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# From cluster managers to scientific software build & installation frameworks, one day working on HPCNow!

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HPCNow! provides its customers with solutions and technologies for dealing with the most complex problems in High Performance Computing (HPC). Installing and managing a HPC cluster and deploying user applications involves a wide range of software packages. A cluster manager provides a unified way to install all the nodes, manage them, and synchronize configurations across the entire cluster. A parallel distributed file system acts as a massive cluster-wide hard drive, enhancing usability and enabling scalable I/O. A workload management system enables efficient execution of various workflows by optimizing the available resources. Scientific application compilation and installation systems maximize the performance of both processor architectures and the file system. Finally, user environments that offer simple and intuitive access will encourage end users to make better and greater use of available HPC resources.
This talk will present examples and tools for each of these points that HPCNow utilizes daily.

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