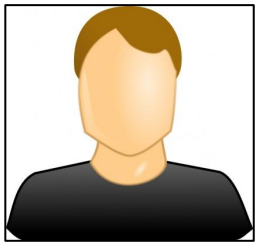
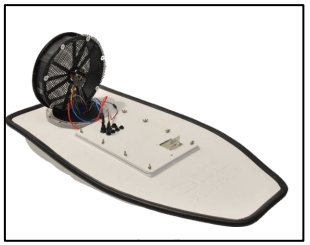
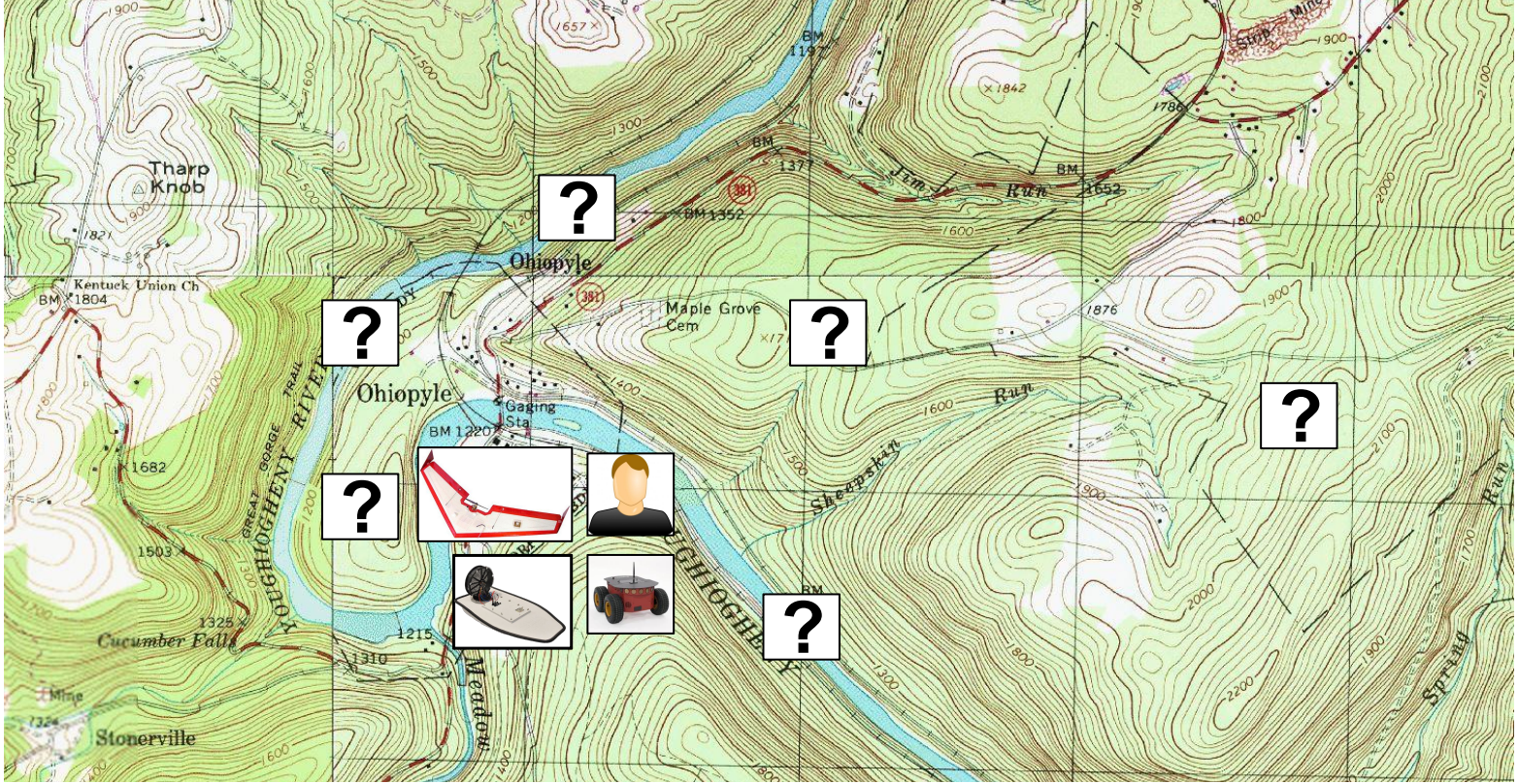
Introduction

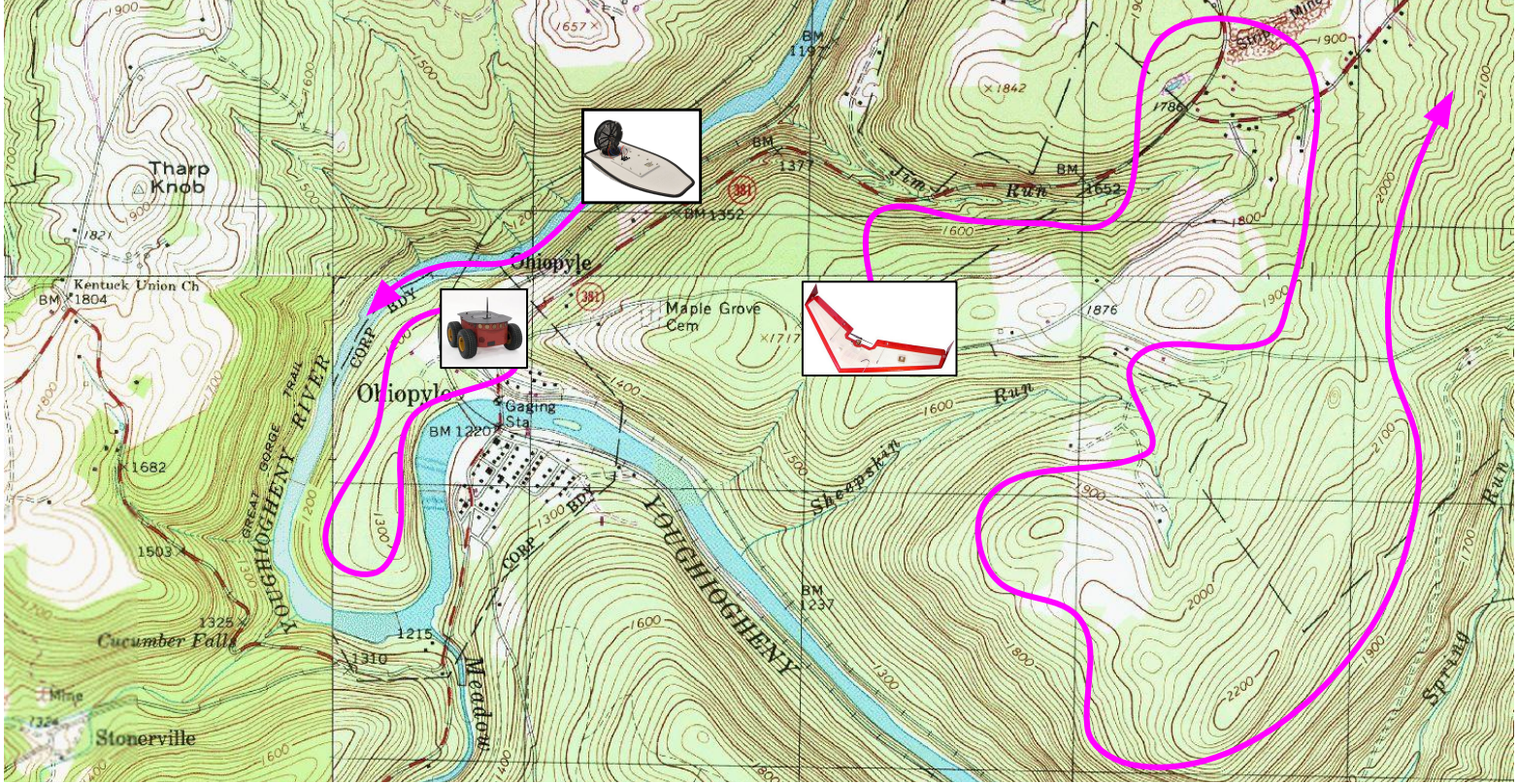





When teams of humans and robots coordinate their efforts, they can use their individual strengths to achieve a common goal they could not achieve individually.

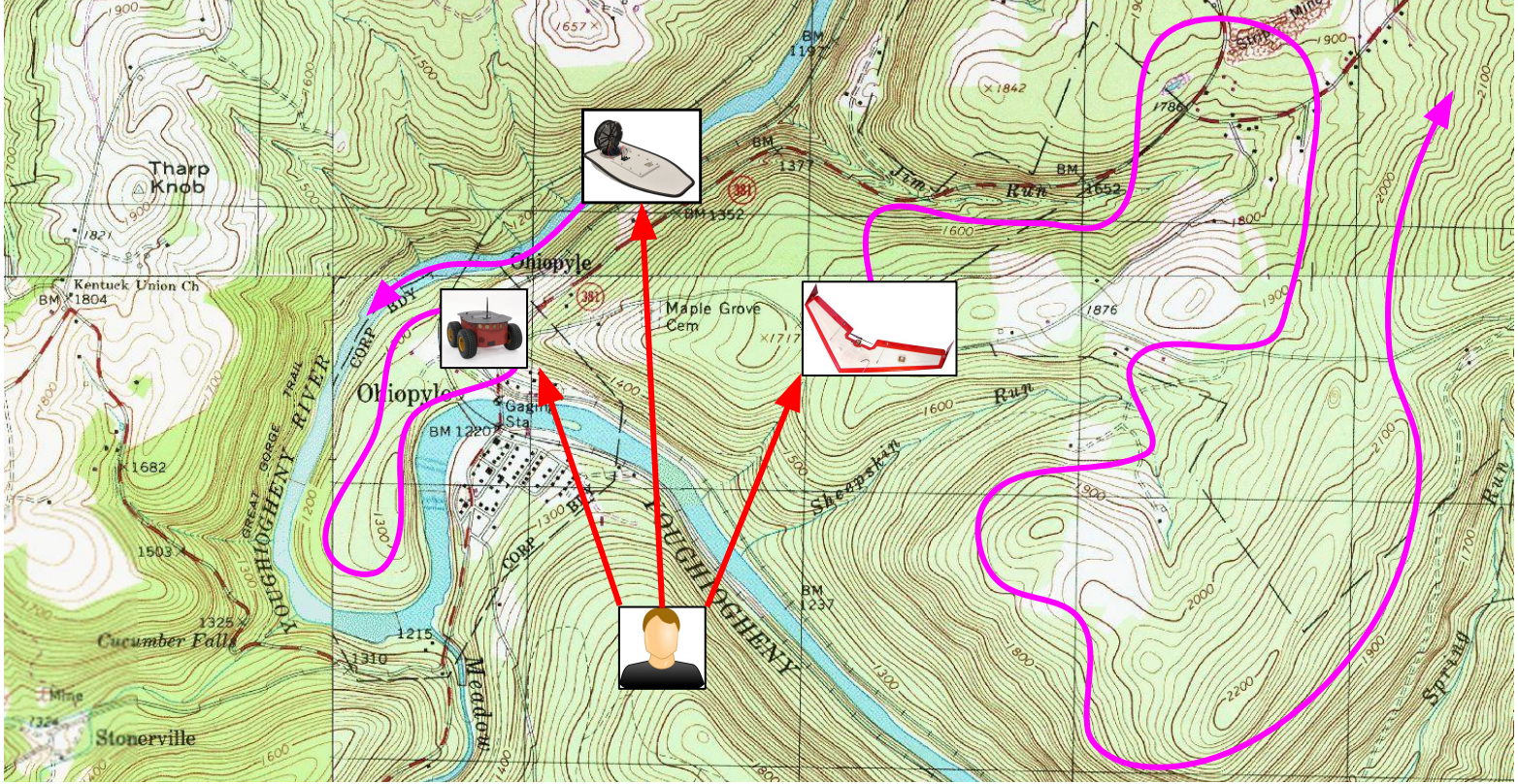
In these lessons, you will learn a language used to describe team plans: the tasks for each team member to achieve a shared goal.



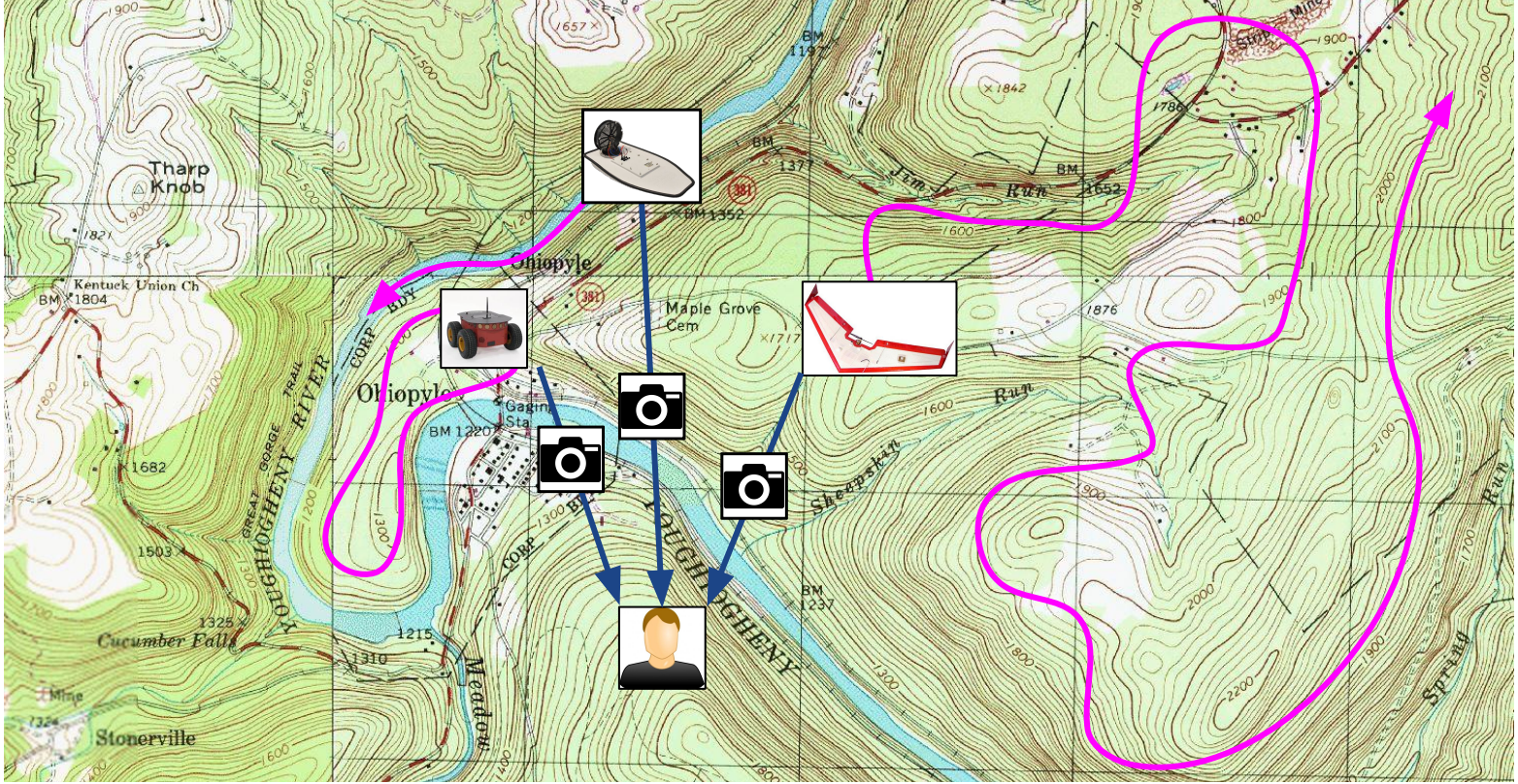
Consider a scenario where a human-robot team needs to investigate areas for signs of a lost hiker.



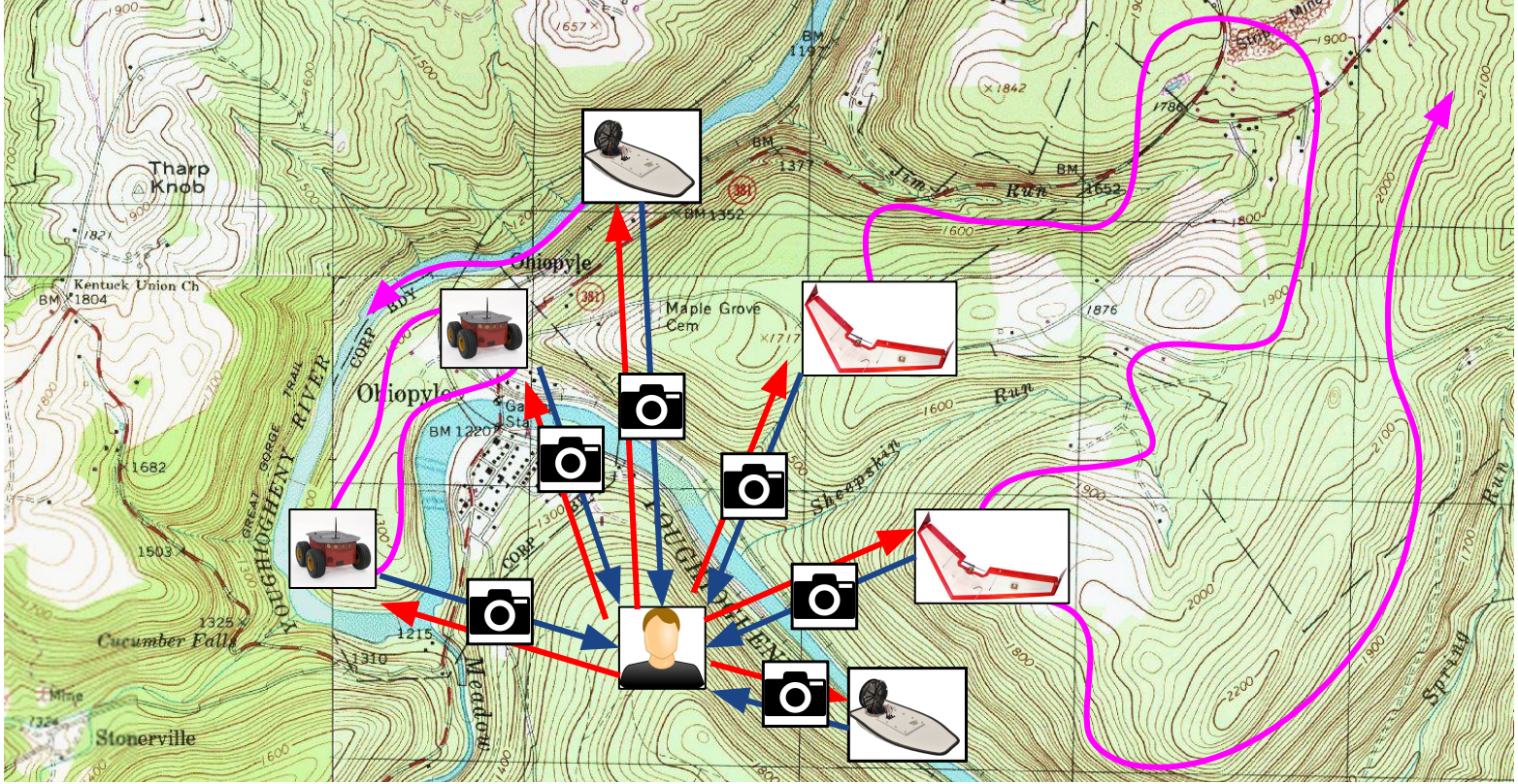
The robots have various sensing and movement capabilities which, when coordinated via a team plan, can rapidly cover an area.



A human can help search, but also has a greater understanding of the nuances of the overall goal and is better used in the team plan as an “operator” who provides high level instructions to the robots.



While the robots have some capability to understand their sensors, the human again has a greater understanding of an image or recording. So in this scenario we would want information to be received by the human, and allow them to adjust the robot's responsibilities.



As more robots are added to the team, the operator can easily be overwhelmed by the amount of information and robot instruction they are responsible for. To address this, the language allows for specific parts of a team plan to be “marked up” with strategies to reduce the operator’s workload.