Memorandum of Understanding
between
Network Infrastructure & Services and Advanced Research Computing
and
VT-Rnet Participants

Purpose

Network Infrastructure & Services (NI&S) and Advanced Research Computing (ARC), both units within Virginia Tech’s Division of Information Technology (IT), and Virginia Tech Research Network (VT-Rnet) participants agree to cooperate to support the operation and use of a high-capacity research network to facilitate advanced research and instruction. This Memorandum of Understanding (MoU) defines responsibilities related to the deployment, operation, and use of the VT-Rnet service. Under the program, 10-gigabit per second (Gbps) connections to the VT-Rnet will be provided, at the cost of a 1-Gbps Enhanced Ethernet networking service, to a group of Virginia Tech faculty members selected for participation based on their research and instructional activities that will benefit substantially from a persistent high-bandwidth 10-Gbps connection. In return, the faculty members will provide feedback to IT and its sponsors to further develop advanced networking services that may be offered to the university community in the future.

Responsibilities

NI&S and ARC Responsibilities – The NI&S and ARC units within the Division of IT agree to:
1. Provide a 10-Gbps connection from the identified research instrument, server, or workstation to the campus core and to national research networks (MARIA and Internet2) via the VT-Rnet service.
2. Provide a 10-Gbps connection at the price of the 1-Gbps Enhanced Ethernet network service for up to five years under the terms of this MoU, beginning from when it became operational on October 22, 2016.
3. Provide 48-hour advanced notice of maintenance whenever possible. (Although unlikely, participating faculty members understand that unscheduled and, possibly, extended disruptions of this cutting-edge service may occur.)
4. Work with the VT-Rnet participant to resolve issues with the service, with resolution of issues occurring during regular business hours of 8 AM to 5 PM, Monday through Friday, excluding holidays and other university closings.
5. Support and troubleshoot the VT-Rnet service on a best effort basis. Support requests should be submitted to ARC (www.arc.vt.edu, menu path User Info → Requests → Help).
6. Maintain a Google Group to facilitate discussions within the VT-Rnet community. The group is found at vt-rnet-users-g@vt.edu.

VT-Rnet Participant Responsibilities – Faculty participating in the VT-Rnet agree to:
1. Follow the provisions of the VT Acceptable Use Policy.
2. Pay for an NI&S-provided 1-Gbps Enhanced Ethernet connection (currently $15 per month) for the duration of this agreement.
3. Utilize the connection for research and instructional purposes only in a manner that is consistent with the request for service submitted by the VT-Rnet participant. (NI&S and ARC must be notified in writing of any change in use of the network by the VT-Rnet participant which must be consistent with the goals of the VT-Rnet. Unauthorized use may result in disconnection of the service and removal of any hardware provided by NI&S and/or ARC.)
4. Acknowledge that the connection is part of a research-oriented program, not a production service, and, hence, some unscheduled and possibly extended disruptions may occur without notice.

5. Work with IT personnel to resolve issues with the service, with resolution of issues occurring during business hours of 8 AM to 5 PM Monday through Friday, excluding holidays and other university closings.

6. Cooperate with IT personnel in monitoring the network for quality assurance and improvement purposes, which may include installing a monitoring agent on the VT-Rnet participant’s system.

7. Provide reports demonstrating the benefits resulting from the improved 10-Gbps connectivity, with the report including a list of publications, proposal submissions, grants awarded, and any other research and/or instruction related output resulting from the VT-Rnet connection. The reports are due on the last business day in March, July, and November each year that the connection is activated.

8. Procure and install a 10 Gbps network interface card (NIC) in the participant's equipment. Maintenance of the NIC is the participant’s responsibility.

9. Tune as needed to achieve acceptable performance. Untuned systems are unlikely to achieve performance anywhere near 10 Gbps without tuning. (See https://fasterdata.es.net/host-tuning for information on tuning end hosts.)

Duration and Termination

This MoU will remain in effect from the date of service activation until completion of the program on October 22, 2021 unless terminated prior to that date. Either party may terminate the connection with 90 days notice or less by mutual consent of all parties to this MoU. IT can terminate the connection immediately if there is a violation of the terms of this MoU by the VT-Rnet participant.

Approvals

The undersigned hereby agree to the provisions contained in this Memorandum of Understanding.

__________________________________________________________
NAME of VT-Rnet Participant:_________________________ Date
UNIT of Participant:________________________________________

__________________________________________________________
NAME of Unit Head:____________________________________ Date
TITLE of Unit Head:_____________________________________

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William C. Dougherty Date
Executive Director, Network Infrastructure and Services

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Terry L. Herdman Date
Associate Vice President for Research Computing, Advanced Research Computing