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Towards Trust in Complex Cloud-based ERP Systems by Informing Users about the System Status

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Complex Cloud-based Systems

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- Cloud-based applications consists of many services and apps
- Business processes utilize distributed services
- Users don't know the underlying architecture
- Problems with one service effects the overall experience

Goals and Research Questions

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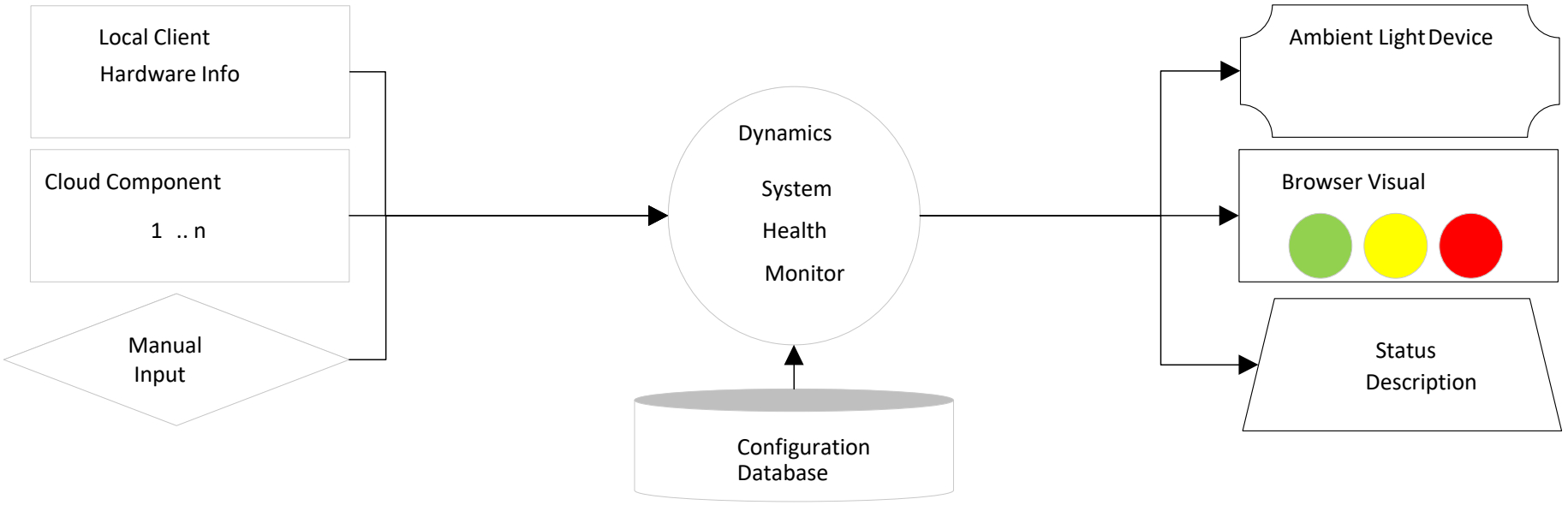
RQ1: How to use monitoring data to inform users about the system state?

RQ2: To what extend does visualization the system status help users to make informed decisions?

RQ3: Can the system status visualization result in improved trust in the software system in long-term?

Dynamics System Health Monitor



Architecture and first implementation

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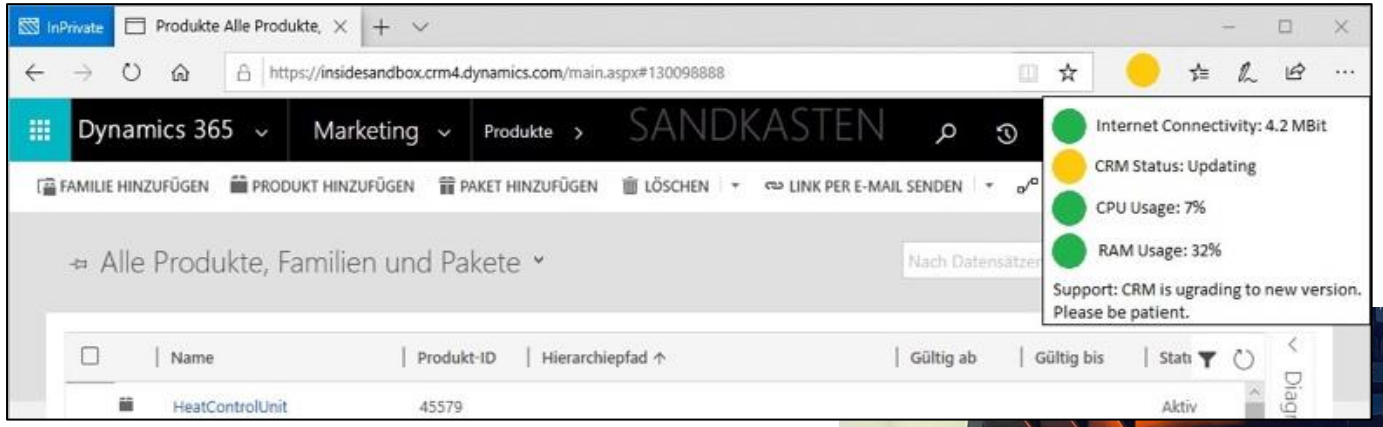
Monitoring:

- Local computer e.g. CPU, RAM, disk space
- Connectivity e.g. DNS, Upload / Download speed
- Cloud Responsiveness e.g. Authentication request, OData queries

Manual input:

- Inform users about ongoing and planned work e.g. Maintenance
- Explain actual system behaviour

First user impressions



Conclusion and next steps

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- Positive feedback from key users

- Todo: Provide feedback mechanism for users
- Todo: Evaluation if DSHM increases trust
- Todo: Evaluate effect on IT support / tickets