Purpose and intent

• Purpose of presentation:
  • Document the overall process
  • Provide transparency into the overall process
  • Illustrate an easy-to-follow work stream to successfully on-board new locality customers and manage existing mainframe accounts

• The intent of the process steps is to reduce the lead time to on-board new locality customers and add/modify user accounts on the VITA mainframe.
Contents

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  – TN3270 emulator description
  – Final user authentication
• Typical maintenance activity
• VITA mainframe “splash screen”
VITA Points of Contact (POC)

- The VITA Customer Care Center (VCCC) service desk is equipped with the processes to support new and existing mainframe customers. Please email or call the VCCC service desk directly.
  - Email: vccc@vita.virginia.gov
  - Phone: (866) 637-8482

*Please note: If the VCCC cannot fulfill your request over the phone or via email, they will engage the VITA locality customer liaison.*

- **For new customers**, your first contact should be to the VITA locality customer liaison by emailing the customer account manager (CAM) mailbox: customeraccountmanager@vita.virginia.gov
  - The appointed VITA locality customer liaison will contact you directly to start the process for new mainframe customers and on-board new locality customers.

- The VITA billing office can assist you with billing and account administration issues regarding your existing mainframe account and establishes new mainframe accounts
  - To contact VITA billing, please email: billing@vita.virginia.gov
Recent security changes – Mainframe web access restricted

- In Nov. 2019, the mainframe RESQ portal was retired due to end-of-service software and unsecure port access
- Several localities were affected had been accessing the mainframe using the following URL: http://mvs3s.state.va.us/servlet/resqportal?&rq_custom_dir=scbtest
  - This URL is no longer authorized for mainframe access use
  - Immediately initiate steps to the direct portal access method (See page 14)
  - VITA apologizes for the sudden change that interrupted operations for several county customers

- Localities using the Compensation Board “FlyNet” website access for DMV, DSS or VEC mainframe applications access must **immediately suspend** use and migrate to the direct portal access method (See Page 14)

- Contact the VITA locality customer liaison (customeraccountmanager@vita.virginia.gov) immediately to migrate mainframe access to the VITA secure internet portal
Starting in the first quarter of 2020, additional security restrictions will be enacted that will/may cause connections to fail. What to check for:

- **TN3270 Emulators (e.g. Jolly Green, Mocha, etc.)**
  - Set to TLSv1.2 and do they support TLS Version 1.2? **AND**
  - The Port setting to secure port 992 OR 990? **AND**
  - Is the Mainframe IP or Host Name set to:
    - 166.67.70.223 or .224 (telnet) **OR**
    - 166.67.65.11 or 12 (file transfer- ftp) **OR**
    - s0121.vita.virginia.gov or s0221.vita.virginia.gov
  - If different than these settings, please contact the VITA locality customer liaison immediately (customeraccountmanager@vita.virginia.gov) for instructions / verification

- **How old is your TN3270 Emulator or FTP tool applications?**
  - If purchased five or more years ago (pre-2015) or not updated five or more years ago, it probably does not meet the TLSv1.2 encryption and secure port requirements.

- **Is your Mainframe Access Coordinator (MAC) list current? Are there identified MAC’s that have since left your organization that may still be associated to your account?**

*If you are not sure or need additional information – please contact the VITA locality customer liaison. The mainframe team will work with you to provide mitigation and change guidance.*
VITA localities webpage is coming in 2020

VITA is developing a web page dedicated to locality activities and updates, expected to be launched in 2020.

- VITA news regarding localities and Mainframe access
- Detailed instructions for forms
- Guidance for new and existing customers
- Frequently Asked Questions (FAQ)
- Contact information

Feedback welcomed - What information or guidance would you like to see?

- VITA website: [https://www.vita.virginia.gov/](https://www.vita.virginia.gov/)
- For now, this presentation is accessible at the following URL: [https://www.vita.virginia.gov/media/vitavirginiagov/services/pdf/Locality-Mainframe-Access-Process.pdf](https://www.vita.virginia.gov/media/vitavirginiagov/services/pdf/Locality-Mainframe-Access-Process.pdf)

Note: VITA member agencies must use the Keystone Edge portal for all forms submissions, not the VITA website forms (MISFORMS).
Definition of terms

- **Mainframe access coordinator (MAC):** The MAC has responsibility to manage all users and LogonIDs as assigned to the locality or department. The MAC will submit updates (add, change, delete) of users to VITA. In some cases, this term can also reference the information security coordinator and ACF2 officer.

- **Billing contact:** The person and address receiving the monthly bill from VITA for payment of the mainframe access account. Changes to the billing contact person or address should be reported to VITA, as needed.

- **“3-letter designator”:** The designator for your locality or department as provided by VITA and is identified as the ACF2/UID1. This identifies the specific account and the first three letters in the LogonID. For example, Accomack County is “ACC.” This will only be alpha characters – no numbers. This is designated and provided by VITA.

- **MOU:** Memorandum of Understanding. The annually-renewed agreement between Virginia Department of Social Services (DSS) and the locality for access to DSS mainframe functions.

- **Access request:** The annually-renewed agreement between Virginia Employment Commission (VEC) and the locality for access to VEC mainframe functions.

- **Use agreement:** The annually-renewed agreement between Virginia Department of Motor Vehicles (DMV) and the locality for access to a DMV mainframe function.

- **LogonID:** The LogonID is a users’ logon account, a minimum of 6-character designator. The first three characters is the “3-letter designator” (described above). Localities can designate additional characters between the “3-letter designator” and the user’s personal designator to further characterize user functions, if desired. The last three letters are always the users’ personal designator, usually the name initials.

- **Out-of-scope entity:** VITA supports executive-level agencies and other agency departments eligible for VITA services. Localities, non-executive state agencies and departments, and federal departments are considered out-of-scope but may use state-level services as administered or hosted by VITA.
Path to completion: Step-by-step process overview – “The Big Picture”

1. Initial Authorization & VITA Contact
   - Complete Use Agreement, MOU, or Access Request Form with agency
   - Determine VITA billing status

2. Mainframe Access Coordinator & VITA Mainframe Billing Account
   - Establish mainframe access coordinator (MAC)
   - Establish mainframe billing account
   - Establish billing contact
   - Establish 3-letter locality code

3. Network Connectivity
   - Provide local network IP (s)
   - VITA completes firewall updates
   - Local IT completes network changes
   - Emulator purchased and configured

4. Access Coordinator Confirms Mainframe Access
   - Complete MAC user LogonID (VITA03)
   - Contact VCCC for authentication / password
   - Perform successful mainframe logon and agency access

5. Locality Users Added
   - Complete LogonID (VITA03) for each new user
   - Contact VCCC for authentication / password
   - Verify successful mainframe logon for each new user

Access Complete
- MAC manages user access
- MAC submits changes, as needed
- Contact VCCC for network / access outages

Timeline:
- 20-30 Business Days
- 10-15 Business Days
- 7-10 Business Days
Step one: New customers initial authorization and VITA contact

1. Initial Authorization & VITA Contact
   • Contact DMV, VEC, or DSS
   • Determine VITA billing status

Contact DMV, VEC, DSS for Access Authorization
   • Complete Use Agreement, MOU, or Access Request form with agency

Contact VITA billing and VITA locality customer liaison
   • Provides guidance to establish a new mainframe account.
   • Checks historical data
   • Clears progression to Step 2.

• Before requesting access to the VITA mainframe, the owning agency (DMV, VEC, DSS) must authorize access to the agency applications and databases resident on the mainframe. Once authorized, the agency will direct the new customer to VITA for further account, network, and log-on processing.

• The VITA locality customer liaison is your main contact for new on-boarding and will work with the mainframe service owner and mainframe technology team to complete the steps necessary.

• VITA billing will create a new or unlock a dormant existing account for the requesting organization and update the mainframe with the account information.
VEC contacts for records access

VEC contact information

- Email: informationcontrol@vec.virginia.gov
- Phone: (804) 371-0068
- FAX: (804) 371-0616
- Mailing Address: Virginia Employment Commission, Information Control, Room 210, PO Box 1358, Richmond, VA 23218

Request: “Access request form for online VEC access”

- Identify need or purposes
- Law enforcement
- Collection of public debt
- Income verification for benefit entitlement programs
- Others, as identified
DMV contacts for records access

DMV contact information
• Governmental access to DMV records:
  https://www.dmv.virginia.gov/commercial/#governmental.asp
• Data services contact: (804) 474-2294

Required applications
• Use agreement application: https://www.dmv.virginia.gov/webdoc/pdf/us531a.pdf
• Extranet transaction access: https://www.dmv.virginia.gov/webdoc/pdf/US531e.pdf

DMV technical support: DMV provides a technical support help desk, (804) 497-7124, that is staffed Monday through Friday 7 a.m. to 6 p.m. and Saturday 8 a.m. to 3 p.m. The help desk staff will walk you through log-on issues and resolve any technical issues that may occur within 24 hours
Step two: All customers mainframe account and access coordinator setup

2. Mainframe Access Coordinator & VITA Mainframe Billing Account

- Establish mainframe access coordinator (MAC)
- Establish mainframe billing account
- Establish billing contact
- Establish 3-letter locality code

Submit “ACTREQv2” form

- Organization and mainframe access coordinator (MAC) identified
- Billing account, billing contact, and 3-letter code completed
- Mainframe updated

Submit “Access Coordinator Letter” form to VCCC

- Organization and mainframe access coordinator is verified.
- Additional mainframe access coordinators identified
- Mainframe updated

• Once cleared by the agency and VITA billing in step one, step two is to establish new organization accounts and identify the primary mainframe access coordinator(s). The VITA billing office will work with you directly upon receipt of the “ACTREQv2” form.

• Following the ACTREQv2, submit the “VITA mainframe access coordinator letter” form to the VCCC. This form verifies the organizations named mainframe access coordinators. The names and contact info will be input into the mainframe database.

• Once these items are complete, the new organization is ready to proceed to Commonwealth of Virginia (COV) network access and establish mainframe Logon ID’s for mainframe access coordinator(s) - step three and step four.
Step three: All customers network connectivity to the mainframe

- Submit the “network connection request” to VCCC to allow the customer’s public IP address through the COV firewall, through the COV network and to the VITA mainframe. (See pages 20 – 22 for technical info)
- Purchase and install a TN3270 emulator software package for each user’s computer in your organization. Suggestions are provided below. Configuration setup will be provided separately.
- Once network connectivity and emulator is configured successfully, a user should be able to view the mainframe “splash screen.”

Next: Proceed to step four to establish Logon IDs.
Step four: Initial/Test Log-on to DMV or VEC mainframe applications

- Mainframe access coordinator (MAC), or designee, will be the first person to establish a mainframe logon and verify agency database access as all future users for the organization will be modeled from the MAC permissions. Online instructions are provided for the VITA03-001 Form. Note: MAC’s are not required to perform the initial or test mainframe access and can designate a “test” user.

- MAC’s can opt for “TSO” access which allows MAC’s to reset passwords of organization users. Otherwise the service desk can perform password resets. The MAC would require mainframe access for TSO permissions. Note: Only a MAC may have TSO access.

- Once connected, verify the databases operate as expected. Contact the owning agency (DMV, VEC, DSS) for instructions and guidance for accessing data or navigating mainframe screens.
Network connectivity to the mainframe: Confirming mainframe access

Tips on final VCCC authentication:

• Have 30 minutes free to complete authentication and access process
• Open the emulator to the “splash screen” before calling the VCCC (completed in step three)
• Have your six-digit logon ID ready, as provided from VITA 03-001 form (completed in step four)
• VCCC phone number (866) 637-8482 - Suggest a call time after 10 a.m.
• VCCC will authenticate you using name, phone, address, and/or organization
• VCCC will provide a temporary password
• User will sign onto mainframe while on the phone with VCCC
• VCCC will verify the user is signed onto the mainframe and active
• User changes temporary password to new password and re-accesses the mainframe
Step five: All customers locality users added or modified or removed

- Mainframe access coordinator(s) must submit VITA03-001 forms on behalf of each user, individually. The form can be used to add NEW, MODIFY, or REMOVE a user. Online instructions are provided. Note: Mainframe access coordinators cannot submit a VITA03 form for him/herself. An alternate MAC must submit on behalf of another MAC.

- As each new user logon ID is added to the mainframe, each new user will contact the VCCC to establish their personal password and verify connectivity to the agency databases.

- If passwords get forgotten or locked, the mainframe access coordinator has the ability to reset passwords for organizational users (if TSO is requested) or users can contact the VCCC directly.
• Submit a mainframe account billing request to VITA billing
  – http://www.vita2.virginia.gov/MISFORMS/forms/ACTREQv2.cfm

• Submit for add/delete/change LogonID(s) on the VITA mainframe
  – http://www.vita2.virginia.gov/MISFORMS/forms/VITA03_001.cfm

• Submit ‘mainframe access coordinator letter’ form (add/delete/change)
  – https://www.vita.virginia.gov/media/vitavirginiaegov/services/docs/VITAMainframeAccessCoordinator-RequestUpdateForm.docx

• Submit ‘VITA network access worksheet’ to VCCC (add/delete/change)
  – https://www.vita.virginia.gov/media/vitavirginiaegov/services/docs/MainframeAccess-FirewallRuleRequest-Localities.xlsx
Email notification of your service ticket number

VCCC receives network connection request from locality

VITA security team reviews and approves request

VITA security team verifies the locality request

VITA network and mainframe update

Locality network access through public firewall

VCCC ticket resolved

Tips on VITA network access processing:

- Notify the VITA locality customer liaison of the ticket number provided for tracking. If the ticket is not resolved within two weeks, contact the VITA locality customer liaison for help.

- VITA security staff may contact the mainframe access coordinator or information security officer network access request for security verification.

- The local IP provided must be a full IP or three-octet subnet (e.g. 123.456.0/24)

- Contact the VITA locality customer liaison for technical help or questions or guidance.
Mainframe network access: Local network and software configuration

- DMV and VEC mainframe access is generally used for updating data on-screen and print-screen capability.
  - See pages 21 – 25 for local network and software configuration guidance

- COMING SOON: DOA CIPPS and state education FTP secure mainframe access guidance and instructions.
Mainframe network access: TN3270 emulator

• Pages 22 – 26 provide guidance for the following:
  • Common TN3270 emulator software packages for download/purchase
  • Network diagram from the local to the VITA network for mainframe access
  • Local network configuration guidance
  • TN3270 emulator setup guidance
Network access to the VITA mainframe: Emulator tools (most common in green)

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Vendor</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mocha TN3270</td>
<td>Mochasoft</td>
<td><a href="http://www.mochasoft.dk/tn3270vista.htm">http://www.mochasoft.dk/tn3270vista.htm</a></td>
</tr>
</tbody>
</table>

Note: The most recent versions of these products meet VITA functional and security requirements
Mainframe network access: DMV and VEC access using emulator software

This section describes the mainframe network access from the locality through the internet to the mainframe to access the DMV and VEC applications. This is a typical network map of the network connection from the locality to the VITA mainframe.
Mainframe network access: Local network changes for TN3270 emulator

• The locality’s local network must be set up to allow connectivity to the VITA network
  • Local firewall must allow Port 992
    • Port 992 is the secure telnet protocol accepted by the VITA network and mainframe. Generally, firewalls are not defaulted to allow this port and must be set up.
  • Direct all Port 992 activity outbound through the local public IP
    • This will be the same IP as provided on the VITA Network Access Worksheet
    • The local router and/or firewall must have this set up to ensure Port 992 traffic inside the locality is pointed to go out through the internet on the public IP
Mainframe network access: TN3270 emulator local setup

• **User Emulator Software Setup**
  • Ensure you have confirmation that your local network setup and VITA network access is completed
  • Mainframe IP or Host name: 166.67.70.224
  • Port: 992 / secure telnet
  • Security: TLSv1.2 and 256-bit encryption
    • All emulators purchased or upgraded since 2014 generally do support TLSv1.2
    • An some cases, a modern emulator may have a TLS or TLS1 option, which generally means it supports up to and including TLSv1.2
  • If these setups are in place and you cannot get the VITA mainframe “splash screen,” please contact the VITA locality customer liaison for additional guidance
Typical access issues

- **Locality intends to change ISP (Internet Service Provider)**
  - Action will change your public IP and sever connectivity to the mainframe if VITA is not notified in advance
  - Submit the VITA network access worksheet at least three weeks in advance of switching to new ISP

- **User cannot log-on to the mainframe**
  - The user’s DMV Use Agreement may have expired
    - Contact DMV first to verify the user has not been locked out
    - Mainframe access coordinator may have to re-submit use agreement renewal to DMV
  - User’s account may have been suspended due to in-activity (90 days)
    - Contact the VITA VCCC to unlock the account or
    - The MAC can unlock / change password (if MAC has TSO access)

- **User(s) cannot view the VITA mainframe splash screen**
  - If all users in the same locality have same problem, there is a local network, internet, VITA network or VITA mainframe problem
  - Contact your local network/IT support to ensure the local network is operating and internet access is active
    - Check your internet access by attempting to reach a website (Google: [https://vita.virginia.gov](https://vita.virginia.gov)), if you get to this website, the local internet access is good.
    - Check firewall rules to ensure all locality user traffic is exiting via the public IP
  - If above is working, contact VCCC to verify if VITA network or mainframe access is not operating
Mainframe “splash screen”