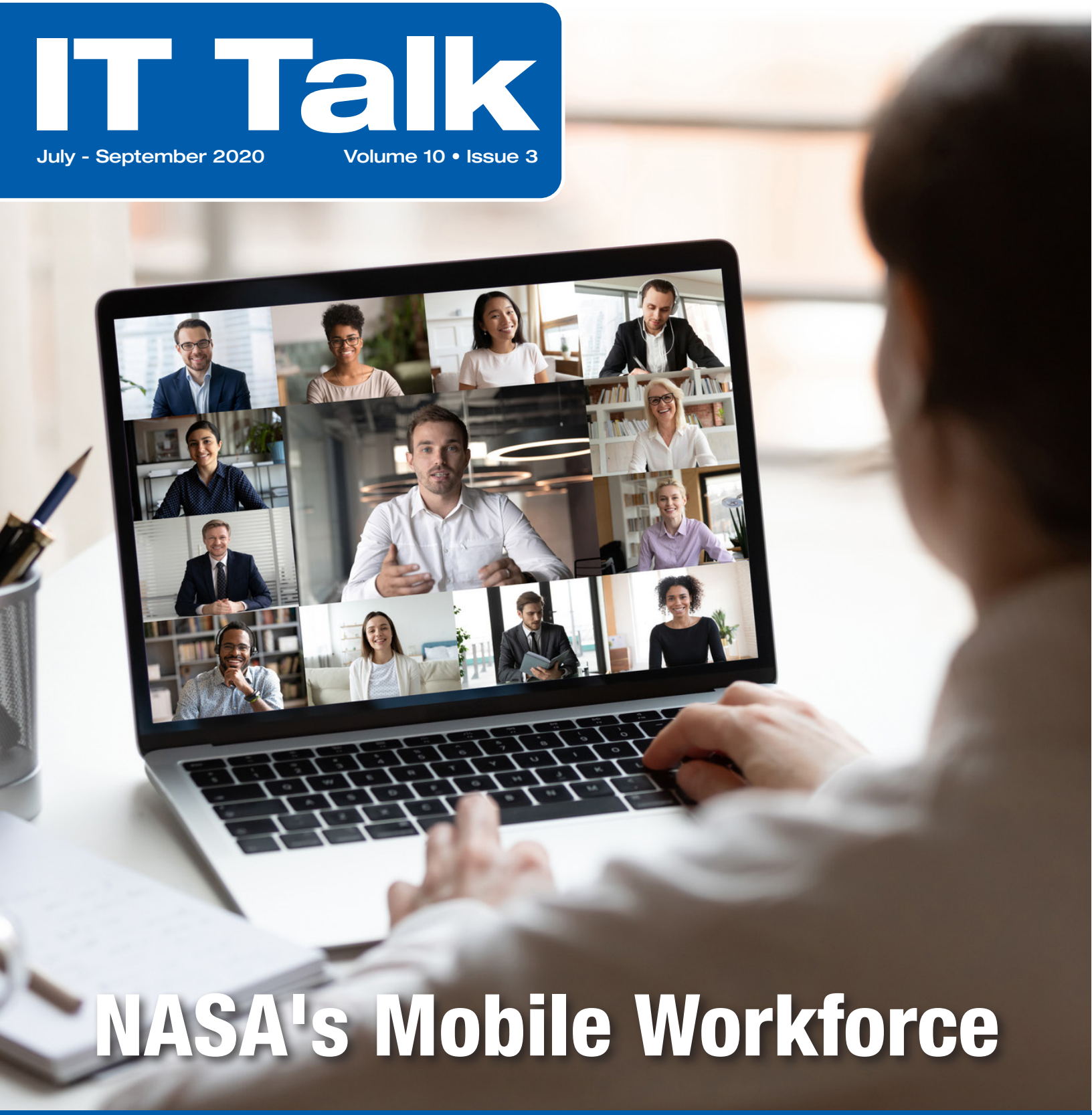
National Aeronautics and Space Administration

IT Talk

July - September 2020 Volume 10 • Issue 3



NASA's Mobile Workforce

IT Talk

Jul - Sep 2020 Volume 10 • Issue 3

Office of the CIO
NASA Headquarters
300 E Street, SW
Washington, D.C. 20546

Chief Information Officer
Jeff Seaton (Acting)

Editor & Publication Manager
Eldora Valentine

Graphic & Web Designer
Michael Porterfield

Copy Editor
Meredith Isaacs

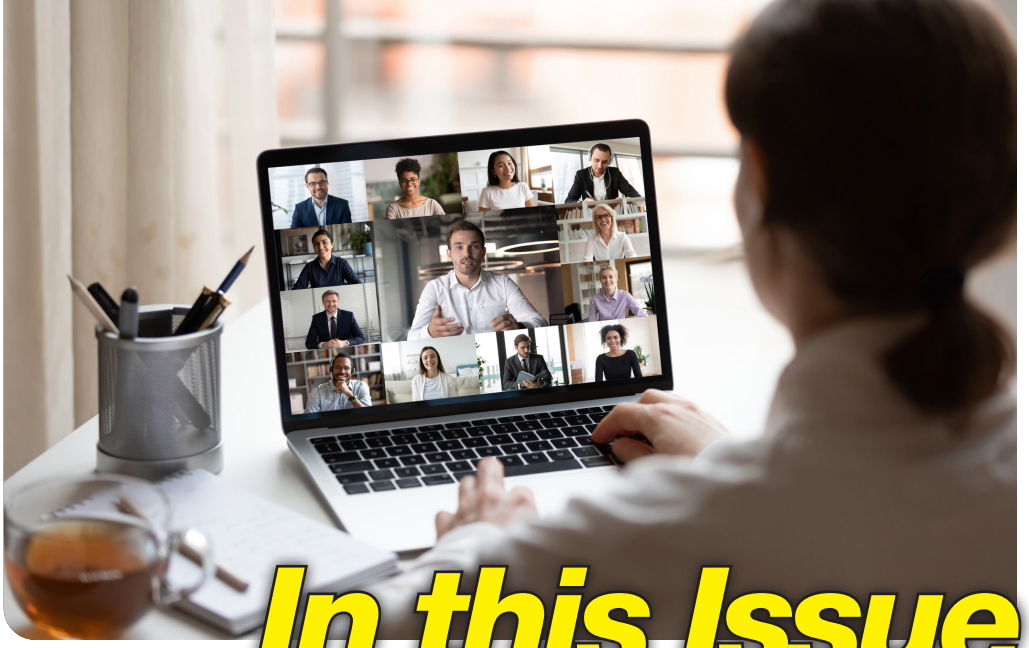
IT Talk is an official publication of the Office of the Chief Information Officer of the National Aeronautics and Space Administration, Headquarters, Washington, D.C. It is published by the OCIO office for all NASA employees and external audiences.

For distribution questions or to suggest a story idea, email:
eldora.valentine-1@nasa.gov

To read *IT Talk* online visit:
www.nasa.gov/offices/ocio/ittalk

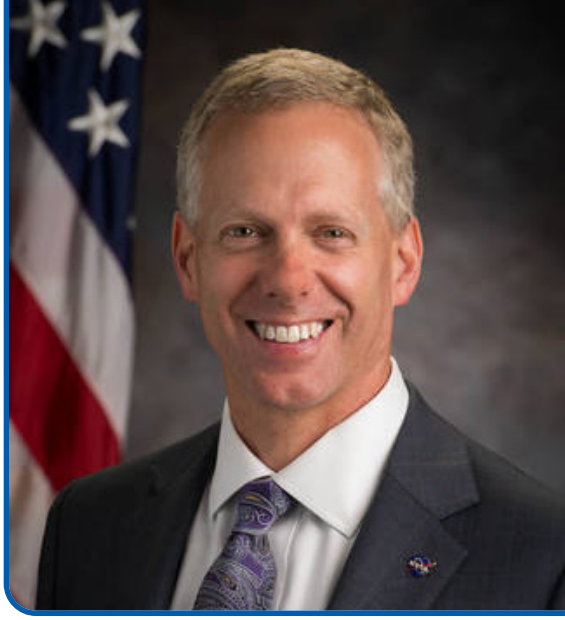
For more info on the OCIO:
- *www.nasa.gov/offices/ocio*
- *inside.nasa.gov/ocio*
  (Internal NASA network only)
- *www.nasa.gov/open/*

www.facebook.com/NASAcio



In this Issue

Message from the NASA CIO



It is no secret that these past few months have been challenging for NASA and our employees, who are dealing with the COVID-19 pandemic. NASA is leading the way in the Federal Government for telework during this period. Since mid-March 2020, more than 90 percent of our workforce has been teleworking—and doing so very effectively. NASA's success in this remote work environment is largely due to the ongoing efforts of team members in the Office of the Chief Information Officer. We have been able to provide our customers with secure, effective, and reliable IT capabilities. Those who are working from home have found tools and strategies to boost collaboration and work satisfaction.

In this issue, we will explore how NASA has been successfully keeping science and exploration missions going strong. None of this would be possible without our communication infrastructure, including our virtual private network (VPN), which creates a secure tunnel to connect each of us to the NASA network and our onsite systems and applications.

Getting to Know Jeff Seaton

1. **What does Jeff like to do in his spare time?** Jeff likes to spend free time outdoors—hiking, kayaking, orienteering, and adventure racing. Last year, he spent 5 days with his son hiking from the Grand Canyon South Rim to the North Rim and back again.
2. **Who does Jeff like to hang out with daily?** Jeff has two dogs who are his hiking buddies—a 13-year-old rescue named Jill and a 1-year-old rescue named Watson.
3. **What is Jeff's favorite thing to do to mellow out?** Jeff enjoys playing the guitar (although not very well!) and just about any acoustic music.
4. **What is Jeff's favorite attire while working from home during COVID-19?** Jeans and a T-shirt.
5. **What keeps Jeff up at night?** Nothing—because he is too exhausted at the end of every workday.

We will also look at how our IT security efforts are keeping NASA safe from cybercriminals. An arsenal of effective processes and automated tools is in place to protect NASA's data and systems. In this remote work environment, many Federal agencies and companies are seeing an uptick in cyber-attacks. NASA is no different. Hackers are trying their best to gain access to our systems and networks; but having solid policies in place around login practices, approved software, mobile devices, and much more has helped to combat these attacks.

And finally, we will show you how NASA's can-do spirit helped in the creation of 3D-print respirators to help protect people from COVID-19 infections. The team used inexpensive and widely available materials and 3D printers so that people across the world could print their own respirators to avoid COVID-19 contamination.

This issue is filled with many inspiring stories that highlight the great work being done in our IT community at NASA. I want to extend my sincerest thanks to the OCIO team for its continued support and commitment to working together and caring for one another while making the NASA IT environment even stronger and keeping the Agency going during these challenging times.

With gratitude,

Jeff Seaton

NASA Chief Information Officer (Acting)

NASA Communications and Collaboration Services During COVID-19 Teleworking

By Daniel Horton, End User Services Program Office (EUSO), and Sylvester Placid, Communications Program (CP), Marshall Space Flight Center

With the unprecedented increase in telework and remote collaboration during the global COVID-19 pandemic, Internet Service Providers (ISPs) and cellular network providers are experiencing a surge in network utilization from users working from home.

NASA employees may experience poor internet or cell phone performance due to this significant increase in network traffic. This may result in audio delays, choppy video, or dropped calls when attempting to join audio or video meetings using NASA-authorized tools.

Here are tips for using NASA communications and collaboration services while teleworking:

- **Microsoft Teams:** Use the computer audio calling capability in Microsoft Teams with or without a headset. More tips for using Teams are available on EUSO's *Working Remotely Guide* and *Teams Resources page*.
- **Office 365:** This set of tools has everything you need to work anytime, anywhere, on any PIV-enabled device. Read more on how to collaborate with colleagues using Office 365 at *EUSO's Resource Page*.
- **Instant Meeting:** Telephone conference lines continue to be available to the NASA community. If you receive a busy signal while attempting to dial in to a teleconference using the Instant Meeting toll-free number (1-844-467-6272), use the toll number (720-259-6462) and enter the same meeting passcode.
- **Webex:** Use the "call me" function in Webex Meeting Center if your meeting will be held within Webex. This function will call any phone number you choose, allowing you to join your meeting's audio without tying up NASA's conference lines or incurring any additional cost to NASA—so it is strongly recommended.
- **Jabber:** If your Center has authorized the use of Jabber, use this service in place of your home or cell phone to make and receive calls and to listen to your NASA voicemail.

If you continue to experience issues, here are some tips for improving your performance at home:

- **Direct Connection:** For desktop computers and laptops with a docking station or built-in ethernet port, connect your NASA computer directly to the ethernet port on your router instead of utilizing Wi-Fi. Direct, wired connections can be more reliable and faster than wireless networks.
- **Wireless Router Location:** Ensure that your wireless router is placed in a central location in your home and that your home office is located within proximity to your router.
- **Modem/Router Software:** Check the software on your modem or wireless router to ensure that it is up to date. An update could be available that can resolve any networking issues.
- **Bandwidth Usage:** Try to coordinate internet use among your family members during work hours. Heavy network utilization from video streaming services (Netflix, Hulu, etc.) and gaming services (PlayStation Network, Xbox Live, etc.) can degrade the performance of your network and affect your audio and video calls.
- **Large File Downloads:** Many modern devices like video game consoles or TV-connected devices can download games, movies, or software while they are in a rest or sleep mode. Check your settings to ensure that they are not using your bandwidth during work hours.
- **Hard Drive Space:** Did you know that an emptier hard drive can run faster? A nearly full hard drive will have much slower write operations and will slow your computer down significantly. Keeping your hard drive relatively empty with fewer files will allow your machine to access information much faster. Read more on EUSO's *Tech Tips article*.

If you experience persistent issues with NASA communications and collaboration services, please contact the Enterprise Service Desk (ESD):

https://esd.nasa.gov/esdportal

1-877-677-2123 (1-877-NSSC123), Option 2

EUSO's New Cloud Backup Service Makes Securing Your Files Easier Than Ever

By Daniel Horton, Communications Strategist, End User Services Program Office, Marshall Space Flight Center

Every day, we are working on critical files stored locally on our machines. From documents to drawings, videos, and more, many of us have gigabytes of important work stored locally that we must constantly access. Backing these files up should be a consistent part of our daily routines to ensure we always have access to the information we need.

Introducing Druva inSync

Over the past few months, the End User Services Program Office (EUSO) has been working to implement a new Cloud Backup Service. This solution utilizes Druva inSync, a new tool that will make backing up your important data as seamless and easy as possible. From the installation to the backup itself, the process is simple. The data on your machine will be backed up to a secure cloud, where it will remain available for you to access should there be a need.

How Cloud Backup Works

The Cloud Backup Service is currently rolling out on a Center-by-Center basis. When it is time to install the tool on your machine, you will receive an e-mail ahead of time letting you know. Look out for this message, as it will contain information about the date the tool will be installed as well as several resources to get you started.

When the new backup tool is ready for your machine, the only action you will need to take is to make sure your computer is connected to the NASA VPN for the Druva client installation. After the client installation completes, VPN connection is not required to complete your backup. All of the data on your local hard drive will be uploaded to the cloud. This process could take up to 6 hours, depending on the size of your files and your local connection. You will still be able to use your machine as usual while this process occurs in the background.

Regular Backups to the Cloud

Following the first backup, the contents of your local hard drive will continue to be backed up to the cloud regularly. To make the process simpler and to save bandwidth, only new and changed files will be part of these routine backups. VPN is not required for these incremental backups.

It is important to note that only local hard drives will be backed up. Druva does not back up virtual or external drives. The user is responsible for backing up their virtual and external drives using their own tool; otherwise, they would need to move files to an internal drive to be backed up by Druva. It also does not back up a user's OneDrive cloud files, which are already backed up in the Microsoft cloud.

Cloud Backup Tools and Resources

The Druva inSync tool offers a preference pane to check on the status of your current upload as well as your files stored in the cloud. For more information on how to use these tools, check the *Cloud Backup Service Installation article on the EUSO website*.

For more information on the features and functionality of the Cloud Backup Service, *User Guides and FAQs* are available now to help you get up to speed.

At EUSO, we understand that data is paramount to NASA's mission, and we are providing this new cloud-based backup solution to improve upon existing backup capabilities and support mission success!

TEAMS Product Updates

By Shaina Strom, Communications Specialist, End User Services Program Office, Marshall Space Flight Center

Microsoft 365 is changing how we collaborate across NASA, and *Teams functionality* is growing. Designed to elevate work life, Teams works persistently to keep mission-critical conversations at your fingertips. NASA users can bookmark and check out the *O365 Support Portal* and *EUSO News* for updates on features and functionality to stay ahead of changing technologies.

Teams Mobile App

- Delivers full desktop functionality to your phone.
- Allows users to join meetings, view shared screens, and track all notifications.
- Is currently available through NASA for iPhone and Android users.

Teams Audio

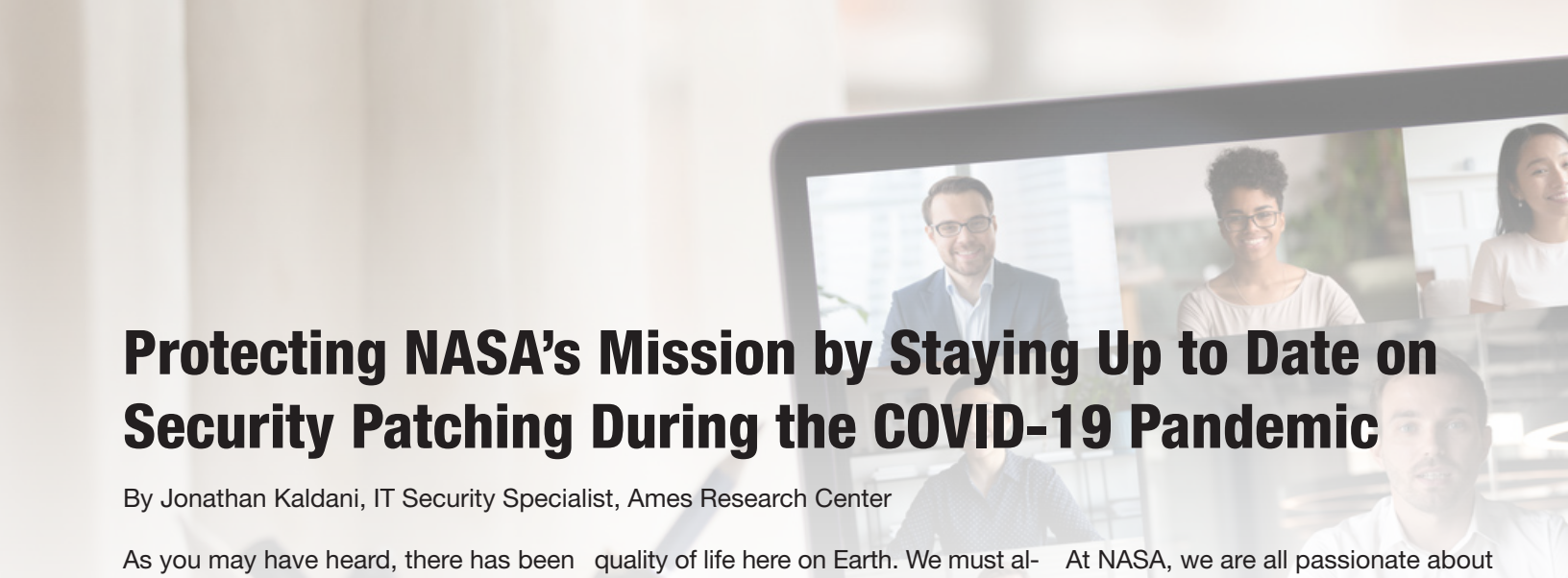
- Automatically adds a dial-in number and unique meeting code to Teams meetings.
- Requires only the meeting organizer to have a license in order for all participants to use the functionality.

Enhancements

- Private Channels: Segment your team into smaller, more effective conversations.
- Background effects: Change your background so the focus stays on you.
- Hand raising: Raise your hand during Teams meetings to notify others that you have input.
- Read receipts: Notify senders when their messages have been read by recipients.

Coming Soon

- Attendance reporting: Never take roll call again with reports that document participants.
- Pop-out chats: Pull individual chats into their own windows.



Protecting NASA's Mission by Staying Up to Date on Security Patching During the COVID-19 Pandemic

By Jonathan Kaldani, IT Security Specialist, Ames Research Center

As you may have heard, there has been a significant increase in cyber-attacks against Government agencies, personnel, systems, and networks during the COVID-19 pandemic. These malicious cyber-attacks are coming from cybercriminals and Advanced Persistent Threats (APTs). Fortunately, there are some measures that can be taken to prevent successful malicious cyber-attacks against Government networks, and one of the most important measures is staying up to date on security patching.

Security patches address vulnerabilities in the software that cybercriminals might use to gain unauthorized access to your device and your data.[1] A prime, well-known example of malware that shows the need to keep your system patching current is WannaCry. This 2017 ransomware attack affected hundreds of thousands of computer systems across hundreds of countries throughout the world. All users had to do to prevent system compromise was to patch their computers. Two months before the WannaCry attack started, Microsoft released a patch that fixed the vulnerability. This attack should not have affected any users. However, because users did not apply the security patches addressing the vulnerabilities, they were susceptible to the attack.

It is critical to always consider the impact that information security has on NASA's operations and its mission. We at NASA are doing amazing work advancing science, space exploration, and quality of life here on Earth. We must always protect the research we do within the Agency by implementing proper security measures such as patching. For example, consider this situation: Imagine you did not keep current with security patches, and a malicious attacker, through your unpatched system, was able to compromise a system on NASA's network. From there, they would be able to move laterally across the network and cause damage in various ways.

Another reason to apply appropriate security patches during this time of COVID-19 is due to the increase of telework across the Agency. An attack on the availability of NASA's IT systems could cause a serious disruption of work. In another scenario to consider, if a malicious attacker were to successfully gain unauthorized access on NASA's network, they could steal scientific research and proprietary data. Years of work could be stolen and used to save significant research cycles and money for a nation in competition with American aerospace interests. Another possibility is taking our good research and ruining its integrity; changing one digit in the findings would be all it would take to damage NASA's mission, the safety of its people, and our international reputation. Imagine a scientist or engineer performing years of hard work only to have it be stolen by an APT or to have the data tampered with, destroying its integrity and wasting years of hard work. It would be devastating to our scientific community and to NASA.

At NASA, we are all passionate about the work we do. We are at a historic time as the Agency begins the Artemis program, which aims to land the first woman and next man on the Moon by 2024. Then we will use what we learn on and around the Moon to take the next giant leap—sending astronauts to Mars! It is a very exciting time at the Agency, with many nations and nefarious actors wanting to leapfrog us and ruin our significant programs. To protect NASA's Artemis mission, we must all do our part to safeguard and ensure the security of NASA's IT systems. Security does not slow down or block NASA's research; rather, it is a business enabler. It ensures the confidentiality, integrity, and availability of NASA's data. It enables us to continue doing the great work that we do across the Agency in a secure manner. To do this, we can work with our IT and Information Security personnel in a timely manner, ensuring that appropriate security patches are applied and other security measures are taken—because NASA's mission is depending on it!

ARTEMIS

[1] *Source: https://www.blackstratus.com/what-is-a-security-patch*

JSC Telework Success Stories

By Nathan Cranford, HRP Communications Specialist, Johnson Space Center

On March 18, Johnson Space Center (JSC) employees and contractors began mandatory telework due to the COVID-19 pandemic. The Agency had instructed workers to telework in the past due to other emergencies, but COVID-19 has been an unprecedented situation. Here are a few success stories about how the Information Resources Directorate (IRD) has been helping the JSC workforce make a successful transition from working onsite to working at home.

Office 365
Office 365 tools like Microsoft Teams have been pivotal to continuing business operations at JSC. "We actually started using Microsoft Teams right before this all went down," said Victoria Govreau, IRD customer support analyst. "It was a blessing because we weren't going in blind."

IRD made training programs like Teams 101 available to teach employees how to use the software. They also added a Telework Ready channel to a Microsoft Team, where users can discuss and develop solutions for issues they experience while working remotely.

Wiki Entries
IRD wiki entries that explain how to perform various tasks remotely have been beneficial during the COVID-19 pandemic as well. "Some people like to do things on their own," Govreau said. "The wikis provide instructions for where to get things [and] how to get things as well as NASA rules and regulations."

Knowledge articles, provided by the End User Services Program Office (EUSO), offer additional self-service tools to be leveraged by the mobile workforce in quarantine. Subject matter experts, including the IRD team, keep the articles up to date and cover various IT-related topics.

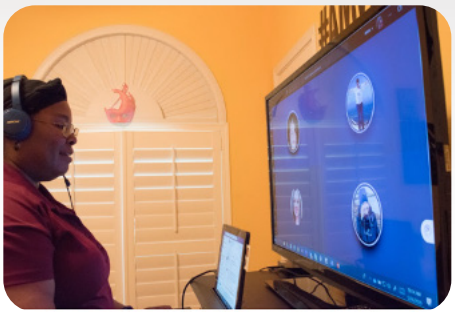
Gilruth Center
While IRD has been assisting customers who are working remotely, the Gilruth Center opened its doors for technical issues that are best dealt with in person by appointment.

"IRD worked closely with the organization that manages the logistics of the Gilruth Center to secure a safe space for our NASA End-user Services and Technologies, or NEST, contractors and JSC employees," said Kelly Foote, IRD customer relationship manager. "They were able to get support and equipment to continue our NASA business."

Laptops
JSC's embracement of laptops with remote access made it easier for many employees to work from home too. "Over time, it has become evident that the laptops are a better fit functionally for teleworking…[and] current laptop models can support…more technically challenging projects," Foote said.

For employees who had been using a desktop onsite, the Agency provided them with loaner laptops or allowed them to bring their desktops home. IRD also enabled many internships to continue by assisting with the shipment of JSC laptops and other equipment to interns across the country.

For more information about IRD services and support, visit https://ird.jsc.nasa.gov/.



Jaumarro Cuffee, IRD communications strategist, using Microsoft Teams to discuss a technical issue with customer relationship managers and configuration management leads.

(Photo credit: Jaumarro Cuffee, IRD communications strategist)

Destiny Ballroom of the Gilruth Center being set up to accommodate IT support by appointment for JSC during NASA Stage 3 mandatory telework.

(Photo credit: Michael Nevills, JSC program principal and subject matter expert for End User Services Program Office)

Jet Propulsion Laboratory (JPL) Team Released COVID-19 Respirators and AI into Open Source

By Tom Soderstrom, IT Chief Innovation Officer, Jet Propulsion Laboratory, California Institute of Technology

Randi Levin, JPL's CIO, called me on a Thursday night wondering if it was possible to 3D-print respirators to help protect people from COVID-19 infections.

The next morning, I spun up a small team of design/3D-printing engineers and Chris Mattmann from IT, and we quickly gathered inexpensive 3D printers and official test equipment from JPL and brought them to our homes. We then began designing, printing, assembling, and scientifically testing prototype designs. We also recruited volunteer medical professionals to make recommendations on the designs.

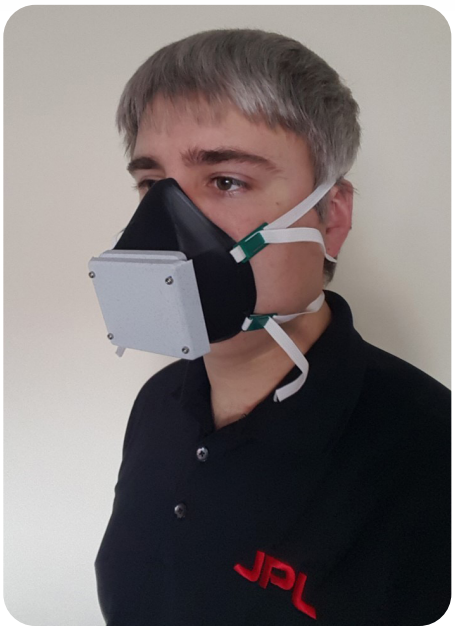
We realized that there would be a perilous lack of commercial respirators and filters. Therefore, we decided to use inexpensive and widely available materials and 3D printers, so that people across the world could print their own respirators to avoid COVID-19 contamination. For example, we built HEPA filters from inexpensive vacuum bags.

Working like a startup, within 5 weeks and after more than 30 rapid development cycles, we released three 3D-printable respirator designs into *Open Source*. We provided several options with instructions, print files, videos, and test results for each respirator, and we described the tradeoffs of comfort vs. filtration.

The feedback so far has been tremendous from the press, the medical support personnel, the Department of Defense (DOD), the National Institutes of Health (NIH), and the State of California's Governor's Office of Emergency Services. We hope everyone takes a look and provides feedback to evolve the designs—or, even better, we hope you will 3D-print a respirator for yourself or someone else. We are especially enthusiastic about building sensors of all kinds into the respirators. We used the $750 Prusa MK3 printers, and the parts list came out to about $3 per respirator, but your own 3D printer should work just fine.

Since the JPL respirator designs are in *Open Source*, we have been contacted by hobbyists from across the world who are printing their own respirators in the locations where they are needed—no shipping required. The benefits will persist well beyond the current pandemic.

JPL IT also helped us to understand the COVID-19 pandemic through data. Responding to the White House's call to action to develop new text- and data-mining techniques that could help the science community answer COVID-19 questions, JPL IT personnel, led by Chris Mattmann, used artificial intelligence and natural language technologies to extract medical diagnoses and conditions, as well as drug and disease information, from a database of more than 25,000 publications. The information helps shed light on what is known about transmission, incubation, and environmental stability; what has been published about medical care; what we know about COVID-19 risk factors; and what we know about nonpharmaceutical interventions. The data was made available to the research community on March 23.



Return to Work Outlook

By Claire Little, Technical Writer, Technology & Data Division, NASA Headquarters

As the COVID-19 pandemic spread across the country earlier this year, we witnessed NASA's workforce showing its capability of working successfully from any location. NASA is a highly collaborative agency, spread across various Centers and facilities across the country, around the globe, and on-orbit. The Office of the Chief Information Officer demonstrated its ongoing commitment to ensuring that we all have access to the tools we need to do our jobs effectively. While there is always room to improve, NASA's ability to be a productive virtual workplace has been proven, as has the need to be ready at any time to pivot to a virtual workstyle.

As the likelihood of mandatory telework increased, the OCIO performed several single-day VPN load tests to confirm that the Agency would be able to continue its mission uninterrupted. Reinforcing the findings of those tests, this extended telework experience has proven the Agency's VPN load capabilities in a real-world, long-term scenario and has shown that our infrastructure can step up to the plate when faced with a challenge.

Virtual collaboration tools, already important to NASA's diffused workforce, became a critical component of the Agency's ability to transition quickly and seamlessly from onsite work to remote work. Microsoft Teams, rolled out Agency-wide late last year, has been the standout. Replacing Skype as the Agency's preferred virtual meeting tool, it also provides a central hub for organizing and collaborating on documents, connecting with colleagues via chat, and creating workgroups. Usage of Teams has almost tripled since mid-March, with an average of 35,000 unique users on a typical weekday.

As workers prepare to return to onsite work after the COVID-19 pandemic, two central questions are being asked of NASA and the OCIO: How are we taking care of our people, and how are we taking care of our systems? Unlike previous examples of atypical work postures, such as Government shutdowns, this period has seen little to no interruption in help desk support and rolling out patches and updates to remote users. This means we will not have to play catch-up when returning to onsite work.

In addition to IT system considerations, we also need to think about how to keep hardware in shared spaces clean and safely usable. The moist cleaning wipes many of us are familiar with can damage electronics; special "tech wipes," designed specifically to safely clean and sanitize electronics and other technology-related equipment without damaging them, should be used instead. Tech wipes will be available in conference rooms and other shared spaces throughout Centers and facilities that contain electronic equipment; additional wipes can be requested via your Center or facility's Logistics Office.

NASA's IT leadership spent years preparing for a mobile and responsive workforce, and the success of those efforts became clear when the Agency was faced with the task of quickly pivoting to almost 100 percent remote work. Learning from our successes during this unusual time, IT leadership will continue to prioritize IT investments that further capitalize on a strong, mobile workforce, including supporting potential long-term changes that NASA may decide to continue post-pandemic.

For more information on NASA's COVID-19 response and return-to-work guidance, visit *https://nasapeople.nasa.gov/coronavirus/coronavirus.htm*.

Nasa Names Headquarters After 'Hidden Figure' Mary W. Jackson

On June 24, NASA announced it was naming the NASA Headquarters building in Washington, D.C., after Mary W. Jackson, the first African American female engineer at the agency. The following is a quote from NASA Administrator Jim Bridenstine.

"Mary W. Jackson was part of a group of very important women who helped NASA succeed in getting American astronauts into space. Mary never accepted the status quo, she helped break barriers and open opportunities for African Americans and women in the field of engineering and technology," said Bridenstine. "Today, we proudly announce the Mary W. Jackson NASA Headquarters building. It appropriately sits on 'Hidden Figures Way,' a reminder that Mary is one of many incredible and talented professionals in NASA's history who contributed to this agency's success. Hidden no more, we will continue to recognize the contributions of women, African Americans, and people of all backgrounds who have made NASA's successful history of exploration possible."

COMMUNICATIONS PROGRAM

CONNECT • ENABLE • TRANSFORM

CONNECT: Continually Enhancing the VPN Service to Keep NASA Teleworking

By Sylvester Placid, Communications Program Communications Strategist, Marshall Space Flight Center

As the NASA workforce continues to telework as part of the Agency's *response to the COVID-19 pandemic*, the Communications Program's (CP) Virtual Private Network (VPN) service has become even more vital for staying connected and productive. Nearly 40,000 users connect to the VPN every day during the workweek.

The CP Communications Network Operations Center (CNOC) team at Marshall Space Flight Center (MSFC) continually monitors the health of the VPN service on a 24/7 basis. VPN appliances at four NASA Trusted Internet Connection (TIC) Center locations (Ames, Goddard, Johnson, and Marshall) are configured to "alarm" when there is a loss of connectivity or if the appliance experiences an abnormal state or failure. Each TIC has a primary and secondary VPN appliance, so if the primary experiences a failure, it will automatically "fail over" to the secondary. Any VPN connections that are dropped on the primary VPN will automatically attempt to reconnect to the secondary. You can find the listing of primary and secondary VPN appliances that support your Center *here* (site internal to NASA only).

CNOC technicians have access to all VPN appliances and can begin troubleshooting issues immediately when notified of an alarm. CNOC responds to VPN appliance incidents within 15 minutes, and most incident resolutions occur within 1 hour—and often much sooner.

CP is continuously modifying and upgrading VPN appliances at TIC locations with patches, "hot-fixes," and changes recommended by the vendor. The Adaptative Security Appliances (ASAs) are constantly updated to provide VPN users with the latest applications, profiles, and updates.

As teleworking continues to be a normal part of Agency operations, CP is planning to upgrade the VPN architecture in order to provide improved load balancing and further enhance the VPN experience for NASA personnel.

ENABLE: Creating New Possibilities for Virtual Town Halls at NASA Centers

By Sylvester Placid, Communications Program Communications Strategist, Marshall Space Flight Center

As nearly every NASA Center operated under mandatory telework in April and May 2020, the Communications Program (CP) was tasked with quickly creating a new service to enable virtual town halls for Centers to communicate with their personnel. The service needed to be secure, but operate outside of a VPN connection in order to alleviate pressure on the VPN service. The service also required security controls to ensure information was not shared with unintended audiences.

In four weeks, CP created a new virtual town hall service with several innovations. In a first for the Agency, CP leveraged Launchpad to credential NASA users outside of the NASA corporate network and authorize them to view the video streams. CP collaborated with other programs across the NASA Office of the Chief Information Officer (OCIO) to authorize and enable VPN connection drops for credentialed users of the video streams. In order to test the solution with a large audience, CP worked with Universal Pictures to provide free screenings of *Apollo 13* to the entire Agency, and gained valuable feedback from users of the new service.

As of May 2020, the new virtual town hall service has hosted over a dozen events and streamed video to more than 3,000 users during a single event. The *International Space Station* (ISS) and *Huntsville Operations Support Center* (HOSC) mission teams are using the service to securely stream video to partners.

With this innovative, timely new service that was established and tested in record time, CP is enabling the NASA workforce to attend and participate in large virtual events from anywhere.

COMMUNICATIONS PROGRAM

CONNECT • ENABLE • TRANSFORM

TRANSFORM: Supporting Mission-Essential Communications for the SpaceX Demo-2 Launch

By Allysha Sneed, Project Support Specialist, NASA Communications System (NASCOM), Goddard Space Flight Center and Sylvester Placid, Communications Program Communications Strategist, Marshall Space Flight Center

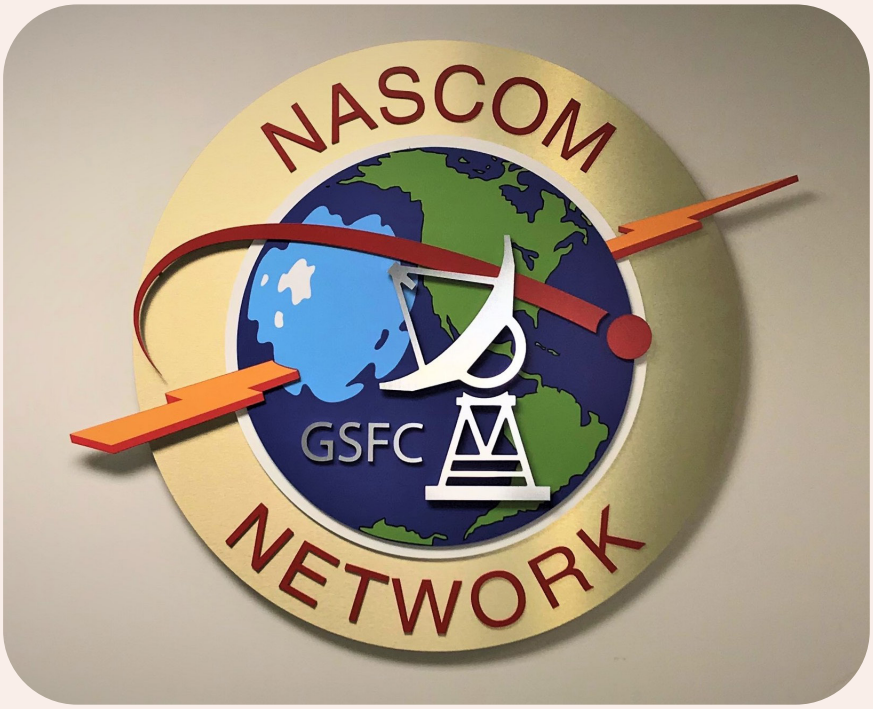
When the first launch of American astronauts from U.S. soil to the International Space Station (ISS) in 9 years went flawlessly on May 30, 2020, the Communications Program (CP) NASCOM team at Goddard Space Flight Center (GSFC) played an essential role in the mission.

NASCOM operates the Terrestrial Network that carried the command and telemetry data from ground stations to the ISS Mission Control Center and the SpaceX demarcation at Johnson Space Center (JSC). The SpaceX demarcation utilizes NASA's point-to-point circuits for communication services. NASCOM also operates the mission-critical voice loops that are used to coordinate launch support.

In addition to providing air-to-ground communications for crewed spacecraft, NASCOM has successfully supported more than nine recent launches, including the launch and docking of Expedition 62/63 to the ISS in September 2019 and April 2020 as well as the Atlas V/USSF-7 launch and the carrier dispatch for the JAXA HTV-9 launch to the ISS, both in May 2020. (HTV-9 and SpaceX's Crew Dragon DM-2 launched just 10 days apart!)

NASCOM continues to build on the successful support of these missions by providing a customer-centric and continuously improving organization. NASCOM remains focused on customer support excellence with the *Mission Customer Dashboard*, transforming how customers receive project updates in real time, including status of high-level reviews and service delivery milestones. NASCOM and NASA Integrated Communication Services (NICS) Customer Service Representatives leverage this tool to proactively mitigate hindrances to service delivery and utilize the shared knowledge base to support customers.

Over the last two weeks, NASCOM shared the latest enhancements to the CP NASCOM Mission Network with mission customers and key stakeholders during the *Mission Communications Working Group* (MCWG). This annual F2F event was held completely virtually this year via Webex. NASCOM looks forward to continuing to provide exceptional service delivery for future launches and missions as NASA's *Commercial Crew Program* transforms human spaceflight.



JPL Named to the “2020 Best Places To Work in IT”

By Whitney Haggins, IT Communication Strategist,
Jet Propulsion Laboratory, California Institute of Technology

On June 23, IDG's *Insider Pro* and *Computerworld* named JPL one of the “2020 Best Places To Work in IT” and ranked it number 23 among large organizations. The selection is JPL's eighth consecutive appearance on the “Best Places to Work in IT” list. JPL is one of the top 100 organizations that challenge their IT staff while providing great benefits and compensation. The list, which is compiled based on a comprehensive questionnaire regarding company offerings in categories such as benefits, career development, training, and retention, is now in its 27th year. Also, IDG conducts extensive surveys of IT workers, and their responses heavily influence the rankings.

JPL CIO Randi Levin had this to say about the honor: "I am excited that JPL continues to appear on this prestigious list with other innovative organizations that achieve excellence through investment in and support of their people.”

IT Talk

National Aeronautics and Space Administration

Office of the Chief Information Officer
300 E Street, SW
Washington, DC 20546

www.nasa.gov

NASA CIO