

# DHS SCIENCE AND TECHNOLOGY

## 2019 Biometric Technology Rally: Requirements for Final Acceptance and Rally Expectations



**Homeland  
Security**

Science and Technology



February 7, 2019

# Overview

- Steps to go from Conditional Acceptance to Final Acceptance
  - Acquisition Systems
  - Matching Systems
- What to Expect
  - Overall Rally II Schedule
  - General Questions, Debugging, and Assistance
  - Acquisition System Installation
  - Internet Connectivity
  - Test Day Schedule
  - Accommodations & Parking
  - Post-Rally II

# Acquisition Systems

## Conditional Acceptance to Final Acceptance

# Cooperative Research and Development Agreement (CRADA) – Acquisition Systems

- Agreement between each Acquisition System Provider (PROVIDER) and DHS S&T (RECIPIENT).
  - Defines the roles and contributions of the PROVIDER and RECIPIENT.
  - Defines strict policy on the proper transfer and handling of Rally II data.
  - Provides the basis for involvement in Rally II activities.
  - Exempt from FOIA process.
- Must be signed by Corporate Officer.
- Signed copy due back to [peoplescreening@hq.dhs.gov](mailto:peoplescreening@hq.dhs.gov) by **March 1, 2019**.

# API Integration – Acquisition Systems

- Acquisition System Providers are required to demonstrate that they have integrated with the MdTF Acquisition System API.
  - <http://api.mdtf.org>
- Acquisition Systems demonstrate API integration by submitting an image using the endpoint(s) appropriate to your system.
- Email [rally@mdtf.org](mailto:rally@mdtf.org) once an image has been submitted. MdTF will verify image submission.
- Deadline: **March 1 , 2019**

# Representatives Attending the Rally II Collection – Acquisition Systems

- Selected Rally Participants will be allowed to bring a **limited number of representatives** to the facility at a given time (see below). This is due to limited physical space at the facility.
  - **VIP Day: Three (3)** representatives will be allowed at the facility at a given time.
  - **Main Collection: Two (2)** representatives will be allowed at the facility at a given time.
- By **March 1, 2019**, you must provide the following to [rally@mdtf.org](mailto:rally@mdtf.org) and [peoplescreening@hq.dhs.gov](mailto:peoplescreening@hq.dhs.gov) for **each** representative who will visit the MdTF.
  - Name
  - Gender
  - Birthdate
  - Citizenship
    - IF foreign national, please provide passport number and issuing country.
    - Each foreign national needs to complete a form and submit to [peoplescreening@hq.dhs.gov](mailto:peoplescreening@hq.dhs.gov). Peoplescreening will email the form to each company's logistics POC.
  - Contact Information (email, phone)
- All representatives involved with Rally II data collection and/or analysis must be certified to interact with human subjects. This includes anyone handling data post-collection.

# Ethical Data Sharing Training – Acquisition Systems

- All representatives involved with Rally II data collection and/or analysis must complete ethics training on data sharing practices. This includes anyone handling data post-collection.
- Ethics and best practices in sharing individual-level research training (by Global Health Training Centre) is required for each representative.
  - Link: <https://globalhealthtrainingcentre.tghn.org/ethics-and-best-practices-sharing-individual-level-data-clinical-and-public-health-research/>
- Register as a new user or log-in as a returning user.
  1. Fill out the appropriate information.
  2. Complete course and take the quiz at the end. You must receive a passing score of at least 80%.
  3. Navigate to your profile and download the certificate.
  4. Email certificates to [rally@mdtf.org](mailto:rally@mdtf.org) and [peoplescreening@hq.dhs.gov](mailto:peoplescreening@hq.dhs.gov) with the subject line of “Ethical Data Sharing Training – Company Name”.
- All certificates must be received by **March 1, 2019**.

# System Safety – Acquisition Systems

- All acquisition systems installed in the MdTF are required to be certified “safe to use” by a third party. Examples of safe to use include, but not limited to:
  - Physical contact
    - Guarded and non-exposed electrical components and wiring
    - No sharp edges
  - Non-physical contact
    - Safe illumination wavelengths
- Potential resource: <https://services.ul.com/service/safety-certification/>
- Once your system has been certified safe, please send the certification to [peoplescreening@hq.dhs.gov](mailto:peoplescreening@hq.dhs.gov) and [rally@mdtf.org](mailto:rally@mdtf.org).
- Deadline: **March 1, 2019**



# Code of Conduct Acknowledgment – Acquisition Systems

- This document outlines professional and ethical behaviors that all company representatives must adhere to at the MdTF.
- All company representatives onsite will sign the Code of Conduct upon arrival to the MdTF.
  - Violation(s) of the Code of Conduct may result in expulsion from Rally II.
- A copy of the Code of Conduct will be sent to your logistical POC in advance of Rally II for review.

# VIP Day – Acquisition Systems

- VIP day is an opportunity for your organization to pitch your system to representatives from DHS, other government organizations, airlines, and other interested parties.
- You will have 5-minutes with each VIP to demonstrate and promote your system.
  - You may also bring materials, such as promotional posters, to set up in your station as long as they fit within your station.
- You may bring up to **three** personnel to the MdTF on VIP day, which may differ from the personnel who will be present on test days.

# Matching Systems

## Conditional Acceptance to Final Acceptance

# Cooperative Research and Development Agreement (CRADA) – Matching Systems

- Agreement between each Matching System Provider (PROVIDER) and DHS S&T (RECIPIENT).
  - Defines the roles and contributions of the PROVIDER and RECIPIENT.
  - Defines strict policy on the proper transfer and handling of Rally II data.
  - Provides the basis for involvement in Rally II activities.
  - Exempt from FOIA process.
- Must be signed by Corporate Officer.
- Signed copy due back to [peoplescreening@hq.dhs.gov](mailto:peoplescreening@hq.dhs.gov) by **March 1, 2019**.

# API Integration – Matching Systems

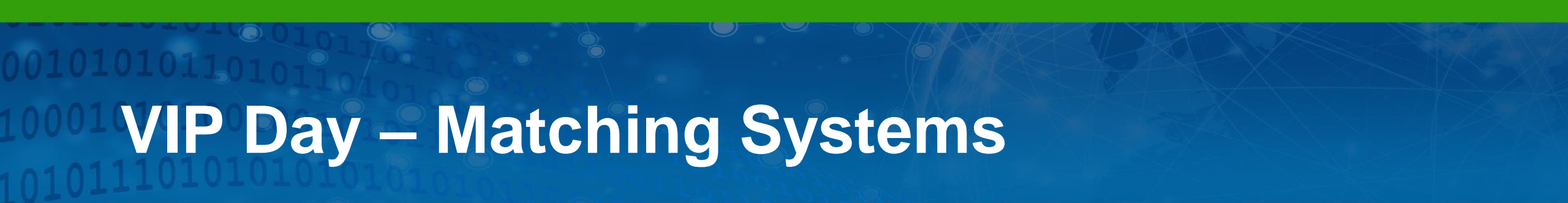
- DHS S&T requires that Matching Systems be implemented and provided to the MdTF within a Docker image. No other formats will be accepted.
- Requirements of Rally II Matching Systems:
  - Docker image conforms to all Rally II Matching System Requirements (review Nov. 19, 2018 webinar materials and <http://github.mdtf.org>).
  - The implemented matching algorithm **must be commercially available** from the Provider.
  - Docker image is less than 1.5 GB in size.
  - The Docker image will reliably return a template in less than 1000 milliseconds.
  - A list of 1000-templates will reliably return a list of 1000 comparison objects in less than 300 milliseconds.
  - All functionality will work for at least one calendar year without access to external networks and without license constraints.

# API Integration – Matching Systems

- Delivery of the algorithm is the responsibility of Matching System Providers. The options are:
  - Provide a secure download site that the MdTF staff may access (preferred).
  - Mail an encrypted USB drive to the MdTF.
- Test and packaging scripts are available at [github.mdtf.org](https://github.com/mdtf). Please consider ease of integration into the MdTF infrastructure upon receipt of the algorithm. DHS has sole discretion in disqualification if the algorithm requires an excessive effort to achieve functionality.
- An initial Docker image must be received by **March 1, 2019** to validate functionality.
- The last Docker image received as of **May 6, 2019** will be the tested version.

# Ethical Data Sharing Training – Matching Systems

- All representatives involved with Rally II data collection and/or analysis must complete ethics training in data sharing practices. This includes anyone handling data post-collection.
- Ethics and best practices in sharing individual-level research training (by Global Health Training Centre) is required for each representative.
  - Link: <https://globalhealthtrainingcentre.tghn.org/ethics-and-best-practices-sharing-individual-level-data-clinical-and-public-health-research/>
- Register as a new user or log-in as a returning user.
  1. Fill out the appropriate information.
  2. Complete training course and take the quiz at the end. You must receive a passing score of at least 80%.
  3. Navigate to your profile and download the certificate.
  4. Email certificates to [rally@mdtf.org](mailto:rally@mdtf.org) and [peoplescreening@hq.dhs.gov](mailto:peoplescreening@hq.dhs.gov) with the subject line of “Ethical Data Sharing Training – Company Name.”
- All certificates must be received by **March 1, 2019**.



# VIP Day – Matching Systems

- Specific date, location, and format is still TBD.





# What to Expect

# Provide Company Contacts – All Vendors

- Business/Logistics POC - For CRADA, Rally participation requirements, and shipping materials
  - Name
  - Phone Number
  - Mailing Address
  - Email
- Technical POC - For API integration, Rally II metrics, system installation, and results
  - Name
  - Phone Number
  - Mailing Address
  - Email
- Email to [peoplescreening@hq.dhs.gov](mailto:peoplescreening@hq.dhs.gov) by **February 8, 2019**

# Overall Rally II Schedule – All Vendors

- Rally II will take place over a two-week period in **May 6-17**. Dates are scheduled but are subject to change.
- Plan for dates as follows:
  - Installation of Acquisition Systems at the MdTF (**May 6-7**)
  - Installation of Matching Systems at the MdTF (**May 6**)
  - VIP Day for Acquisition Systems (**May 8**)
  - Rally II Collection (**May 9-10, May 13-15**)
  - Make-up/Tear Down (**May 16-17**)
  - Matching System Analysis (**May 20+**)

# General Questions, Debugging, and Assistance – All Vendors

- This is the *last* planned webinar prior to Rally II.
- Programmatic/logistical questions should be directed to [peoplescreening@hq.dhs.gov](mailto:peoplescreening@hq.dhs.gov).
- For technical topics, a Slack channel (chat room) will be available for questions that pertain to:
  - API Integration
  - Rally II Schedule
  - Rally II Metrics
- To obtain access to the Slack channel, please email [rally@mdtf.org](mailto:rally@mdtf.org).

# Acquisition System Installation

- There will be multiple stations in the test bay at the MdTF, each labelled with a letter. You will be assigned to one of these stations upon arrival.
- Must be able to configure station name and IP address of the API endpoint.
- After you have completed installation of your system within the MdTF, a staff member will validate the following:
  - **Space Limits: 6 feet wide x 8 feet long**
  - **Power: 5 amps max (single power strip will be provided)**
  - **Ethernet: LAN only**
- That you adhere to the safety information you provided and no risk is present for any users, including tripping hazards like cables on the floor.
- That you are able to successfully acquire and send image data through the API to the MdTF infrastructure.



# Intranet Connectivity – Acquisition Systems

- There will be network drops for Acquisition Systems to send images to the MdTF API during the Rally.
- This network **WILL NOT** have public internet access during the test. Your systems will not be able to “phone” home.
- It is simply meant to connect your systems to the MdTF infrastructure.
- Please keep this in mind as your are refining your systems.

# Internet Connectivity – Acquisition Systems

- During the testing, all of the MdTF networks will be dedicated to Rally testing.
- Therefore, we are not able to provide public internet access for any personal devices.
- If you would like to work (i.e. check emails, etc...) during your visit to the MdTF, we recommend that you bring a mobile hotspot.

# Location & Shipping Information – All Vendors

- Maryland Test Facility
  - 1221 Caraway Court, Suite 1070
  - Upper Marlboro, MD 20774
  - Attn: Rebecca Duncan (301) 909-9271
- Please label all packages with your company name and appropriate POC.
- Shipping Information
  - Acquisition System shipments will be received and staged in the assigned booth 1 week prior to the installation – any shipments received before **April 29, 2019** will be rejected.
  - Matching Systems that are being shipped must be received by **May 6, 2019** or risk being rejected from Rally II.
  - MdTF is NOT responsible for inspection or condition of equipment received.
  - Arrange for return shipping to be completed no later than **May 17, 2019**.

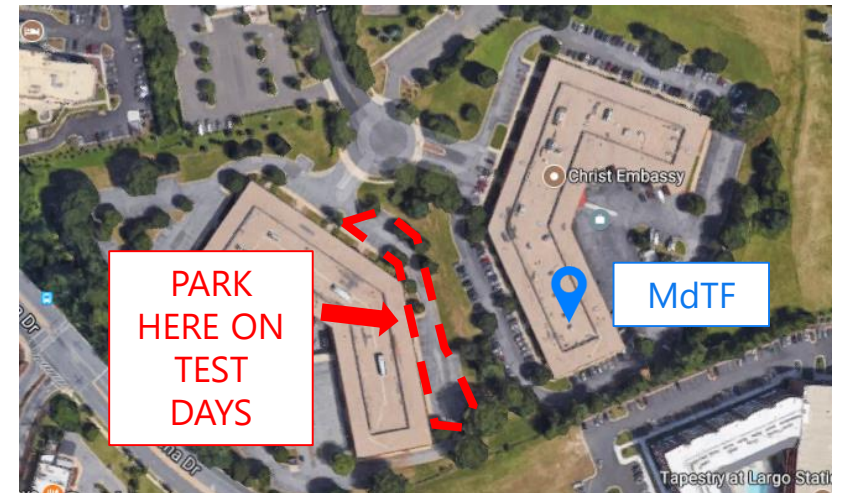


# Test Day Schedule – Acquisition Systems

- There will be multiple test sessions during each test day.
  - The morning session is planned to begin at 8:30 AM.
  - The afternoon session is planned to begin at 1:00 PM.
- We recommend that you arrive 45-minutes prior to each session to verify your equipment is operational.
- During the test you will be able to view transactions at your stations using a device monitor.
  - If you notice something about your system during this time, you should notify an MdTF staff member and they will be able to schedule a time for you to address your issue.
  - Testing will not be interrupted to address technical issues.
  - No session data will be excluded from Rally metrics.
  - Human factor changes will only be allowed on the first two days of testing.

# Accommodations & Parking – Acquisition Systems

- During Rally II, a group rate has been established at the Courtyard by Marriott Largo Capital Beltway.
  - Within walking distance of the MdTF.
  - Reservation link: <https://bit.ly/2HSOAxn>
  - You must book your reservation by **April 6, 2019** to receive the group rate.
- There are several other hotel options in the local area.
- If you do not stay at the suggested hotel and require parking on test days, please park across from the facility.
  - Parking immediately outside the facility is reserved for volunteers on test days.
- Note: New Starbucks located within 1 mile of the MdTF!



# Post-Rally II – Acquisition Systems

- Upon conclusion of Rally II, you must begin tearing down and packing your system/equipment.
- Equipment de-installation needs to begin as soon as the collection concludes, as there will be limited access to the facility following the rally.
- The MdTF is not responsible for any packaging, marking or shipping of equipment, so for those who do require shipping, please coordinate shipping of your equipment from the MdTF no later than **May 17, 2019**.

# Post-Rally II – Acquisition Systems

- DHS will be providing the data collected from your system back to you upon conclusion of Rally II collection.
- You are responsible for providing the media in which the data will be delivered. We suggest you consider acquiring a high-speed, encrypted data locker for this purpose.
  - <https://datalocker.com/product/datalocker-dl3/>
- You MUST leave the **FIPS 140-2** encrypted device, a point of contact, and a shipping address with the MdTF so it can be shipped to you in the weeks following the collection.
- Upon receipt of data, we require you provide acknowledgement, via email ([peoplescreening@hq.dhs.gov](mailto:peoplescreening@hq.dhs.gov)).

# Post-Rally II – Matching Systems

- Analysis of Matching System will take place following Rally II testing. Matching System Providers should make their technical POC available for a period of three months after the conclusion of Rally II testing.
- You are responsible for providing the media in which the data will be delivered. We suggest you consider acquiring a high-speed, encrypted data locker for this purpose.
  - <https://datalocker.com/product/datalocker-dl3/>
- You MUST provide the **FIPS 140-2** encrypted device, a point of contact, and a shipping address with the MdTF so it can be shipped to you in the weeks following the collection.
- Upon receipt of data, we require you provide acknowledgement, via email ([peoplescreening@hq.dhs.gov](mailto:peoplescreening@hq.dhs.gov)).

# Due Dates Reminder – All Vendors

## Acquisition Systems

Item	Due Date
CRADA	<b>March 1, 2019</b>
API Integration	<b>March 1, 2019</b>
Representatives Information	<b>March 1, 2019</b>
Ethics Training	<b>March 1, 2019</b>
System Safety Certification	<b>March 1, 2019</b>
Code of Conduct Acknowledgment	<b>May 6 – 7, 2019</b>

## Matching Systems

Item	Due Date
CRADA	<b>March 1, 2019</b>
Initial Docker Image	<b>March 1, 2019</b>
Ethics Training	<b>March 1, 2019</b>
Final Docker Image	<b>May 6, 2019</b>