

The VINCI Workspace

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VA Informatics &
Computing
Infrastructure



About the VINCI Workspace

- The VINCI Workspace is a FREE high-performance computing environment that serves research and business intelligence communities (Operations)
- Firewall provides enhanced data security
- Access to computing power, software tools, databases, SAS/Grid, file and data storage
- Can be accessed from outside the VA through VA VPN solutions of Rescue and CAG
- The VINCI Workspace and shared project folders allow for national collaboration in a research group

About the VINCI Workspace

■ Comes in two variations

- Standard Workspace
- Development Workspace

■ Standard Workspace

- Standardized environment
- Shared resources
- Software restrictions
- No elevated privileges

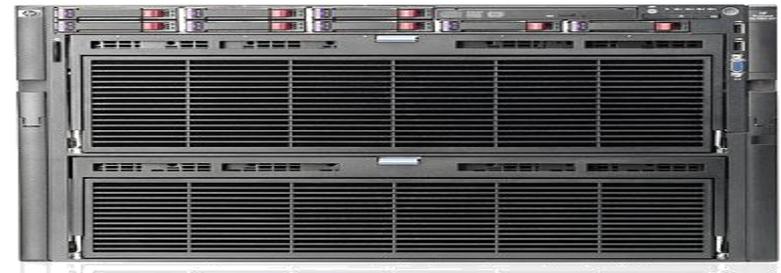
■ Development Workspace

- Special purpose usage (custom coding, use of non-standard software)
- Elevated privileges allowed with approval

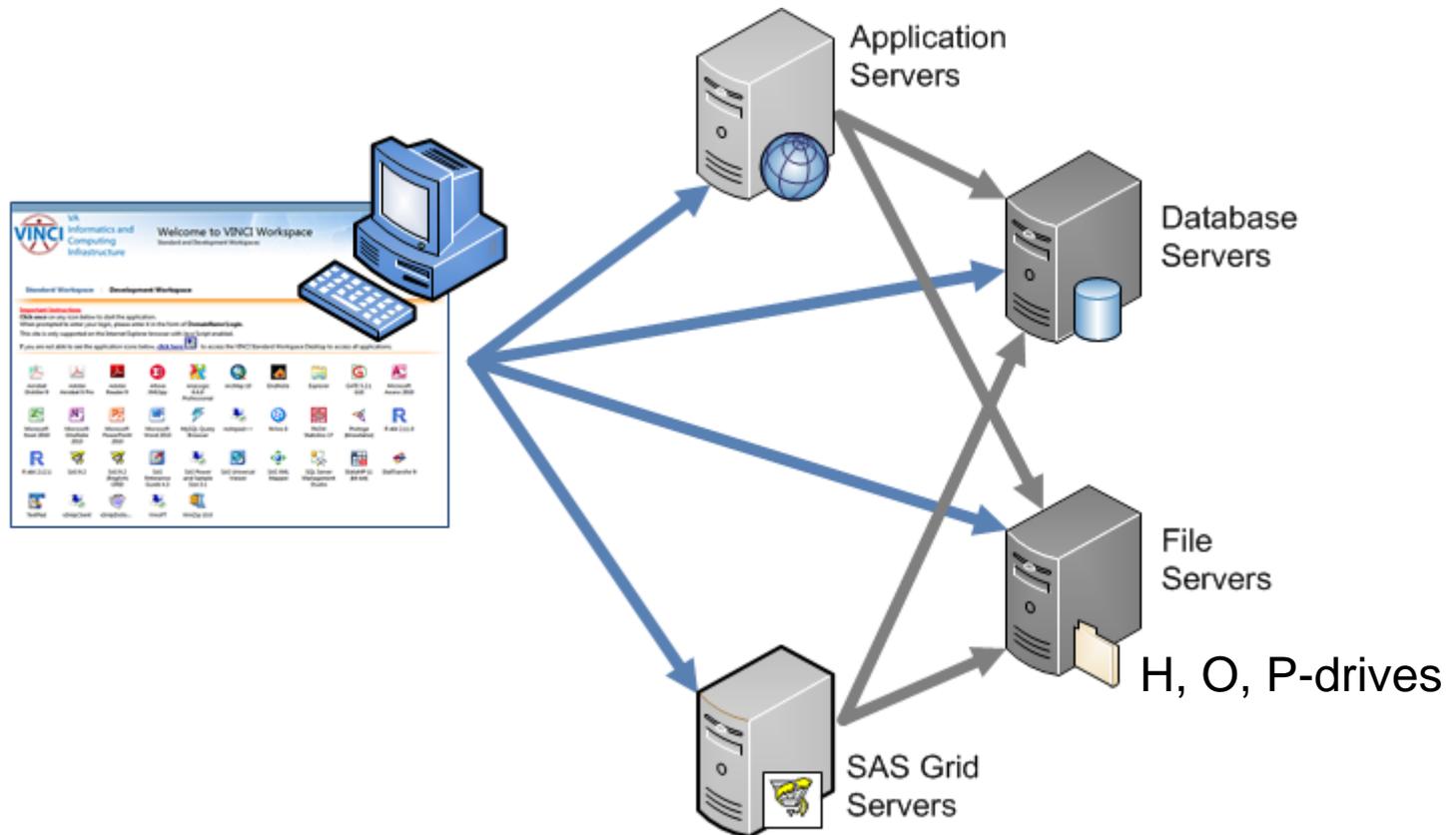


VINCI Standard Workspace

- Windows Server 2012 Enterprise R2 x64 SP2 Operating System on 3 load balanced servers
- No elevated (administrative) permissions
- Fixed software package (can request other software)
- 4 shared CPUs totaling 32 cores
- Shared 128 GB RAM
- No Internet access



Standard Workspace Architecture



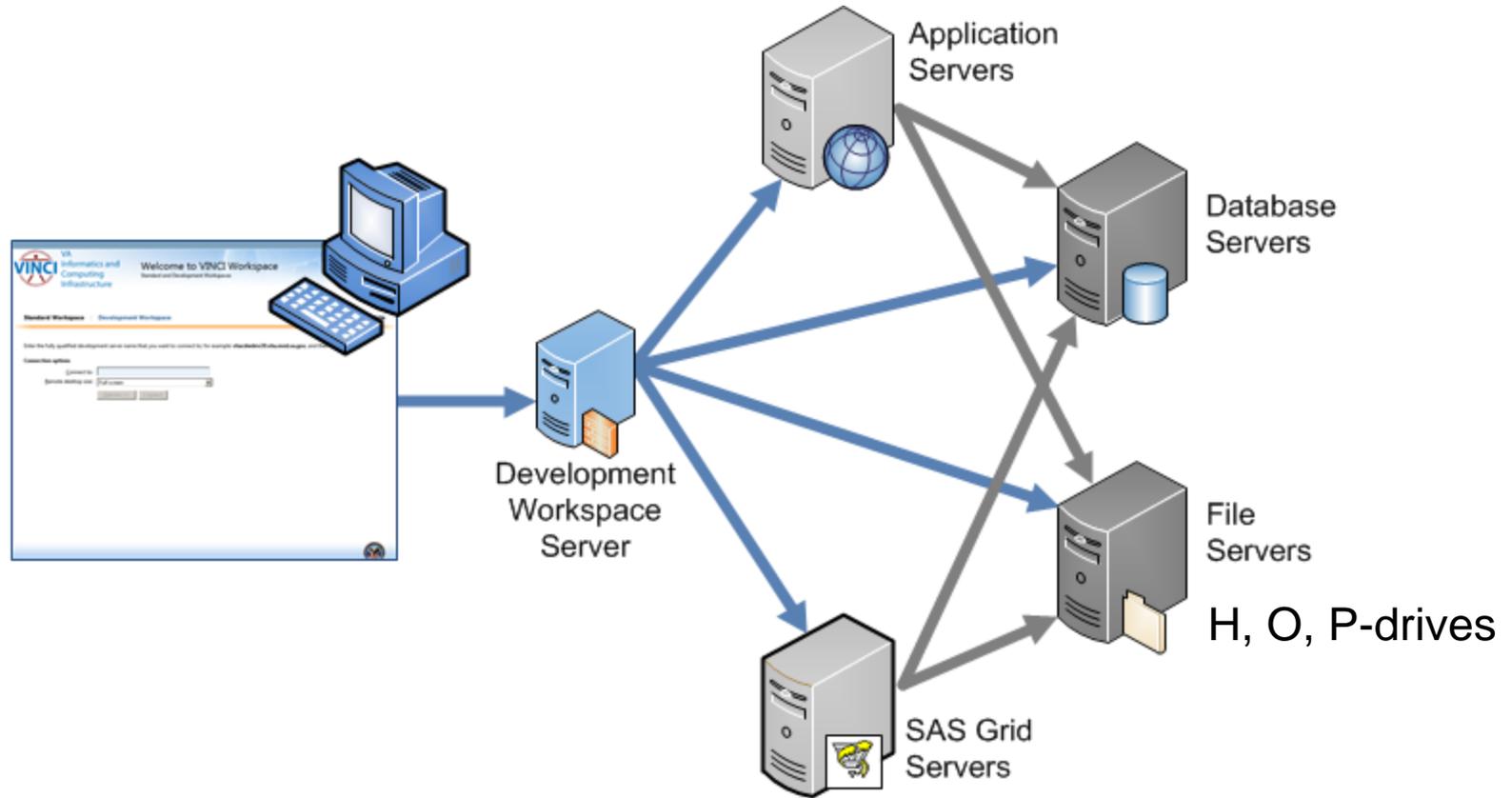
VINCI Development Workspace

- Windows Server 2012 Enterprise R2 x64 SP1 or Linux Operating System
- Elevated permissions allowed (with approval*)
- Install additional software yourself (S-drive)
- 1 processor core (can request more)
- 4 GB RAM (can request more)
- No Internet access



* VINCI does not provide access approvals - see your ISO.

Development Workspace Architecture

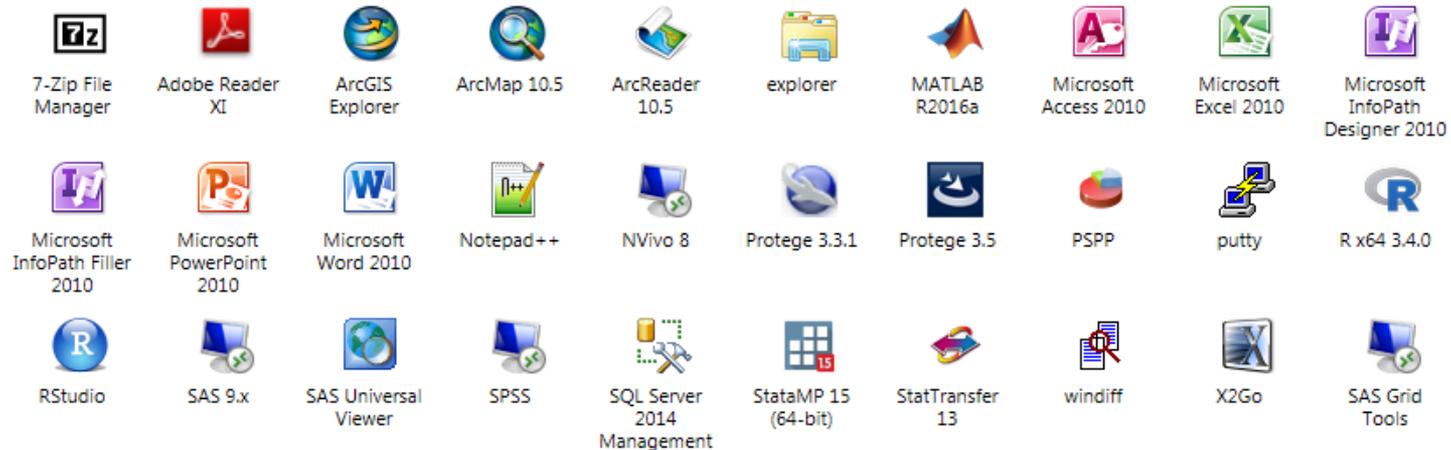


Data Storage Options

- H-Drive Personal Folder
 - 10 GB standard size
 - For personal file storage only
 - **NOT** for storing study data
- O and P-Drive Project Folders
 - 100 GB standard size (can request more)
 - Intended for storage of shared project files
 - Access is controlled and limited to study staff
 - Specifically intended for study file storage
 - One folder per study
- Microsoft SQL 2014 server databases
- Tape and Disk backup

Workspace Software

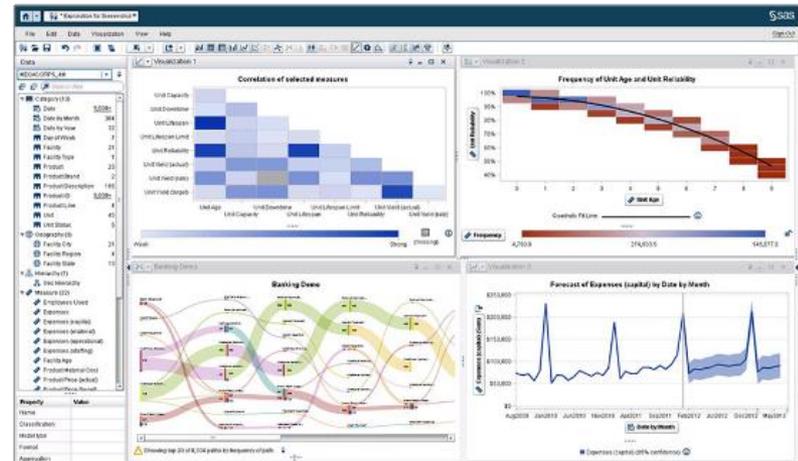
- VINCI provides STATA, R, SAS, SPSS*, PSPP, MatLab, and other software for FREE
- Additional and updated software added when funded



*SPSS will eventually be removed for lack of funding. Use PSPP instead.

SAS Environment

- Maintain and Support two SAS grids (Operations and Research)
- Over 2 million compute minutes per month
- Leading VA in authentication using AD on Linux Platform
- PIV Card Support



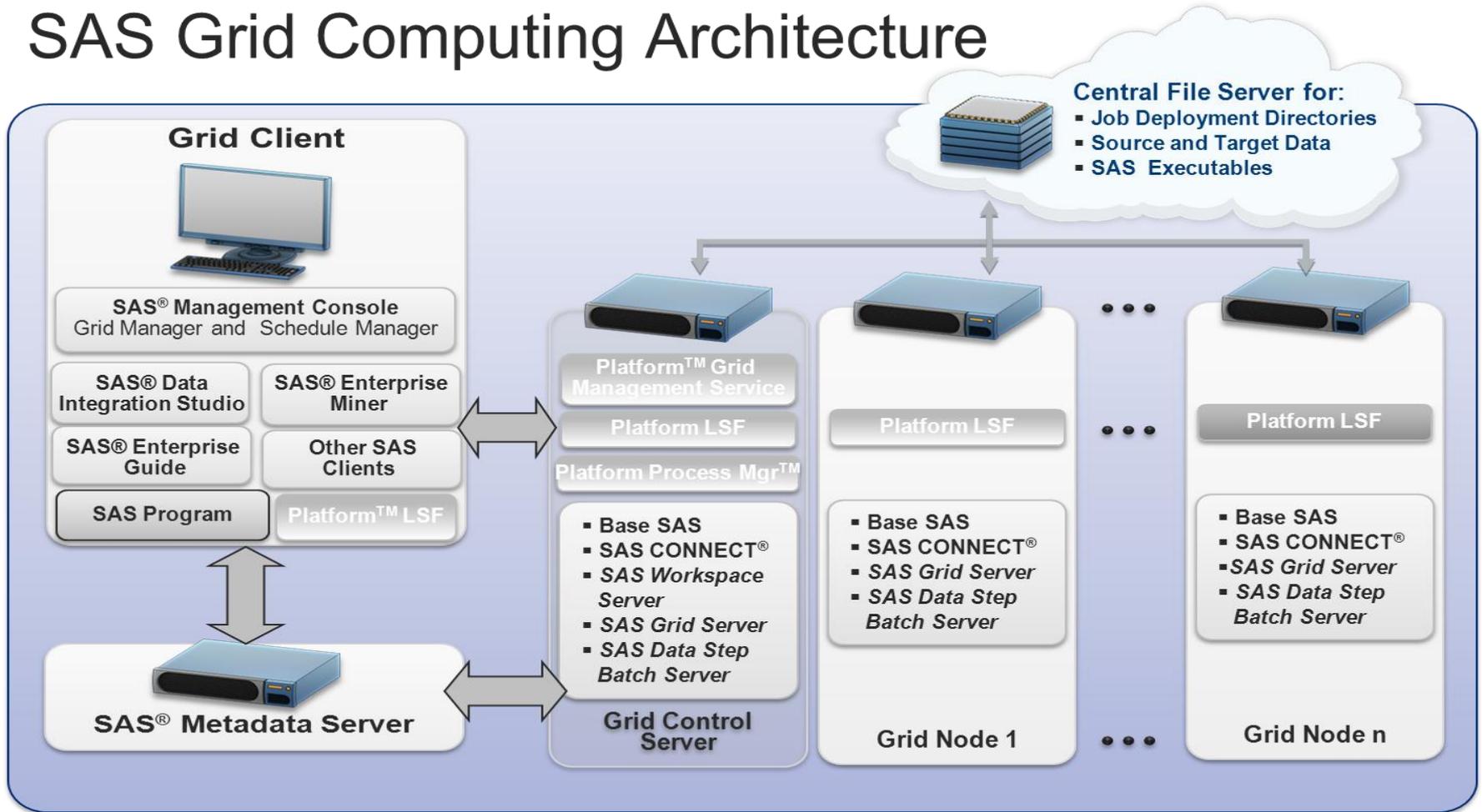
VINCI SAS 9.4/Grid

- Distributed management of SAS jobs
- 5 clustered Linux servers (RHEL 7.3 as O.S.)
- 128GB of RAM, 8 CPUs and 40 job slots per server (can be increased at any time)
- 10GB Ethernet connection to CDW/VINCI data servers
- Latest SAS9.4 release (T94M4)



SAS Grid Architecture

SAS Grid Computing Architecture



SAS Environment

- Why use SAS/Grid over SAS?
 - Load-balanced, parallel-processing very robust venue.
 - Greater storage capacity.
 - All statistical procs reside on the Grid, not the Desktop.
 - More efficient OS venue.
 - Greater security



SAS Environment

- SAS Enterprise Miner is very robust and easy to use. It also allows rapid, efficient data mining and modeling with a minimal amount of programming (parameter inclusions). Proc IML (Interactive Matrix Language) also allows the inclusion of R into the SAS world.
- SAS Enterprise Guide is a point-and-click, menu- and wizard-driven tool that empowers users to analyze data and publish results.



VINCI Accessible SQL Databases

■ CDW Production domains

Allergy, Appointment, Consult, CPRS Orders, Dental, Emergency Dept. Int. Software (EDIS), Health Factors, Immunization, Inpatient, Lab Chemistry, Lab Microbiology, Mental Health Assessment, Non-VA Meds, Outpatient, Outpatient Workload, Patient, Patient Associated, Patient Enrollment, Patient Insurance, PCMM, Pharmacy BCMA, Pharmacy Outpatient, Pharmacy Patient, Purchased Care, Pyramid GIS, Radiology, Recall Reminders, RPCMM, SPatient, Staff, SStaff, Surgery INTRA Table, Surgery PRE Table, Surgery POST Table, Text Document Titles, Travel, VistA Compensation and Pension, VistA Waitlist, and Vital Signs.

■ CDW Raw domains

Bill Claims (CBO), Decision Support System (DSS), Echocardiogram, Equipment Inventory, Fee Basis Claim System, Health Economics Resource Center (HERC), Intravenous Meds, MedSAS, Oncology, Prosthetics, PSSG Geocoded Files, Pulmonary Function Test (PFT), Rx Unit Dose, Travel, Veteran's Choice Program Eligibility (VACAA), VETSNET, and Vital Status.

VINCI Accessible SQL Databases

Observational Medical Outcomes Partnership (OMOP) v5 common data model of CDW data consists of:

Appointment (Status), Dental (Tobacco Use Only), Dim (Abused Substance, Clinical Procedure, CPT, Device, Facility Type, Institution, Location LOINC, MajorConceptMap, SNOMED, etc.), Fee Basis/Purchased Care- Outside of VA Care, ICD 9CM and ICD 10CM, ICD9PCS and ICD 10PCS, Inpatient, Lab Chemistry, Outpatient (Visit, Diagnosis, Procedure), Patient/Spatient, Patient Providers and Sstaff, PatSub Ethnicity and Race, PCCM (Patient Providers), Pharmacy BCMA (Inpatient), Pharmacy Outpatient, Staff/Sstaff, Vital Signs, and NDS Vital Status Mini (from CDC/SSI/BIRLS/CMS).

VINCI Poll #1

Select all that apply:

- I have not used the VINCI Workspace
- I have used the VINCI Workspace
- I have used the VINCI SAS/Grid
- I want to use the VINCI Workspace
- I want to use the VINCI SAS/Grid

Find and Read the User Guide

The workspace user guide is on VINCI Central under User Guides

Home About VINCI Skip to Content

VINCI Central

Welcome to the VA Informatics and Computing Infrastructure

Keyword Search Search

Timothy Trautman
VINCI Email: VINCI@VA.gov
Concierge Desk: 1-801-872-3324
[Request Help Online](#)

- Launch Workspace
- New To VINCI
- My VINCI Dashboard
- VINCI University
- VINCI Tube
- VINCIPedia/FAQ
- User Guides**
- VINCI Services
- Computing Cloud
- Data Sources
- Applications
- Events
- Policies and Forms
- Quick Links

User Guides

VINCI User Guides

Showing 1 to 3 of 3 entries Filter:

Type	Guide Name	Description	Last Updated
	VINCI Database User Guide	This guide provides users with step-by-step instructions on how to access and query their study's SQL database in the VINCI Workspace, getting started with using SAS, and using CDW Project Specific databases.	2017-02-01
	VINCI File Transfer Guide	This guide explains how to upload and download files to the secure VINCI Workspace.	2017-02-01
	VINCI Workspace User Guide	This guide is intended to provide users with pre-requisites and instructions on accessing the VINCI Workspace for the first time as well as instructions on using the VINCI Workspace.	2017-03-27

Previous Next

Additional Resources

- [VINCI SAS Grid Guides SharePoint site](#)
- [Veterans Administration SAS® Users Group \(VASUG\) SharePoint site](#)
- [Acceptable Use Policy for SAS/Grid](#)
- [Grid - Where to begin?](#)

SPSS to SAS
Cyberseminar
4-13@2PM ET
[Learn to use SAS](#)



Accessing the VINCI Workspace

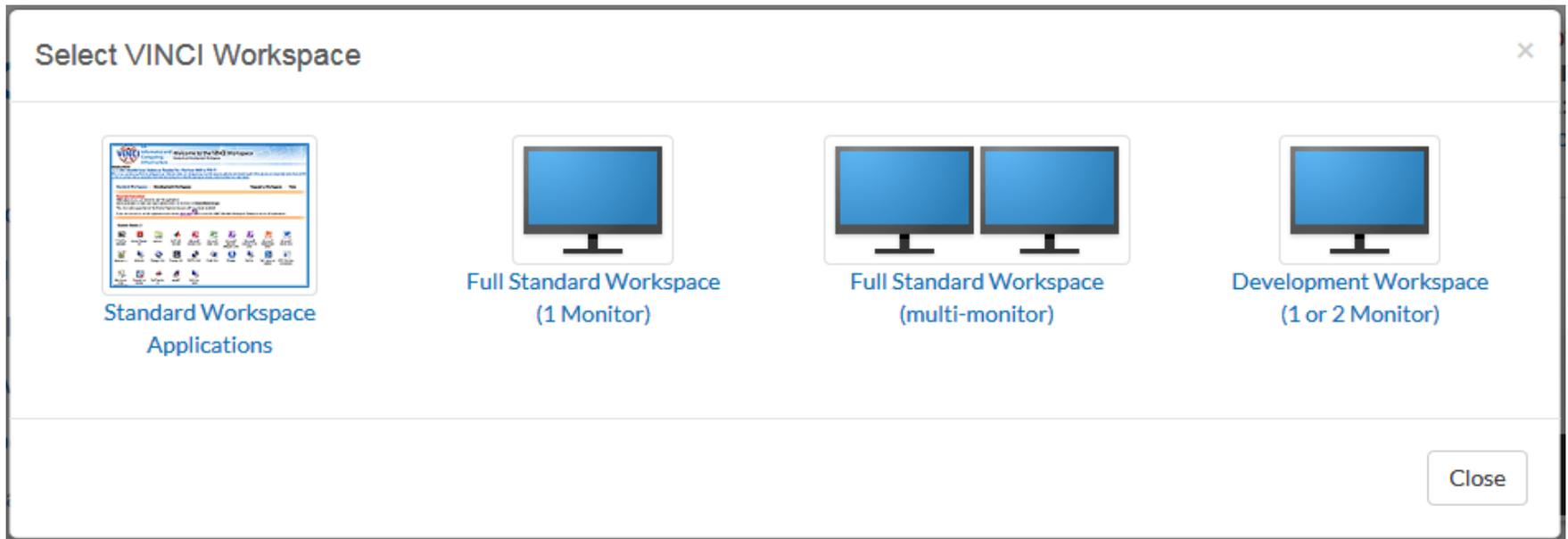
- On VINCI Central, click Launch Workspace

The screenshot shows the VINCI Central homepage. At the top, there is a navigation bar with 'Home', 'About VINCI', and 'Skip to Content'. The main header includes the VINCI Central logo, a 'Welcome to the VA Informatics and Computing Infrastructure' message, a search bar, and contact information for Timothy Trautman. The left sidebar contains a navigation menu with 'Launch Workspace' highlighted in a red box and a red arrow pointing to it. The main content area features a 'New To VINCI' banner, a 'My VINCI Dashboard' link, and a grid of service tiles including VINCI University, VINCI Tube, VINCIpedia, User Guides, VINCI Services, Computing Cloud, Data Sources, and Applications.

- From outside the VA, see VINCI Workspace User Guide

Accessing the VINCI Workspace

- This gives you 4 options:
 - Standard Workspace Applications (launch one at a time)
 - Full Standard Workspace (1 monitor)
 - Full Standard Workspace (multi-monitor)
 - Development Workspace (1 or 2 monitor)



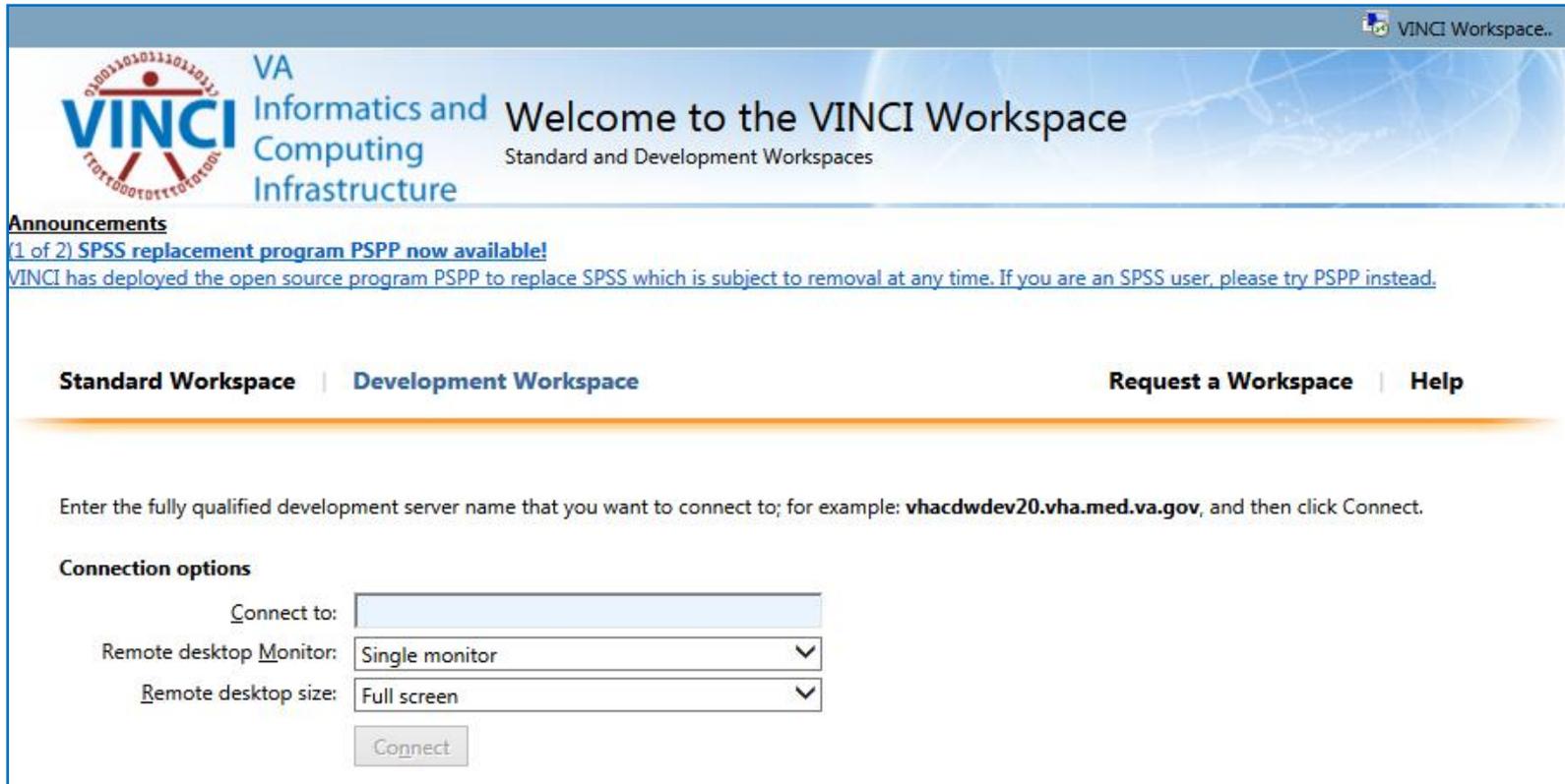
VINCI Workspace Web Interface

To launch one application at a time

The screenshot displays the VINCI Workspace web interface. At the top left is the VINCI logo with the text "VA Informatics and Computing Infrastructure". To the right, it says "Welcome to the VINCI Workspace" and "Standard and Development Workspaces". Below this is an "Announcements" section with a link to "SPSS replacement program PSPP now available!". Navigation links include "Standard Workspace", "Development Workspace", "Request a Workspace", and "Help". A section titled "Important Instructions" provides login and browser requirements. The main area shows a "Current folder: /" with a grid of application icons and their names: 7-Zip File Manager, Adobe Reader XI, ArcGIS Explorer, ArcMap 10.5, ArcReader 10.5, explorer, MATLAB R2016a, Microsoft Access 2010, Microsoft Excel 2010, Microsoft InfoPath Designer 2010, Microsoft InfoPath Filler 2010, Microsoft PowerPoint 2010, Microsoft Word 2010, Notepad++, NVivo 8, Protege 3.3.1, Protege 3.5, PSPP, PUTTY-CAC, R x64 3.3.1, RStudio, SAS 9.x, SAS Universal Viewer, SPSS Statistics & Modeler, SQL Server 2014 Management, StataMP 14 (64-bit), StatTransfer 13, windiff, and SAS Grid Tools.

VINCI Workspace Web Interface

- Development Workspace Login
- Connect to `vhacdwdwhdevXX.vha.med.va.gov`



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VINCI Workspace..

VINCI VA Informatics and Computing Infrastructure

Welcome to the VINCI Workspace
Standard and Development Workspaces

Announcements
[\(1 of 2\) SPSS replacement program PSPP now available!](#)
VINCI has deployed the open source program PSPP to replace SPSS which is subject to removal at any time. If you are an SPSS user, please try PSPP instead.

Standard Workspace | **Development Workspace** | **Request a Workspace** | **Help**

Enter the fully qualified development server name that you want to connect to; for example: `vhacdwddev20.vha.med.va.gov`, and then click Connect.

Connection options

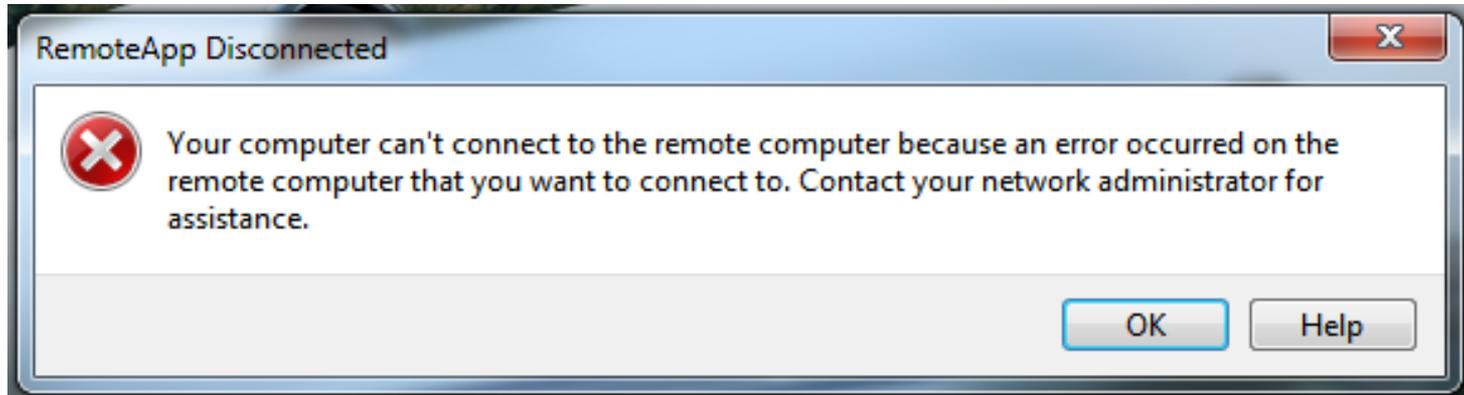
Connect to:

Remote desktop Monitor:

Remote desktop size:

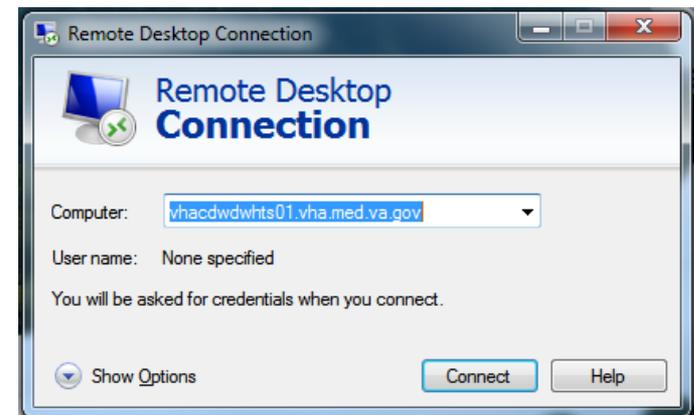
Local VA Policy Issue

Computer policies vary from location to location. Some locations are more restrictive which causes failure of the normal way to launch the workspace. This results in an error when launching:

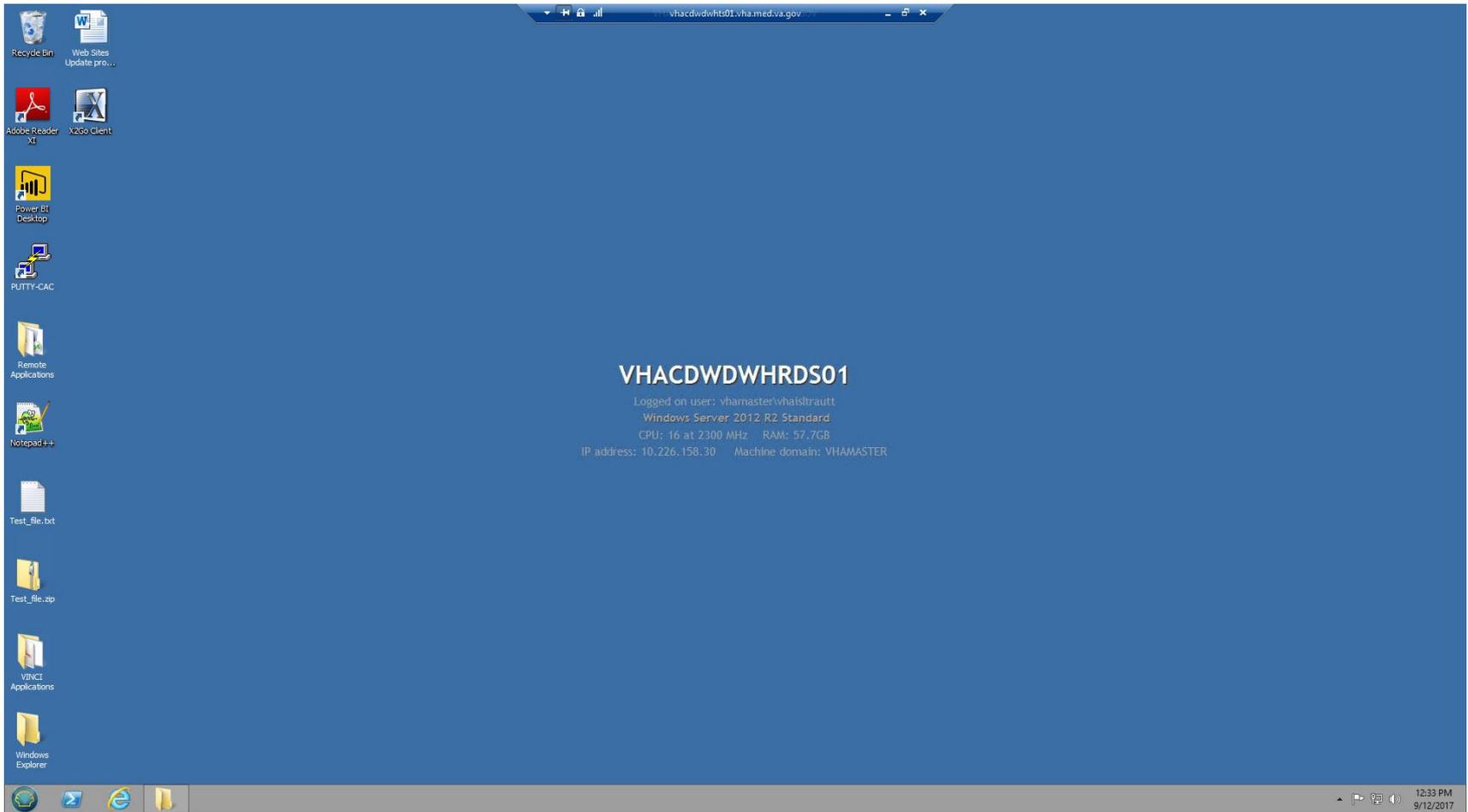


Local VA Policy Issue Workaround

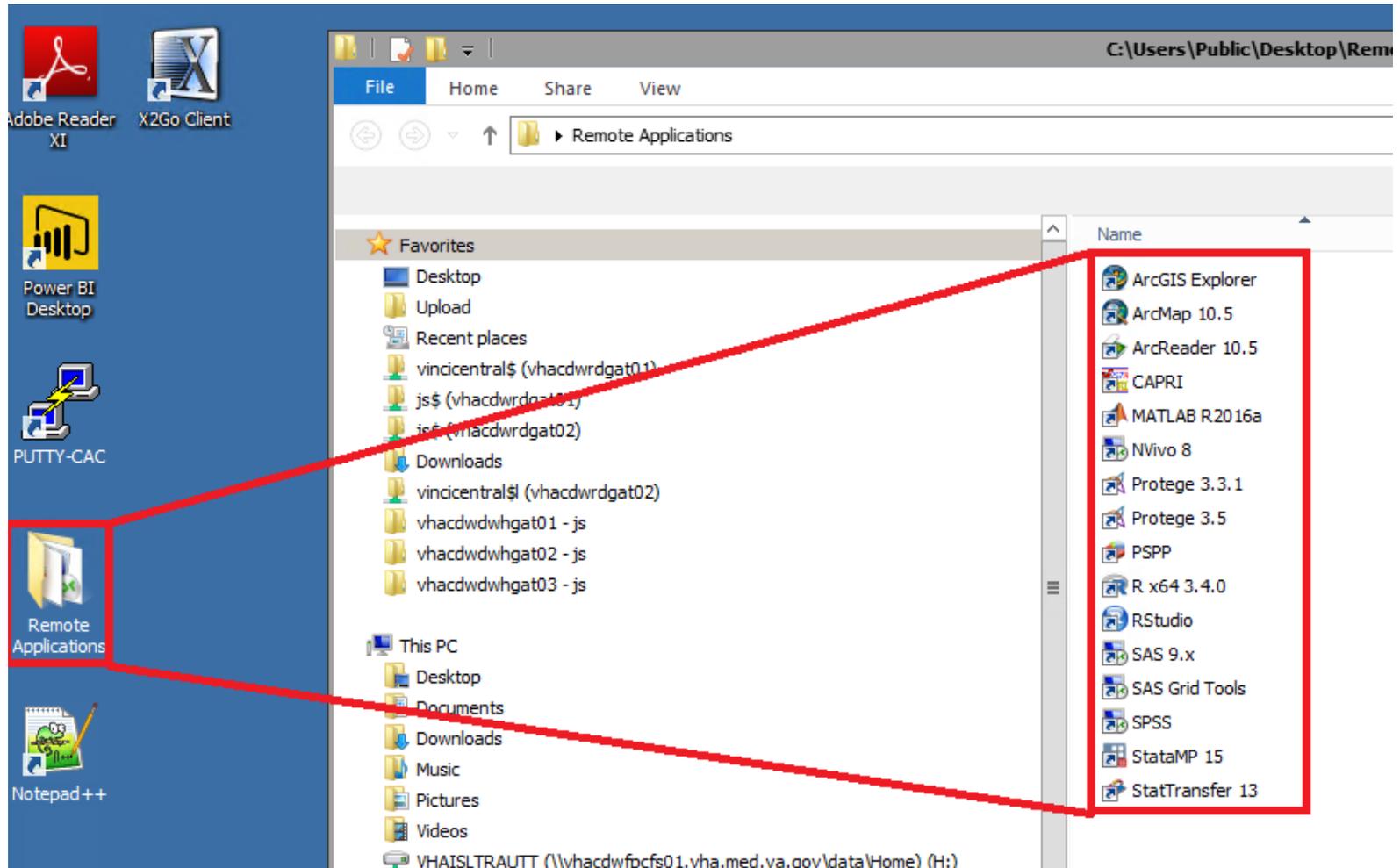
1. Launch Remote Desktop Connection
2. Enter “vhacdwdwhs01.vha.med.va.gov”
3. Click Connect and follow prompts to login
4. Once TS01 loads, the workspace web interface is displayed
5. Launch the workspace



The VINCI Workspace



Workspace Applications



Workspace Restrictions

- No Internet access (for data security)
- Cannot copy and paste to/from workspace
 - Can save info as file and download/upload within regulations -
 - Operations download PHI/PII is OK
 - IRB Research download PHI/PII by permission
- Copy and paste between applications in the workspace is restricted as applications run from several different servers
 - Same server - can copy and paste
 - Different server - cannot copy and paste

VINCI Poll #2

Select the one thing you want most:

- I want more computing power (CPUs)
- I want more RAM
- I want more analytical software
- I want access to more databases
- I want more data storage

VINCI File Transfer Options

- VINCI File Upload Utility
 - Can transfer one file at a time (ZIP multiple files together into one)
 - Limited to 2GB per transfer
 - Available from VINCI Central

- VINCI File Download Utility
 - Can transfer one file at a time (ZIP multiple files together into one)
 - Available from VINCI Central

VINCI File Transfer Options

From VINCI Central, click the Applications card to show the upload and download links

The screenshot displays the VINCI Central website dashboard. At the top, there is a navigation bar with links for Home, About VINCI, and Skip to Content. The main header area includes the VINCI Central logo, a welcome message, a keyword search bar, and contact information for Timothy Trautman. A sidebar on the left lists various services and resources. The main content area features a 'New to VINCI' banner and a grid of application cards. The 'Applications' card in the bottom right is highlighted with a red box, showing 'Upload Files' and 'Download Files' options.

Home About VINCI Skip to Content

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- Data Sources
- Applications
- Events
- Policies and Forms
- Quick Links

SPSS to SAS
Cyberseminar
4-13@2PM ET
Learn to use SAS

More Details

New to VINCI
Learn more about VINCI, VINCI Studies and the virtual environment.

My VINCI Dashboard
All your VINCI resources in one place!

VINCI University
Here you learn more

VINCI Tube
Videos on all things VINCI

VINCIPedia/FAQ
VINCI's forum for research & info

User Guides
Let us guide you through VINCI

VINCI Services
Support and concierge services

Computing Cloud
Computers, software, and

Data Sources
Learn about our available data

Applications

- [See All Applications](#)
- [DART](#)
- [Upload Files](#)
- [Download Files](#)

VINCI File Upload Utility

- VA Intranet-based utility application for copying files into the workspace
- Copies to either your H-drive or project folder per your selection
- Creates an “Upload” folder for the contents
- VINCI File Upload Utility:
<https://vaww.vinci.med.va.gov/WebApps/VCFileTransfer/Upload>

VINCI File Upload Utility

Web interface of upload utility

VINCI File Transfer Tool Upload Download Welcome, VHAMASTER\VHAISLTRAUTTI

Before you get started

Important Note: Files containing patient information can only be uploaded to project folders.
Maximum file size limit is 2 GB.
For uploads exceeding 2 GB, please email vinci@va.gov

[Please compress \(Zip\) your files before uploading.](#)

Step 1 : Pick an upload destination

H:\Upload x ▾

Drop files here or click to upload



VINCI File Download Utility

- VA Intranet-based utility application for copying files from the workspace
- Copies files from your H-drive or project folders per your selection
- File Audit Process
 - Copies of transferred files are archived
 - Copied files from IRB Research studies are audited for PHI, PII, and SI
- VINCI File Download Utility:

<https://vaww.vinci.med.va.gov/WebApps/VCFileTransfer/Download>

VINCI File Download Utility

A warning appears when the utility is opened

The screenshot shows the VINCI File Transfer Tool interface. A modal dialog box titled "VINCI File Download" is open, displaying a warning. The dialog contains the following text:

Watch out! Do NOT click "Save."

It will save to your "Downloads" folder, which may be a violation of your approved protocol and privacy and security policies.

Click on the little arrow at the right of the "Save" button and "Save as..." to the appropriate server location.

The dialog also shows a visual representation of the "Save" button with a dropdown menu. The dropdown menu is open, showing three options: "Save", "Save as", and "Save and open". A red circle highlights the dropdown arrow on the "Save" button, and a red arrow points to the "Save as" option in the dropdown menu.

The background of the application shows a dark header with "VINCI File Transfer Tool", "Upload", and "Download" buttons. On the right, it says "Welcome, VHMASTERVHAISLTRAUTTI!". Below the header, there is a grey box with text: "I attest that transfer of any Pe... applicable VAVHA policies a... Accountability ACT (HIPAA). I will be subject to full penalty... criminal and civil penalties." Another grey box on the right says: "es is in accordance with all... ance Portability and... I am found to be in violation,... demotion, removal, and... CI@va.gov and we will add it."

VINCI File Download Utility

Web interface of download utility

VINCI File Transfer Tool Upload Download Welcome, VHAMASTER\VHAISLTRAUTT!

I attest that transfer of any Personally Identifiable Information (PII) or Protected Health Information (PHI) contained in the files is in accordance with all applicable VA/VHA policies and directives, state and federal regulations, and applicable statutes including the Health Insurance Portability and Accountability ACT (HIPAA). Furthermore, I acknowledge that my files may be audited at any time to ensure compliance. If I am found to be in violation, I will be subject to full penalty of law, which may include suspension of access privileges, reprimand, suspension from work, demotion, removal, and criminal and civil penalties.

If your facility is not listed, please select the closest location that is listed or send your station number, city, and state to VINCI@va.gov and we will add it.

Choose a location

(660) Salt Lake City, UT *

If you don't see one of your folders please try refreshing the page.

P:\Projects	O:\Projects	H:\Drive
<ul style="list-style-type: none">ORD_Percipio		<ul style="list-style-type: none">.spssAppDataApplication DataDataMaps10DesktopDocumentsDownloadsDownloadTestFavoritesMusicPicturesProgram FilesTempUploadVC Site ImagesVideosDownloadTest.zipThumbs.db

Download Restrictions

■ Operations Project Users

- Can transfer files out without permission
 - Identifiable PHI/PII/SI data
 - Aggregate data
 - Documents - papers, analysis, presentations

■ IRB Research Study Users

- Can transfer files out *without* permission
 - Aggregate data
 - Documents - papers, analysis, presentations *without* PHI/PII/SI
- Can transfer out *with* data steward permission
 - Data containing PHI/PII/SI
 - To local secure server, not desktop or laptop

Download Restrictions

- Before downloading any file, familiarize yourself with HIPAA and VHA definitions of PHI and PII; VHA Handbook 1605.1, Appendix B, is a good resource
- If you are not sure whether you may download PHI/PII for your project, read your Research Request Memo
- Once you have selected the "Download" link, be aware that browsing to and opening any file will cause the file to be downloaded. Do not use "Open" in utility. If you open a file and then close the utility without saving the file, it will still be written to your temporary internet files folder in violation.

Download Restrictions

- Pay attention to the warning that is displayed as soon as you select the "Download" link, which advises you to select "Save As" and not "Save" when downloading the file. Selecting "Save" will copy the file to your "Downloads" folder in violation. "Save As" will allow you to copy the file to your local secure server.
- When you select the name of the file you wish to download, click on it ONE time. A message will display at the bottom of the screen when the download is complete (usually just a matter of seconds). Each click on the file name results in another download of that file.

VINCI Innovation

Things in incubation:

- NLP - Natural Language Processing - these are open source as well as homegrown software solutions for analyzing the millions of notes that are acquired every day. Deployment underway.

VINCI Innovation Infrastructure

- High-speed Infiniband network - will allow multipath transfers of data at 40 gig/sec
- Use of SMB (Server Message Blocks) in Windows 2012 will allow multi - parallel paths to be used for both speed and redundancy
- Windows 2012 Cluster allows VM's to be moved and backed up and monitored very easily

VINCI Workspace Resources

- **VINCI Central:** <http://vaww.vinci.med.va.gov>
- **VINCI Workspace User Guide:**
http://vaww.vinci.med.va.gov/vincicentral/documents/VINCI_Workspace_User_Guide.pdf
- **VINCI Database User Guide:**
http://vaww.vinci.med.va.gov/vincicentral/documents/VINCI_Database_User_Guide.pdf
- **VINCI File Transfer Guide:**
http://vaww.vinci.med.va.gov/vincicentral/documents/VINCI_File_Transfer_Guide.pdf

Questions?

VINCI Support: VINCI@va.gov

SAS Support: VINCISASAdmins@va.gov

