

Prato: databases on demand

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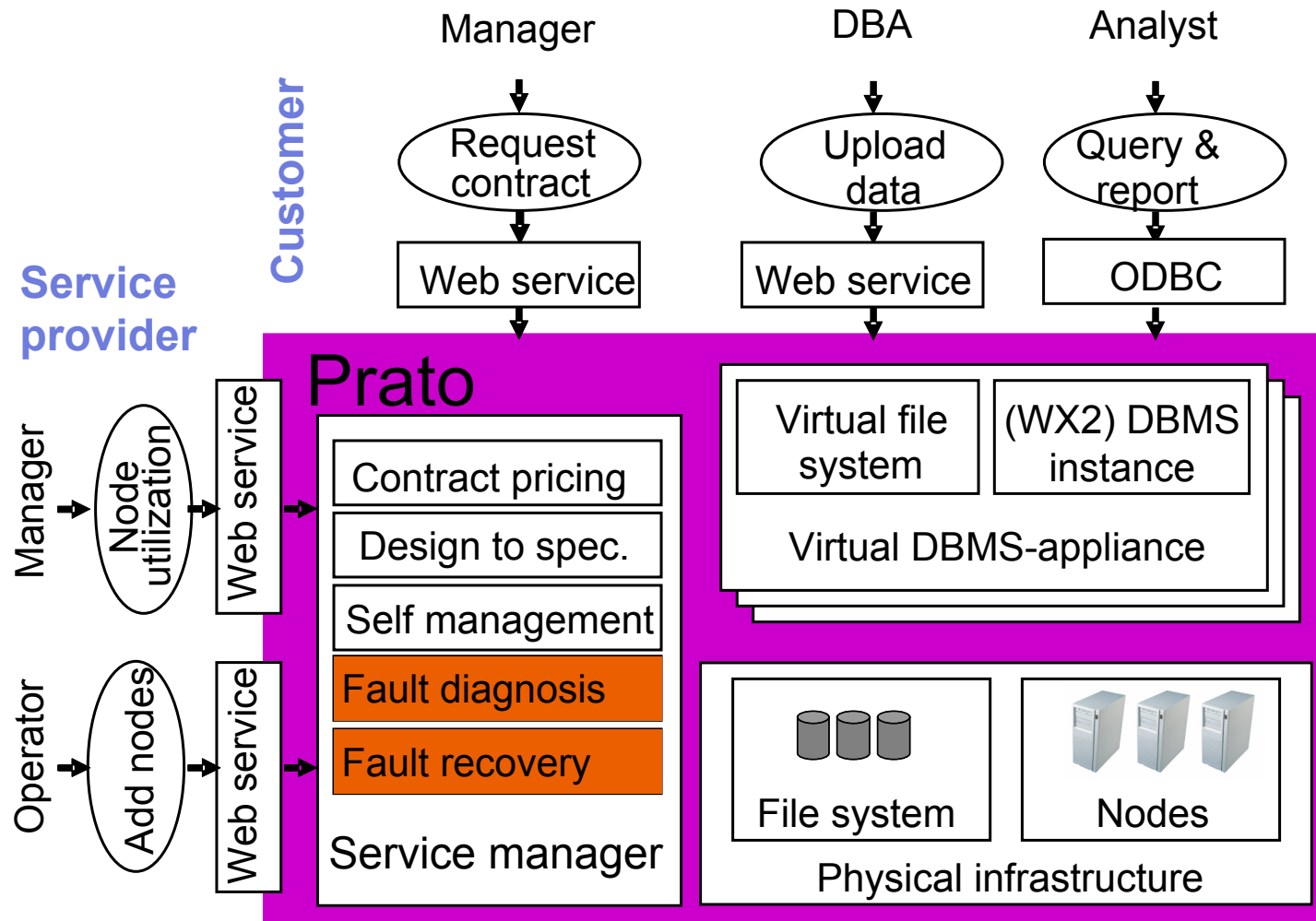
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Approach: Prato

- a self-managing **service provider**
- that offers a **dbms-on-demand service**
- by providing a **virtual dbms appliance** to each client
- while hiding the complexity of:
 - setting up the service
 - managing the service (e.g., if it breaks)



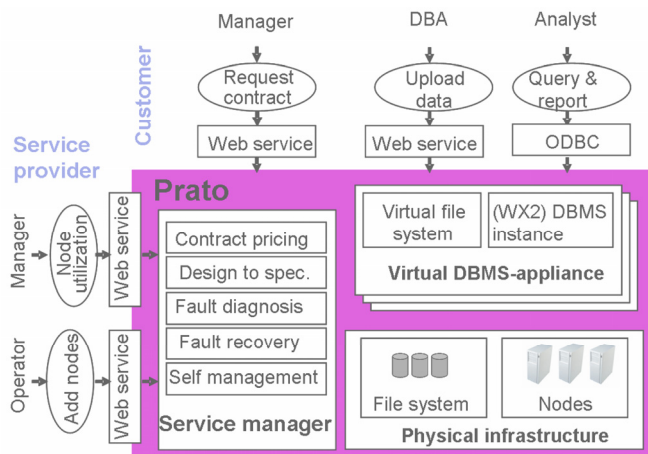
Prato architecture



Sample research topic: fingerprinting



service is unresponsive!
why?!



overloaded dbms?
runaway query?
network congestion?
node crash? ...



Fingerpointing research questions

- **composable fingerpointing**
 - distribute fingerpointing and recovery responsibilities
 - challenges
 - dynamic environments and diverse services
 - conflict resolution between resource co-owners
- **fingerpointing under uncertainty**
 - challenges
 - uncertain failure rates, unreliable monitors
 - conflicting diagnosis, unanticipated dependencies ...
- **goal: minimize expected penalties**



Questions, comments ...

Stop by the poster,
and let's chat!

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