

Scenarios for Puppies

A series of scenarios prepared by Mike Bursell, APM Ltd, to explore the possibilities available using Puppies.

Mike Bursell - 28th October, 1996.

Scenario 1 - Today's news - wherever I am

Basic Scenario

I have a range of interests and like to keep in touch with news. My personal Puppy knows what my interests are, and uses an agent to find information on subjects which are of interest to me. The basic information it provides may be gleaned from commercial news services, and the Puppy may authorise payment for some services, but other information may come from other sources on the Net - official sites or information servers, for instance.

My Puppy knows that I access information from a range of devices, and over time can learn my preferred access method in different situations. The Puppy formats the information according to the method by which I am likely to access it, and communicates that information to me. For instance, I may not be contactable via email over the weekend, but the Puppy could put together a 'magazine programme' which I could access via my television. If I am on a trip, the best method may be to fax the information to me, which would require very different formatting of the information - video clips would not be suitable, but in-depth editorial might be. The Puppy is aware of what formats are acceptable for which access-methods, and presents the information accordingly.

Extended Scenarios

Using access to my diary to determine where I am likely to be over the week, my Puppy can prepare information in a suitable format, but might also include information about cities which I might be visiting for the first time.

If I have a particular interest in a certain subject, the Puppy could contact me when something comes up in relation to that topic, or maybe give me information about my favourite singer as an introduction to telephone calls!

The Puppy can look at my documents to determine my interests, and try to identify news that reflects the subjects that are of interest to me at the moment.

Scenario 2 - Meeting arranger

Basic scenario

time or not. I give the Puppy my answer ‘ Yes’ , interpreted using either touch-tone dialling or a voice-recognition system, and the Puppy books the meeting.

The Puppy may interact with an agent that books meeting rooms, and arrange for our meeting to be scheduled in a room that fits our requirements - we have twelve people attending the meeting, therefore a ten-person meeting room would not be suitable. If the meeting is scheduled to go over lunch, the Puppy can order sandwiches for us, negotiating with our personal Puppies over specific dietary requirements.

On certain occasions, it may be necessary to travel to a meeting. There is a budget allocated to the group, some of which the Puppy can access. It talks to an agent which handles rail ticket booking, and arranges tickets to the destination to allow us to arrive on time.

Scenario 3 - Worlds on your desktop

Basic Scenario

Note - this scenario is in part an adaptation of ideas from UK Wired magazine, July 1996, p. 23 *The Smiley Accountant* and from the book *Interface* by Stephen Bury. Both these sources posit the use of simple graphical models to communicate information about a complex system.

Following the model of the federated Puppy in *Scenario 2* above, the company for which I work has a company Puppy. Although my personal Puppy does not have access to all details about the company, in the way that the Puppies belonging to the company CEO might do, there is certain information about the state of the company that the company Puppy can communicate to me via my personal Puppy. For instance, one of the duties of the company Puppy might involve project management. Although I am not involved in the day-to-day running of most of the projects in the company, it may well be of interest to me to see how they are progressing. The company Puppy provides graphical representations of how the projects are progressing; for instance, a globe, whose size represents the number of people working on the project, whose weather system reflects how close it is to completion, etc.. This information is taken from a variety of different systems, and may come from a variety of Puppies - my team’s Puppy, for instance, may provide information about how well we are keeping to budget on our project.

Extended scenarios

As the information is being communicated to me via my personal Puppy, my personal Puppy may influence the way in which the information is processed. The brightness of the globes in the example above might reflect my influence in the project - if I am working 40% on a project and 60% on another, this will show in the display of the globes.

It may be the case that one of the projects on which I am working needs attention - clearly this will be reflected in the ‘ health’ of the globes. However, my personal Puppy may, in consultation with the team Puppy, recognise that prompt action on my part will make a large difference to the health of the project. This would be displayed graphically in the representation of the globes on my display, but

Extended scenarios

My Puppy may be set to run once a week - or have set itself to do this, having learnt that the best time for a delivery rarely varies. If it 'notices' from our diaries that my partner and I have been out for a couple of nights and will be away over the weekend, it can vary not only the time of the delivery, but also the amount of food that it orders. At a very fine level of granularity, it might be aware that we always eat fish on Fridays, but not bother to order any this week, as it notes that we have an appointment that involves our dining out this Friday.

A group of people who live close to each other - in the same village, for instance - might decide to cause their Puppies to work together. This federated Puppy could have access to **certain** parts of the diaries of all members of the group, allowing a delivery to be made to one member, who could then distribute items as needed. More important than ease of delivery, this would allow purchases to be made in bulk, getting a better deal for everybody. There is no need, in fact, for this grouping to be geographical - in the case of some commodities, a large order might make a product run viable.

The Puppy can, of course, cause the shopping agent to be affected by other factors. For instance, it might be set up to watch the forecast during the summer and buy barbecue commodities when a warm weekend is due!

Scenario 5 - Transport

Basic Scenario

I am making a journey which involves quite a long drive, and I wish to avoid traffic as much as possible. I tell my Puppy where I want to go, and when and the Puppy, using a route-planning agent, plans a route for me. Unlike most traditional route-planning methods, however, the agent that my Puppy uses negotiates with a traffic control system to decide the best route. Also, as my Puppy has communicated with the traffic control system, the latter now has more information that it can feed back and use to update forecasts of where traffic will be. In fact, the traffic control system may well be a federated Puppy of several different traffic control systems, which means that local traffic information can be accessed for other uses such as planning construction or road repair work.

Extended scenarios

A group of people who regularly travel long distances could federate their Puppies to allow car-sharing, thus saving fuel costs and, if the group were large enough, reducing congestion.

My Puppy could keep track of where I am using some positioning system, and contact me by mobile phone or in-vehicle screen if the traffic ahead required a change of route. It would pass this information to the traffic control system, which would be better able to divert traffic sensibly, rather than making all vehicles do the same diversion, no matter where they are headed.