



IntraDataspace

An architecture for a company-internal Dataspace

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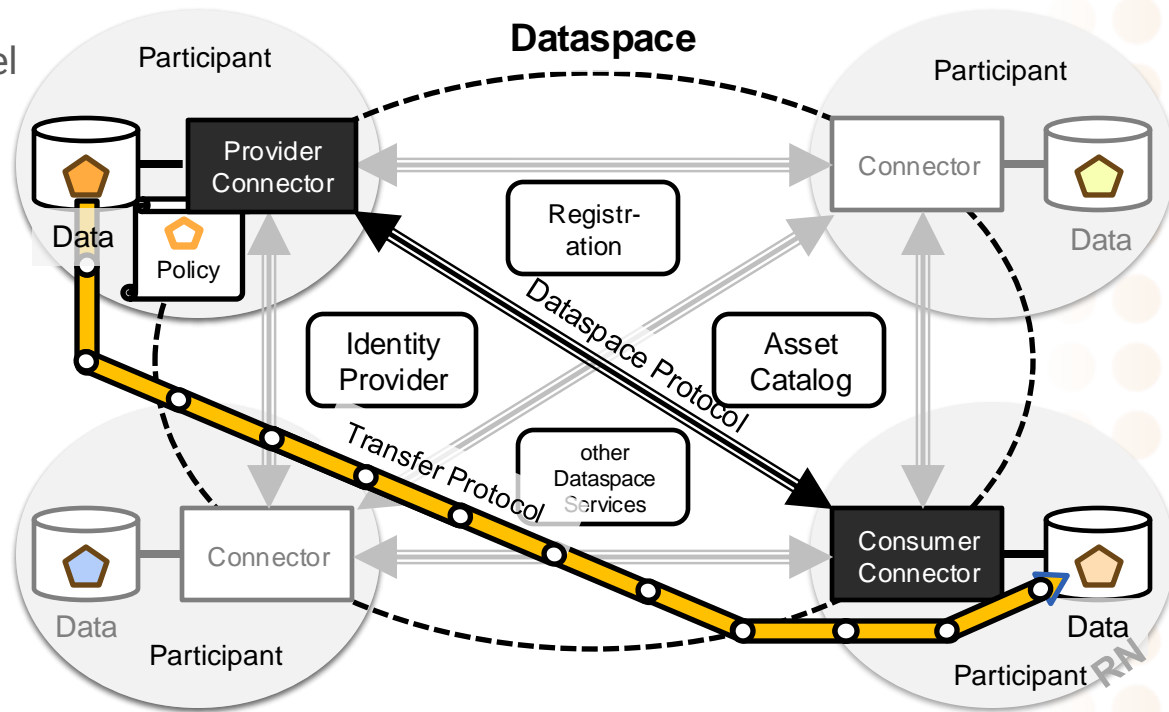
Introduction

- Myself
 - Jan Peter Meyer
 - Computer Science, M.Sc.
 - Researcher at Fraunhofer ISST
- Fraunhofer Institute for Software and Systems Engineering
 - Founding Member of Dataspaces
 - Activities
 - Contribute to the Open-Source Eclipse Dataspace Components (EDC) Project
 - Contribute to the Eclipse Dataspace Protocol (DSP)
- IAV GmbH
 - Engineering Company in the automobile sector
 - Around 1000 projects per year
 - 7.600 employees
 - 26 locations

Introduction

Dataspaces

- Data-Sharing on Company Level
- Creating Trust in a Dataspace
 - Self-Sovereign Identities (SSI)
- Policies
 - Access Policy
 - Usage Policy



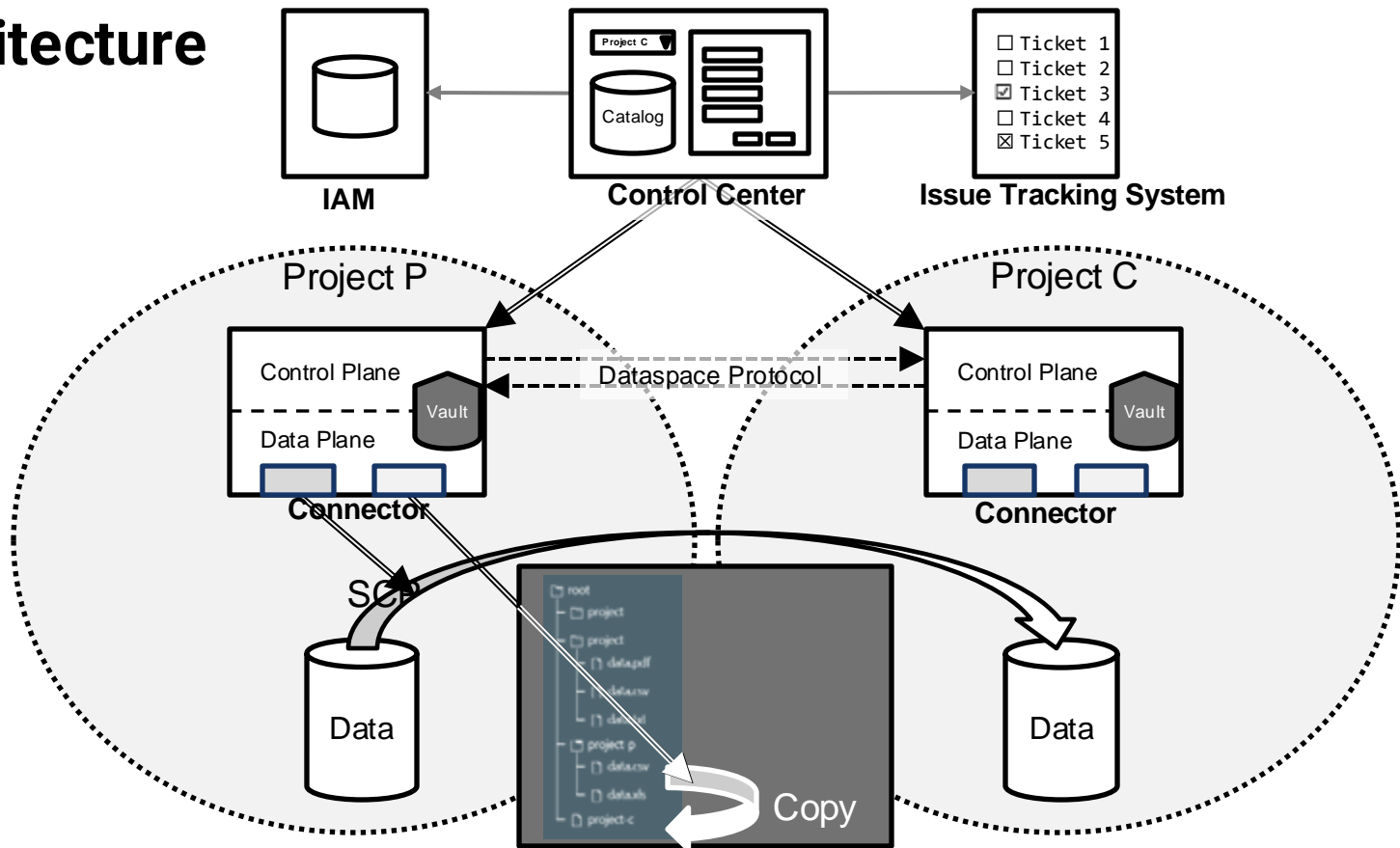
Use Case

- IAV has a thick of data which is not manageable by humans
 - Reuse and further utilization of data present a significant opportunity to achieve better results and reduce redundant work
- Identities within the dataspace follow a project-based approach
 - Data is generated within projects and is therefore associated with them
 - There are contracts and regulations that specify how data can be used and reused in specific projects

Architecture - Goals

- Usage of Dataspace Principles and Technologies
 - Usage of Eclipse Dataspace Components
- Integrate the existing IT infrastructure
- Create a user experience that is as simple and data-centric as possible
 - Increase data discoverability

Architecture



Architecture - Key Facts

- Integration of the company's Identity and Access Management (IAM)
 - User-based roles depending on their assigned projects
- The identity of a connector corresponds to a specific existing project
- Implementation of a centralized data catalog
 - All and only employees are allowed to know about every Datasets
 - No Access Policy evaluation by connectors
- Inside a IntraDataspace trust is existing by nature

Next steps

- Improve project Scaling in the architecture
- Integration in Company-to-Company Dataspaces



Thank you

