

# Strategies for Working Remotely: Making the Transition to Virtual Software Teams

## A Panel Discussion

Approved for public release



### Panelists:

Jay Jay Billings, ORNL – Group Leader of Research Software Engineering

Mark Gates, University of Tennessee – Assistant Research Professor

Mahantesh Halappanavar, PPNL – Data Sciences Group Leader

Angela Herring, LANL – Staff Scientist

Axel Huebl, LBNL – Postdoctoral Scholar

Moderators: Elaine Raybourn, SNL – IDEAS-ECP, Ashley Barker, ORNL – ECP CAM

# Who are we?

- Staff at U.S. Department of Energy (DOE) laboratories

- Involved in the DOE Exascale Computing Project (ECP)
  - <https://www.exascaleproject.org>
- Currently working remotely

## DOE national laboratories: Leaders in science and innovation



The screenshot shows the top of the Exascale Computing Project (ECP) website. The header features the ECP logo and the text "EXASCALE COMPUTING PROJECT". A red banner on the right side of the header reads "How the DOE Labs are fighting COVID-19 +". The main content area has a dark green background with a glowing green tunnel effect. The title "The Next Leap Forward in Computing" is prominently displayed in white. Below the title, a blue button with a left arrow is on the left and a blue button with a right arrow is on the right. The text "Exascale computing will provide the capability to tackle challenges in scientific discovery and national security at levels of complexity and performance that previously were out of reach." is centered. A blue button labeled "Details +" is positioned below the text. At the bottom, there are four small white circles, with the second one from the left being blue.

# Agenda

- Brief introductions from panelist addressing prompts:
  - *Advice you would give to someone just getting started.*
  - *Challenges you have experienced.*
  - *Unforeseen benefits.*
  - *Opportunities to look for from this experience.*
- Q&A:
  - Type question in Zoom chat box.
  - Moderator will ask you to ask your question.
- Slides, video, and bios from today:
  - <https://www.exascaleproject.org/event/virtualsoftwareteams/>

# Jay Jay Billings – Opening Remarks

- **Advice**

- Managers: Be willing to make a video call as quickly as you would be to walk down the hall – your people need you!
- Everyone: Focus on your mental health by getting outside (trees make you as happy as Christmas!) and doing lots of video chats with colleagues and friends

- **Challenges**

- We were g2g on distributed work and remote for a few days. Not ready for 100% remote 100% of the time.
  - Not everyone had a home office – no gear, no desk, poor internet, etc.
  - New types of physical and mental stress, requiring new outlets

- **Unforeseen benefits**

- Productivity jumped by roughly 2x: Closing tickets faster, better.

- **Opportunities to look for from this experience**

- How can we maximize our productivity by embracing "work from where you work best" philosophy?

# Mark Gates – Opening Remarks

- ***Advice***

- Work with multiple collaboration tools (email, Slack, Zoom, Google docs, etc.)
- Check in frequently, to replace informal hallway conversations

- ***Challenges***

- With COVID-19, hiring is more difficult, particularly international

- ***Unforeseen benefits***

- Local and remote team members are treated equally – no one left out of local discussion or visuals
- Switching meetings is near instantaneous

- ***Opportunities to look for from this experience***

- Learn remote collaboration tools better to benefit future collaborations
- Institutions develop more flexible policies to enable remote work

# Mahantesh Halappanavar – Opening Remarks

- **Advice (observations)**

- The way an organization treats its staff and the local community will determine its *long-term success*
- Every person is going through the experience in a unique way, being *nonjudgmental* is important
- *Charity* in all forms is now essential
- Regular and frequent *communication* is fundamental

- **Challenges**

- *Remote paired programming* is a challenge (SME – Algorithms – Programmers – Performance & testing)
- *Recruitment* and regular *commitment* are a challenge (pulled onto perform different roles)
- *Ergonomic* challenges
- Retaining the *human* touch

- **Unforeseen benefits**

- Higher productivity from lack of *commute* and *travel*
- We are getting to *learn* a little bit more about each other
- Greater *tolerance* of each other
- Greater opportunities for *learning* (e.g., soft skills, programming skills)

- **Opportunities to look for from this experience**

- Better *work-life balance*; better tools for collaboration; a cleaner world

# Angela Herring – Opening Remarks

- **Advice**

- Don't forget the human connection. Technical meetings do not build or maintain camaraderie.
- Virtual water cooler times are excellent team building opportunities.
- Don't be afraid to call people individually. This gives an opportunity to connect on more than just technical topics. Think of it as replacing hallway chats and walks to meetings around campus.

- **Challenges**

- Electronic communication lacks nuance. We must remind ourselves to interpret electronic communications graciously.

- **Unforeseen benefits**

- My teams have made an extra effort to build in appropriate social connection time; we discuss everything from where to find supplies in town (groceries! fabric!) to our hobbies. This has led to increased engagement with each other and, ultimately, stronger teams.
- Work-life balance is easier to achieve without transition costs. I love the flexibility and working outside on my deck.

- **Opportunities to look for from this experience**

- This has shown us on a large scale that work from home is productive. Let's seize this opportunity to hire more part-time, remote workers. Especially for remote locations like Los Alamos, it should give us more choice and diversity in our hires.

# Axel Huebl – Opening Remarks

- **Advice**

- Embrace efficient **communication**, transparency of **decision** processes, **documentation** and **accountability**.

- **Challenges**

- Over/-under **sharing**: communication methods, planning, feedback and inspiration.  
“(Zoom) meetings that could have been an e-mail”, vs. “Hm, haven’t heard from X in a month, are they still with us?”
- **Balance**: Help each other and stay productive. In an office situation, people see you are need help/a break/are already occupied – **indicate** this remotely, too.

- **Unforeseen benefits**

- Teams that already have **strong open (source) routines** will improve their workflows with fully **open development** practices (issues, kanban, summaries of offline discussions, release planning, continuous documentation, etc.). This leads to a **more inclusive work environment** for teams & collaborations.

- **Opportunities to look for from this experience**

- Live-communication (Slack, Zoom, hallway meetings) can be quick & effective but also problematic in common situations. Parenting, vacations/PTO, hobbies, trips, etc. are **good reasons for not being permanently reachable**. People are able to learn to self-organize their daily routines, all2all overlap of a few fixed hours (e.g. 2hrs / day; 2-3 days a week) might be sufficient. Embracing **asynchronous working hours** can improve focus (less interruptions) and increases overall productivity.





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- **Working Remotely: The Spack Team**
  - T. Gamblin, E. Raybourn, 5/16/2020, blog post
- **Remote Working in an Agile World**
  - R. Bartlett, 4/12/2020, intro to podcast by BCS, The Chartered Institute for IT
- **Resources for Maximizing Remote Working**
  - E. Raybourn, 3/18/2020, curated content on:
    - *Remote versus co-located work*
    - *The remote work playbook*
    - *How to lead in the age of newly remote teams*
    - *COVID-19 and the shift to remote work*
- **Clean Your Work Surfaces: One Way to Help Flatten the Curve**
  - M.C. Miller, 3/19/2020
- And more to come ...



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