

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

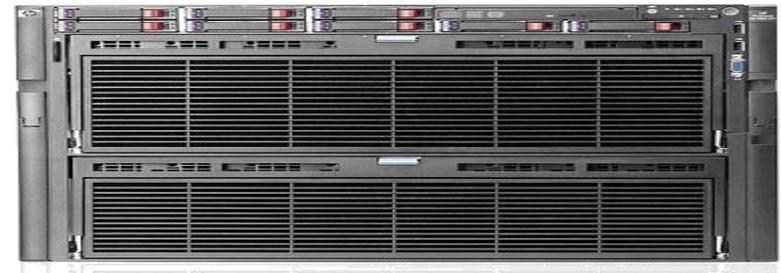
■ Development Workspace

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

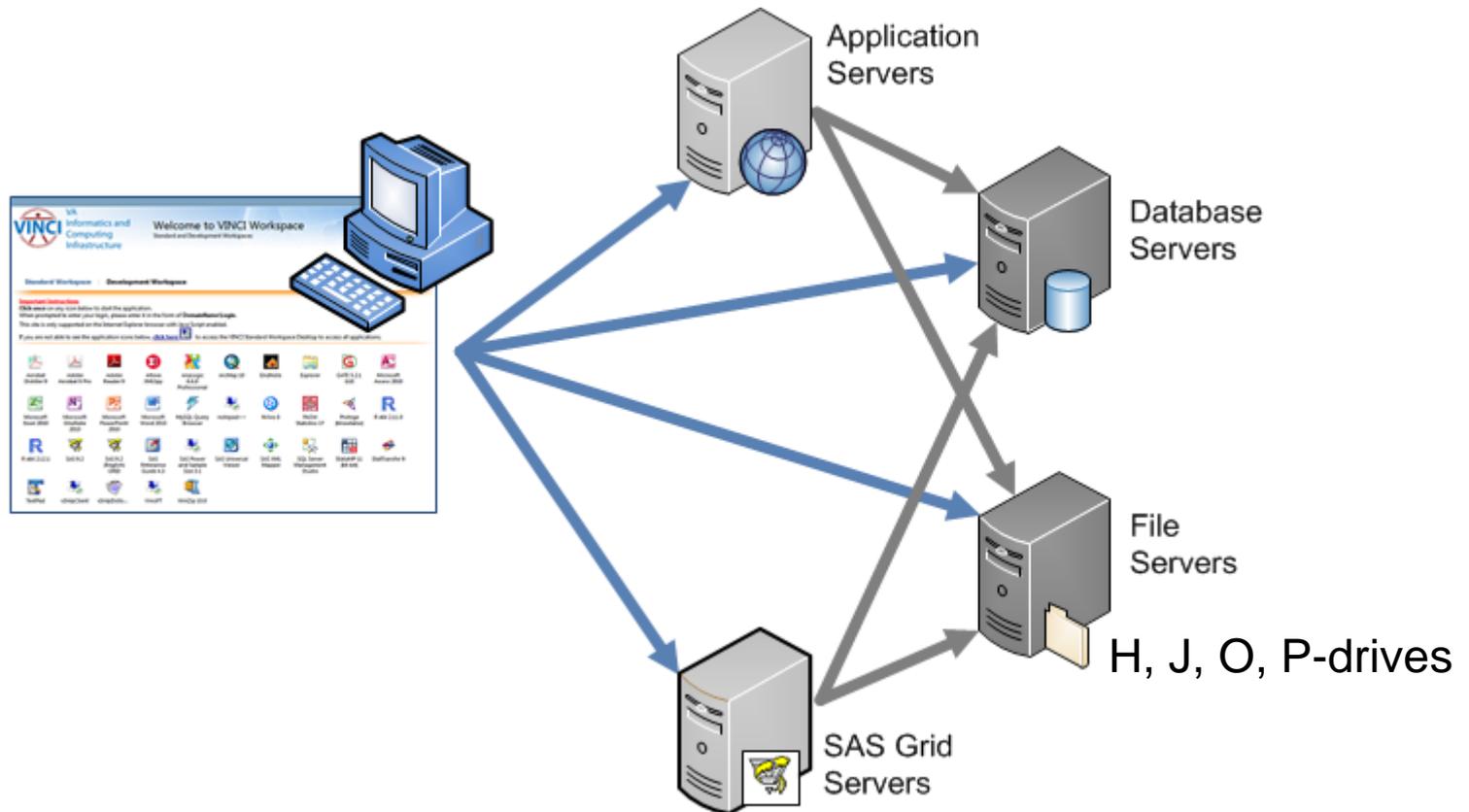


VINCI Standard Workspace

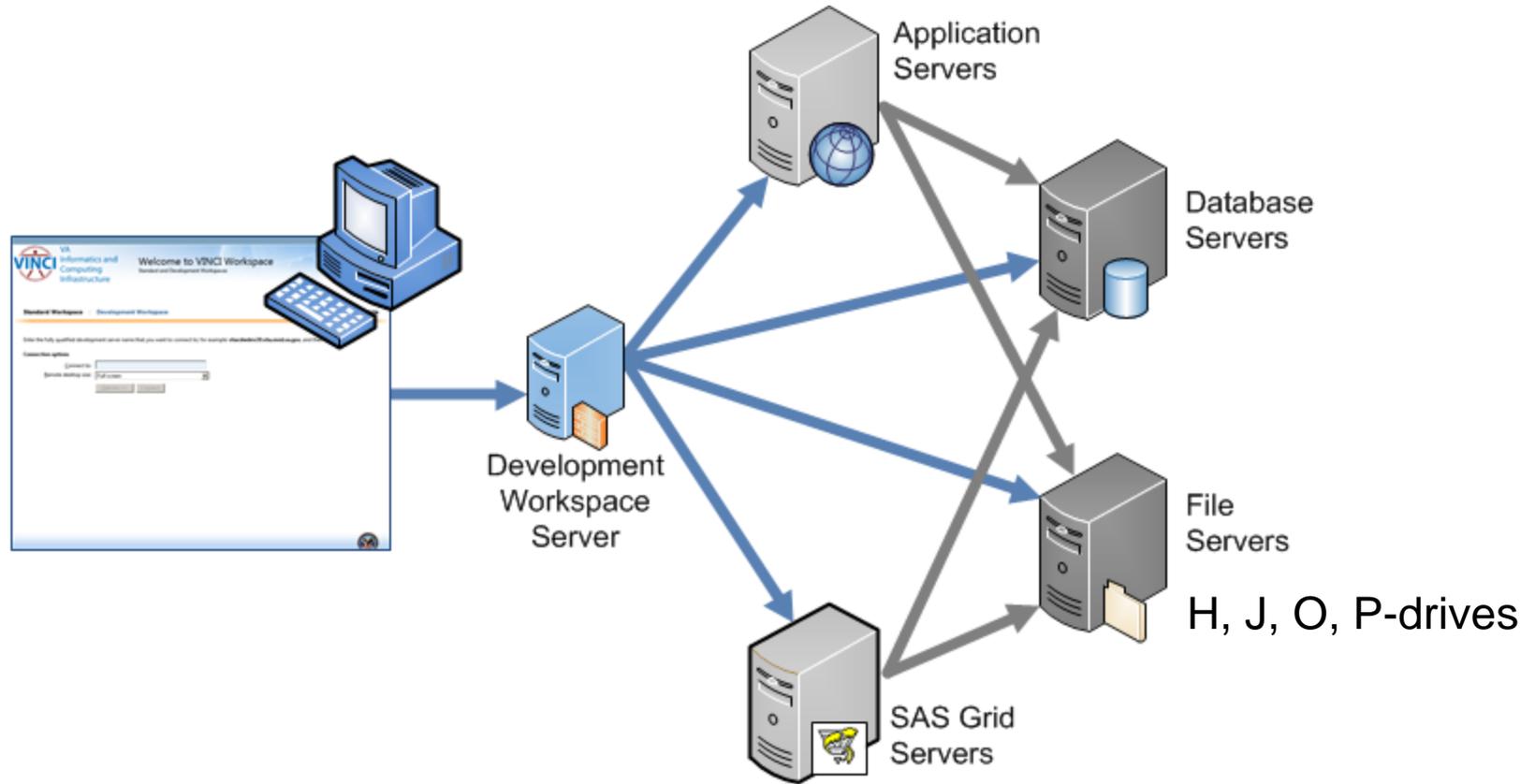
- Windows Server 2008 Enterprise R2 x64 SP2 Operating System on 3 load balanced servers
- No elevated (administrative) permissions
- Fixed software package (can request other software)
- 4 shared CPUs totaling 32 cores
- Shared 128 GB RAM
- No Internet access



Standard Workspace Architecture



Development Workspace Architecture

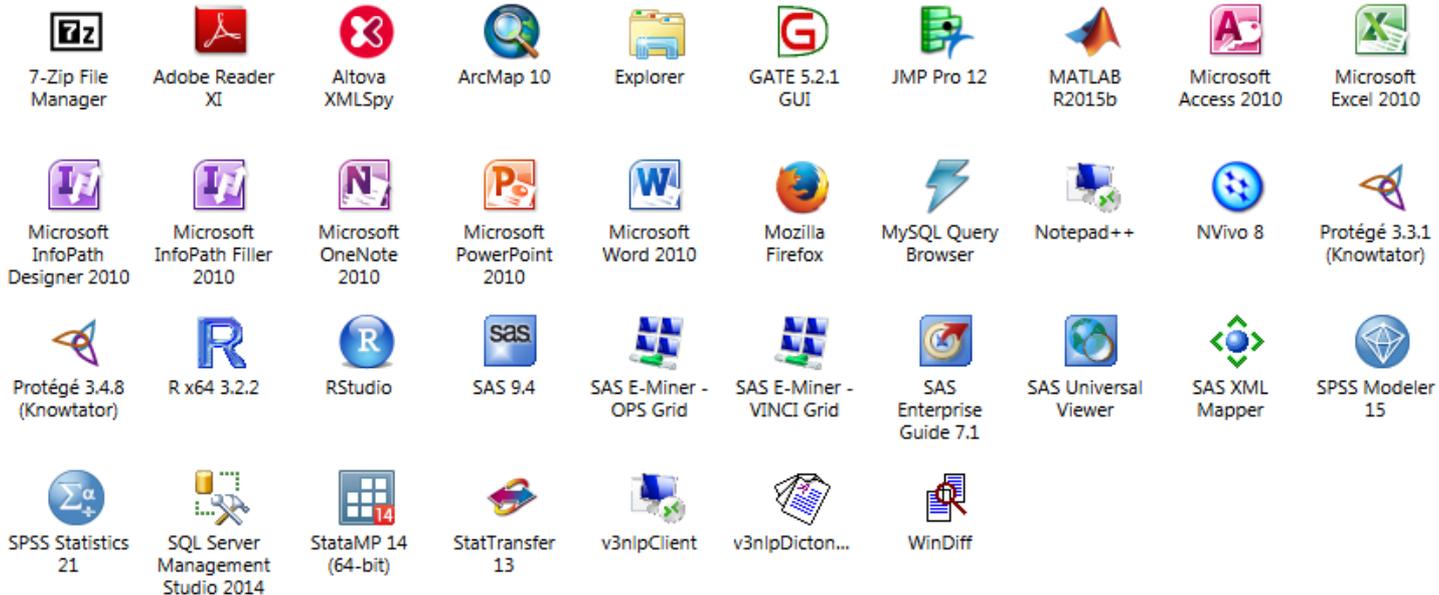


Data Storage Options

- H-Drive Personal Folder
 - 10 GB standard size
 - For personal file storage only
 - **NOT** for storing study data
- J, O, 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 on drive of our choice
- Microsoft SQL 2014 server databases
- Tape and Disk backup

Workspace Software

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

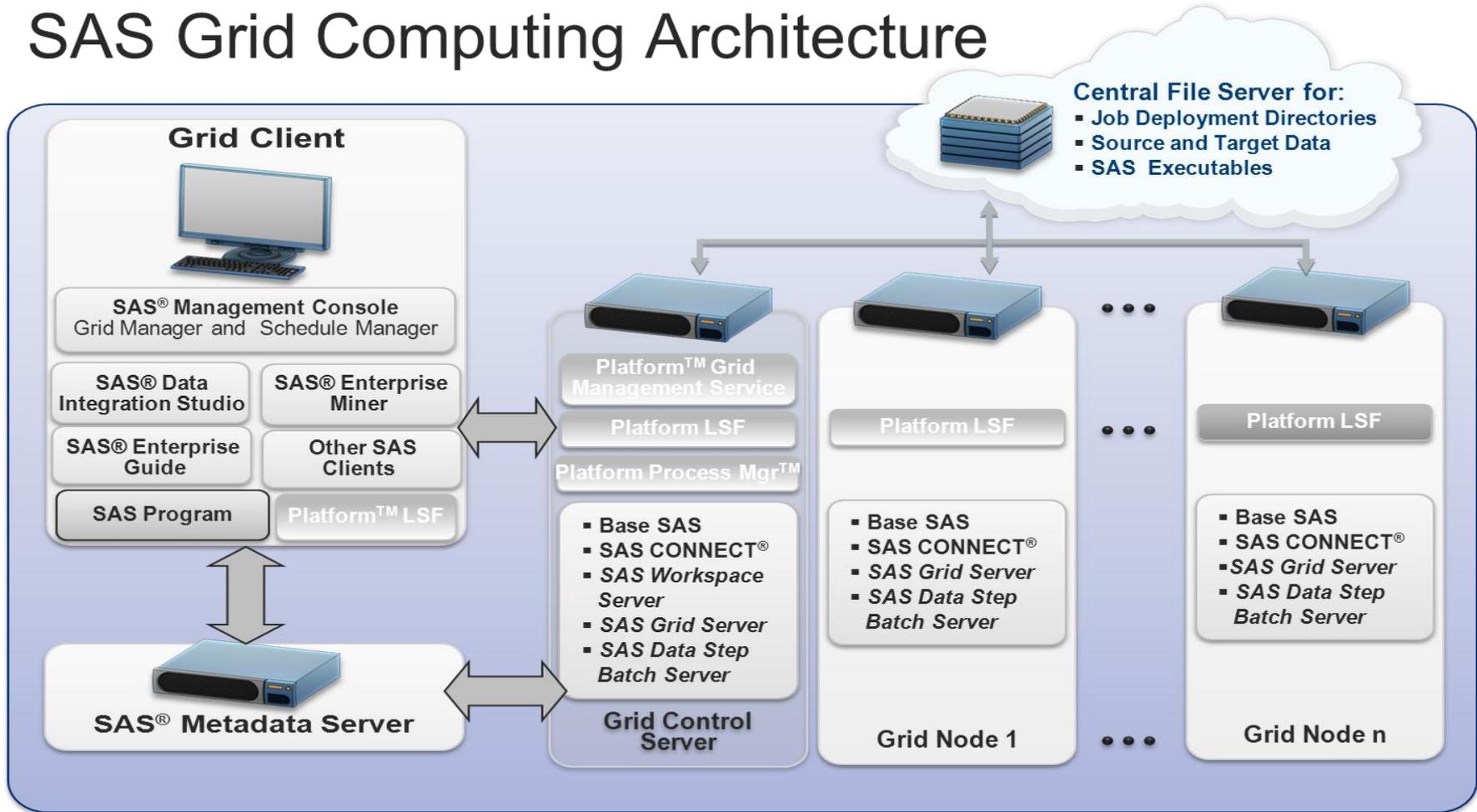


VINCI SAS 9.4/Grid

- Distributed management of SAS jobs
- 5 clustered Linux servers (RHEL 6.5 as O.S.)
- 64GB of RAM, 8 CPUs and 30 job slots per server (can be increased at any time)
- 10GB Ethernet connection to CDW/VINCI data servers
- Latest SAS9.4 release (T94M1)

SAS Grid Architecture

SAS Grid Computing Architecture



SAS Enterprise Guide (EG) 7.1

- GUI client tool for easy connection to Grid
- Leverages background metadata definitions
- Programming Editor windows for experienced coders
- Task Wizards for SAS beginners
- Great for code development

VINCI Accessible SQL Databases

■ CDW Production domains

- Allergies, Appointment, Consult, CPRS Orders, Dental, Health Factors, Immunization, Inpatient, Lab Chemistry, Lab Microbiology, Mental Health Assessment, Non-VA Meds, Outpatient, Patient, Patient Associated, Patient Enrollment, PCMM, Pharmacy BCMA, Outpatient Pharmacy, Purchased Care, SPatient, Staff, SStaff, Surgery PRE Table, and Vital Signs

■ CDW Raw domains

- Bill Claims (CBO), CliniComp, Echocardiogram, Emergency Dept. Int. Software (EDIS), Equipment Inventory, Fee Basis Claim System, IFCAP, Intravenous Meds, Oncology, PAID, Radiology, Rx Unit Dose, and Surgery.

VINCI Accessible SQL Databases

- MCA NDE
- Vital Status
- BIRLS
- MedSAS
- VetsNet
- Care Assessment Need (CAN) Scores
- HERC Avg. Cost, V21, and Nosos Risk Score
- Patient Aligned Care Team (PACT)
Implementation Index (Pi2)
- Vital Status File
- Coming soon - Observational Medical Outcomes Partnership (OMOP) v5 modeled CDW data

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

VINCI File Transfer Options

■ Upload

● 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

● Attachmate Reflection FTP Client

- For secure upload of files greater than 2GB
- Available in your computer's Programs

■ Download

● 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

The screenshot displays the VINCI Central website interface. At the top, there is a navigation bar with links for 'About', 'Using VINCI', 'Data', 'Guides', 'Support', and 'VINCI Workspace'. A dropdown menu for 'VINCI Workspace' is open, showing three options: 'Launch VINCI Workspace', 'VINCI File Upload Utility', and 'VINCI File Download Utility'. The 'VINCI File Upload Utility' and 'VINCI File Download Utility' options are highlighted with a red box. Below the navigation bar, the main content area features a 'Home' section with the VINCI logo and a mission statement. To the left, there is a sidebar with 'Applications' (Data Access Request Tracker) and 'Shortcuts' (My Collaboration Sites, VINCI Workspace, VHA Data Portal, HSR&D, VIReC, HSRData-L Listserv). Below the shortcuts is a 'Just Ask a VINCI Concierge' button. The main content area has four large icons with text: 'Learn About VINCI', 'I Want to Use VINCI', 'I Am a Current User', and 'Launch the VINCI Workspace'. The 'Launch the VINCI Workspace' section has two sub-links: 'UPLOAD files to Workspace' and 'DOWNLOAD files from Workspace', both highlighted with a red box. On the right side, there is a 'Did you know?' box with statistics. At the bottom, there is an 'Announcements' section with a link to an HSR&D Cyberseminar.

VINCI Central

About Using VINCI Data Guides Support VINCI Workspace

Applications

Data Access Request Tracker

Shortcuts

My Collaboration Sites

VINCI Workspace

VHA Data Portal

HSR&D

VIReC

HSRData-L Listserv

Just Ask a VINCI Concierge

Home

VINCI

VA Informatics and Computing Infrastructure

The mission of VINCI is to improve the healthcare of Veterans by providing access to integrated national data sets and tools for analysis in a secure, high-performance computing environment. The vision of VINCI is to become VA researchers' preferred data source and data-processing environment.

Learn About VINCI

About VINCI Workspace Software Available Data

I Want to Use VINCI

Get a VINCI Workspace How to use VINCI

I Am a Current User

Support Training VINCI Guides SAS Guides FAQs

Launch the VINCI Workspace

UPLOAD files to Workspace DOWNLOAD files from Workspace

Did you know?

VINCI has 3,793 VINCI Workspace users as well as 1,510 research and 272 oper-

Announcements

(1 of 1) **HSR&D Cyberseminar on the VINCI Workspace Thursday 10/2 at 3PM ET**

VINCI will present the VINCI workspace and discuss available software including the SAS/Grid, accessing databases, accessing the workspace, workspace characteristics, file transfer, and how to get the most out of your workspace experience. Click this announcement to register.

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://vhacdwrdat.vha.med.va.gov/WebApps/FileTransfer/VinciUpload.aspx>

VINCI File Upload Utility



VA
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Infrastructure

Trautman, Timothy N. (FVFT) Welcome to VINCI's File Upload Site

**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 see the VINCI File Transfer Guide for solutions.**

Please compress (Zip) your files before uploading.

Select a file to upload:

Upload to:

- H:\Upload
- P:\ORD_Percipio\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
- 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://vhacdwrdat.vha.med.va.gov/WebApps/FileTransferutility/Vftdownload.aspx>

VINCI File Download Utility

VINCI VA Informatics and Computing Infrastructure Trautman, Timothy N. (FVFT) Welcome to VINCI File Download Site

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.

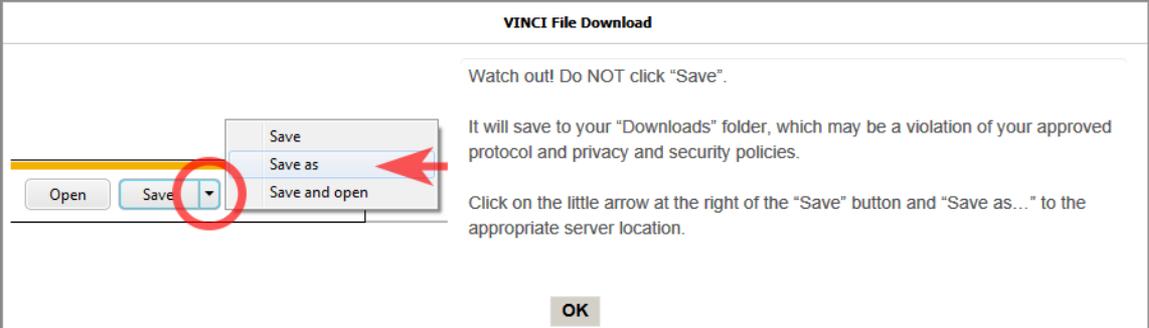
VINCI File Download

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.

OK



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.

Please click on folders to navigate and each single file name to start downloading.

-  P:\Projects
-  O:\Projects
-  H:\Drive

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

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.

Accessing the VINCI Workspace

- From VINCI Central on VA Intranet at vaww.vinci.med.va.gov

The screenshot displays the VINCI Central website. The top navigation bar includes links for About, Using VINCI, Data, Guides, Support, and VINCI Workspace. The VINCI Workspace dropdown menu is open, showing options for Launch VINCI Workspace, VINCI File Upload Utility, and VINCI File Download Utility. On the left sidebar, under My Collaboration Sites, the VINCI Workspace link is highlighted. The main content area features a 'Learn About VINCI' section with sub-links for About, VINCI Workspace, Software, and Available Data. Below this is an 'I Want to Use VINCI' section with sub-links for Get a VINCI Workspace and How to use VINCI. Further down is an 'I Am a Current User' section with sub-links for Support, Training, VINCI Guides, SAS Guides, and FAQs. A prominent 'Launch the VINCI Workspace' button is highlighted, with sub-links for UPLOAD files to Workspace and DOWNLOAD files from Workspace. A 'Did you know?' box provides statistics: VINCI has 3,793 users and 1,510 research and 272 operations project data folders. An announcement at the bottom mentions an HSR&D Cyberseminar on the VINCI Workspace.

- From outside the VA, see VINCI Workspace User Guide



VINCI Workspace Web Interface

VINCI VA Informatics and Computing Infrastructure

Welcome to VINCI Workspace

Standard and Development Workspaces

Announcements
1 of 1) [HSR&D Cyberseminar on the VINCI Workspace Thursday 10/2 at 3PM ET](#)
[VINCI will present the VINCI workspace and discuss available software including the SAS/Grid, accessing databases, accessing the workspace, workspace characteristics, file transfer, and how to get the most out of your workspace experience. Click this announcement to register.](#)

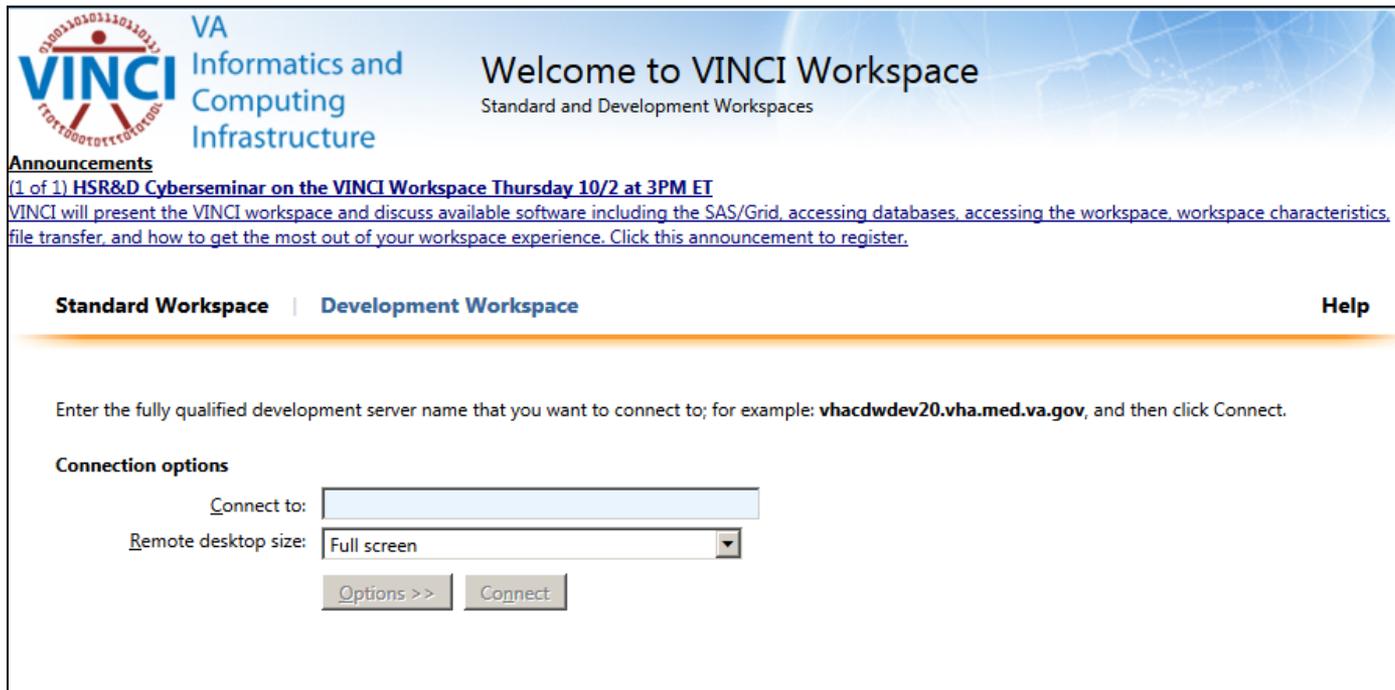
Standard Workspace | **Development Workspace** | [Request a Workspace](#) | [Help](#)

Important Instructions
Click **once** on any icon below to start the application.
When prompted to enter your login, please enter it in the form of **DomainName\Login**.
This site is only supported on the Internet Explorer browser with Java Script enabled.
If you are not able to see the application icons below, [click here](#) to access the VINCI Standard Workspace Desktop to access all applications.

7-Zip File Manager	Adobe Reader XI	Altova XMLSpy	ArcMap 10	Explorer	GATE 5.2.1 GUI	GuardianEdge Removable Storage	JMP Pro 10	MATLAB R2011b	Microsoft Access 2010
Microsoft Excel 2010	Microsoft InfoPath Designer 2010	Microsoft InfoPath Filler 2010	Microsoft OneNote 2010	Microsoft PowerPoint 2010	Microsoft Word 2010	Mozilla Firefox	MySQL Query Browser	Notepad++	NVivo 8
Protégé 3.3.1 (Knowtator)	Protégé 3.4.8 (Knowtator)	R x64 3.1.0	RStudio	SAS 9.3	SAS 9.4	SAS Enterprise Guide 5.1	SAS Enterprise Guide 6.1	SAS Grid Enterprise Miner	SAS Universal Viewer
SAS XML Mapper	SPSS Modeler 15	SPSS Statistics 21	SQL Server Management Studio 2014	StataMP 11 (64-bit)	StataMP 12 (64-bit)	StatTransfer 12	v3nlpClient	v3nlpDicton...	WinDiff

VINCI Workspace Web Interface

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



The screenshot displays the VINCI Workspace web interface. At the top left is the VINCI logo, a circular emblem with binary code, and the text "VA Informatics and Computing Infrastructure". To the right, a header reads "Welcome to VINCI Workspace" and "Standard and Development Workspaces". Below this is an "Announcements" section with a link for an HSR&D Cyberseminar. The main content area has two tabs: "Standard Workspace" and "Development Workspace", with "Development Workspace" selected. A "Help" link is in the top right. The page instructs the user to enter a fully qualified development server name in a text box and provides a "Connect" button. A "Remote desktop size" dropdown menu is set to "Full screen".

VINCI VA Informatics and Computing Infrastructure

Welcome to VINCI Workspace
Standard and Development Workspaces

Announcements
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Standard Workspace | **Development 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 size:

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 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

Become a VINCI User

- Currently there are 6,334 users; 2,293 research folders; and 461 operations groups
- We are an approved, secure, central analytic platform for performing IRB research and supporting clinical operations activities

Become a VINCI User

■ For IRB Research

- New project for NDS-approved data access, use Data Access Request Tracker (DART)

<http://vaww.vhadataportal.med.va.gov/DataAccess/DARTRequestProcess.aspx>

■ For Operations

- New project for NDS-approved data access, get NDS Healthcare Operations approval first

<http://vaww.vhadataportal.med.va.gov/DataAccess/HealthcareOperationsRequestProcess.aspx>

- Second, use CDW Project Request Form following *Request a VINCI Workspace for Operations* guide

http://vaww.vinci.med.va.gov/vincicentral/documents/Request_a_VINCI_Workspace_for_Operations.pdf

- Have own data already? Contact VINCI@va.gov



VINCI Workspace Resources

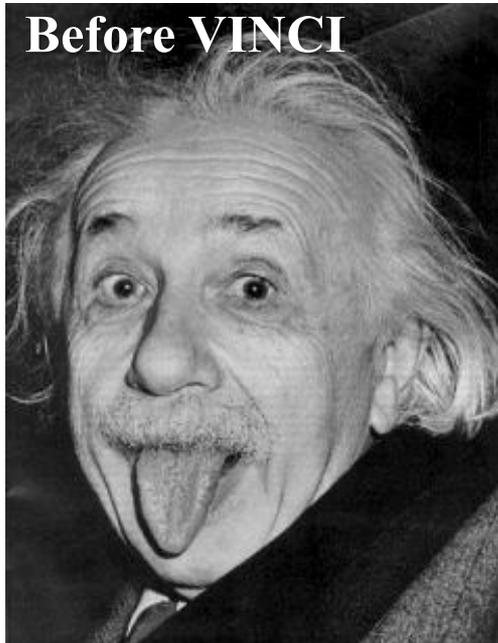
- **VINCI Central:** <http://vaww.vinci.med.va.gov>
- **VINCI Workspace User Guide:**
http://vaww.vinci.med.va.gov/vincicentral/documents/VINCI_Workspace_User_Guide.pdf
- **VINCI Database User Guide:**
http://vaww.vinci.med.va.gov/vincicentral/documents/VINCI_Database_User_Guide.pdf
- **VINCI File Transfer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

Before VINCI



After VINCI

