signs LOCAL App
2. Go to > Menu > Preferences > Backup
3. Check the 'Synchronize report data with backup location' box. **NOTE: Your IT staff may need to create a data file folder on the server e.g., 'CNSVS Testing Data'**
4. Choose the Back-up location – your clinic server, external drive, etc.
5. Click Apply > Click Ok > Exit CNS Vital Signs
6. Your files are now Backed Up – a confirmation message appears when closing the CNS VS App.



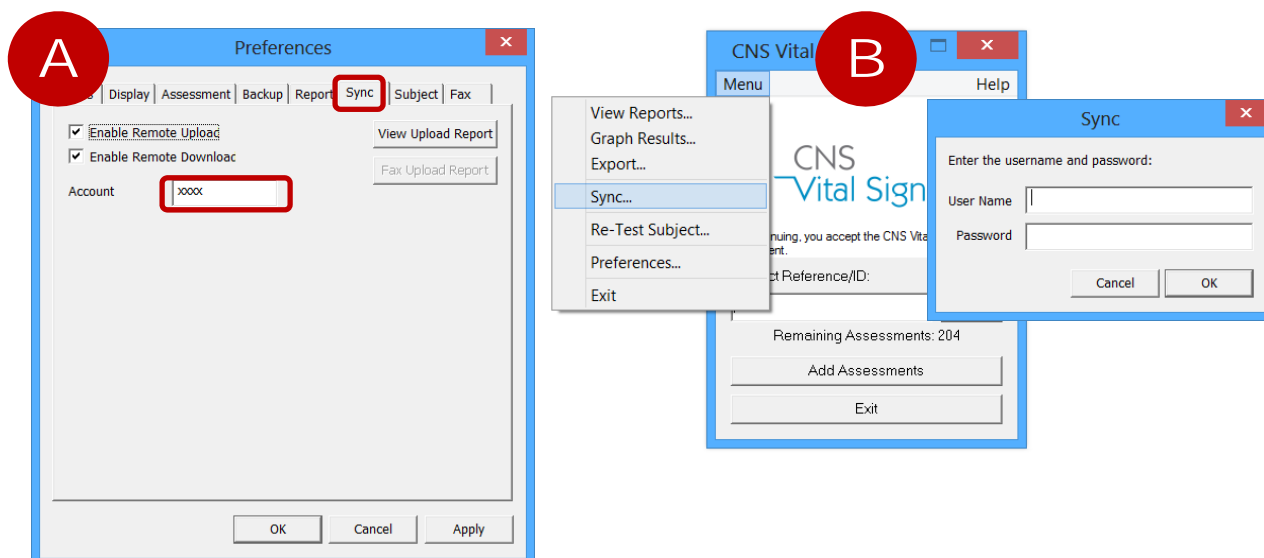
If you use multiple Testing Computers, now Back-Up each one:

1. Follow the same steps above
2. Be sure to choose the same Back-up location – your server or external drive
3. The CNS Vital Signs Backup feature will Synchronize patient files if the '**Synchronize report data with backup location**' box is checked – meaning it will only sync or write the existing, new or missing files. It does not re-write existing identical files which are already in place.

Syncing and Backing-Up test files from one or multiple computers using the CNS Vital Signs LOCAL App and the CNSVS WEB Cloud Account can be easily accomplished by following the steps below in sequential order. **You will need a CNSVS WEB Account set-up by calling the CNS Vital Signs Support line or by going to [www.cnsvsonline](http://www.cnsvsonline) and clicking the computer button and logging-in using your registration Username and Password. This web login will automatically setup a WEB Account for data back-up and also allow you to use the WEB-Based App.** Multiple test station computers at multiple clinic and research locations can be Synced together remotely to store and access the subject/patient reports.

From each Computer:

1. Open CNS Vital Signs LOCAL App
2. Go to > Menu > Preferences > Sync (A)
3. Check the 'Enable Remote Upload' box. **NOTE: If you have multiple testing stations and/or clinic or research locations you can back-up your data to the CNS VS server cloud.**
4. Check the 'Enable Remote Download' box. **NOTE: If you have multiple testing stations and/or clinic or research locations and you want all testing results shared to all the test stations uploading to your WEB Account.**
5. Enter your WEB Account Number.
6. Click Apply > Click Ok > Exit CNS Vital Signs Preferences



7. Go to > Menu > Preferences > Sync (B)
8. A SYNC Box will appear. In the SYNC Box enter your CNS Vital Signs Account Username and Password and CLICK the OK button and your testing data will be backed-up to the CNS VS Server Cloud.



What Practice & Research Settings Can CNS Vital Signs be used?

Easily deployed at individual practices, busy large group practices, hospital networks, academic medical centers and research projects.

Multiple Testing Solutions... Custom Configured Solutions

