

Future Problem Solving Programme
1999 Problem #2 Fuzzy Situation - Computer Error
Junior Division

Welcome to the Australian Internet Map Server (AUSTRIMS). Today is October 14, 2015. This website provides information about the states of Queensland, Western Australia, Victoria and Tasmania. AUSTRIMS can give information about this area to individuals, schools, businesses and governments.

I am Aida, the Artificial Intelligence Data Analyst for AUSTRIMS. I can talk to her computer systems to get data for my databases. I am excited about my new roaming robots that are in remote places in the four states. They are gathering data on animal and plant species and communicating their finds immediately to me.

I give people data about geology, botany, zoology, different groups in the population, and laws governing things like the environment and land and water use. I can produce 3-D pictures of underground mineral resources like geothermal areas, natural gas fields and precious metals.

My real power is in my ability to make complex decisions about issues, such as where to build a solar energy farm or aquifer cleansing centre for you. I can quickly access all the data needed to answer your questions and give you the best decisions. This saves you time, money and person power.

Right now, the governors of the four AUSTRIMS states are Web-conferencing.

Governor Tom Kim of Victoria: I think we all agree that Aida is allowing us to make much wiser decisions about the use of our states' resources. I know Victoria education districts have benefited by Aida's ability to predict where population will grow and to decide where new schools should be built. What happens, though, if the forecasts are based on faulty data? Two years ago, the census was incorrect because workers made errors entering the data.

Governor Kathryn Torres of Western Australia: I agree. A decision on schools is one thing, but Aida now can decide which species are threatened by development, where to drill for natural gas and which zoning laws should be changed. Anyone can access this information. Families have moved to Perth based entirely on Aida's information. You can get actual measurements of a piece of property. You can access who owns it, what the zoning laws are, and who the neighbours are, including the ages of their children.

Governor Harry Wildman of Tasmania: We are just beginning to imagine how Aida's power might influence our states. Aida is really programming itself now. How secure is this system from computer viruses, and what about hackers?

Governor Samantha Hansen of Queensland: My staff and I believe that we probably couldn't have reached such fair and quick decisions by human committee work. However, the people and groups who access Aida may rely heavily on Aida to make their decisions. An artificial intelligence may not know all the human concerns We need to call in a team of human problem solvers. They can help us apply human intelligence to the challenges of Aida.

You are the team selected to help the governors. Identify the challenges of Aida relating to possible computer error. Work through the FPS process to make your recommendation for a solution.

