Presentation 10
Agnostic Questions

Paper: "Autonomic Computing: An Overview", by M. Parashar and S. Hariri
Presenter: Alejandro Simon
Agnostic: Joseph Cilli

Question 1:
Being that the ACS paradigm is modeled after the human nervous system, is it accurate to
conclude that the paradigm is fallible when you consider that a system might not be able
to self-heal an unknown/unforeseen issue just as the human biological system may not be
able to self-heal because it is unaware of specific infections and its inability to learn
unless combined with artificial intelligence?

Question 2:
The authors' state an ACS requires sensor channels to sense changes and motor channels
to react; however, there is never any mention of the overhead involved with sensing,
analysis or reaction. Is there a significant cost to these requirements that is overlooked in
the paper?

Question 3:
The idea of ACS seems like a viable solution to handle complex systems. Yet there have
been instances where an ACS has caused more work for an administrator. Have there
been any studies to compare system performance using solely human interaction with
system performance using an ACS?

Question 4:
Once high level policies are defined by a human, how would an ACS handle conflict
resolution between contradictory self management aspects?

Question 5:
The authors' state that one of the research challenges is autonomic application & system
architecture. Since the proposed architectures deal with autonomic element
communication, can one infer that such architectures would be OS and/or machine
specific?

Question 6:
Once a human sets high level policies, how can a non-programming administrator
determine if the self-management aspects of a system are performing
properly/efficiently?

Question 7:
Clearly ACS has a broad use in many industries; however, the authors' examples of
existing projects mostly focus on data management systems. Was the current concept of
ACS spawned by DBMS or does it simply lend itself to that arena?

Question 8:
The authors' conclude that achieving overall autonomic behaviors remain an open and significant challenge, which can be accomplished, in part, by open industry standards; however, a lone standards organization body has yet to be defined. How can the stated challenges be met when multiple governing bodies exist?