Execution Broker

SRCNet-0.2
Sequence diagram

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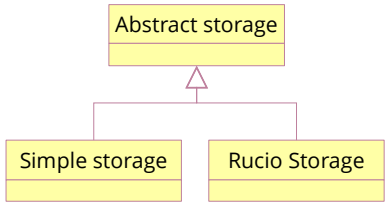

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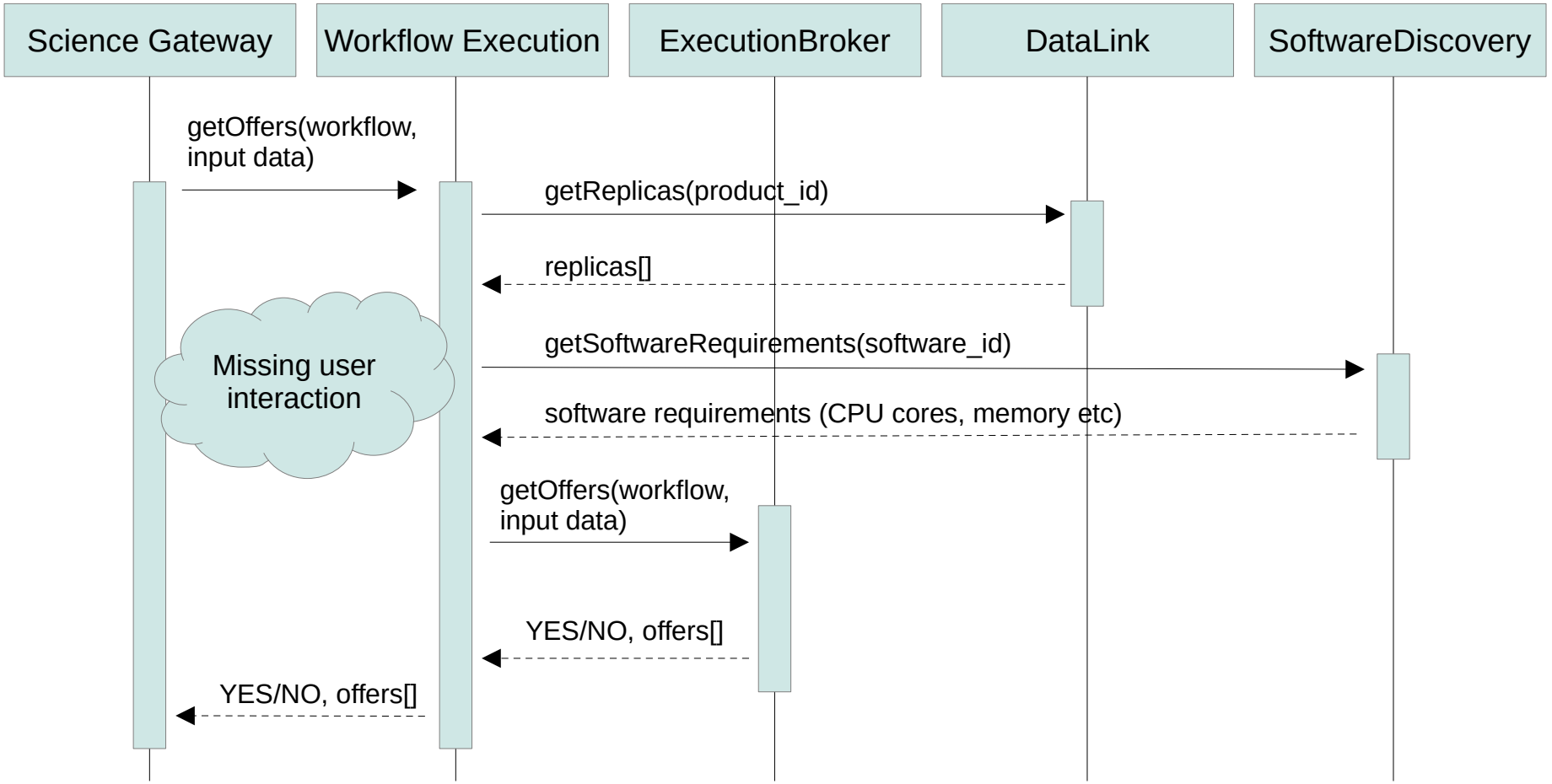
Current sequence diagram

https://confluence.skatelescope.org/pages/viewpage.action?pageId=311713724



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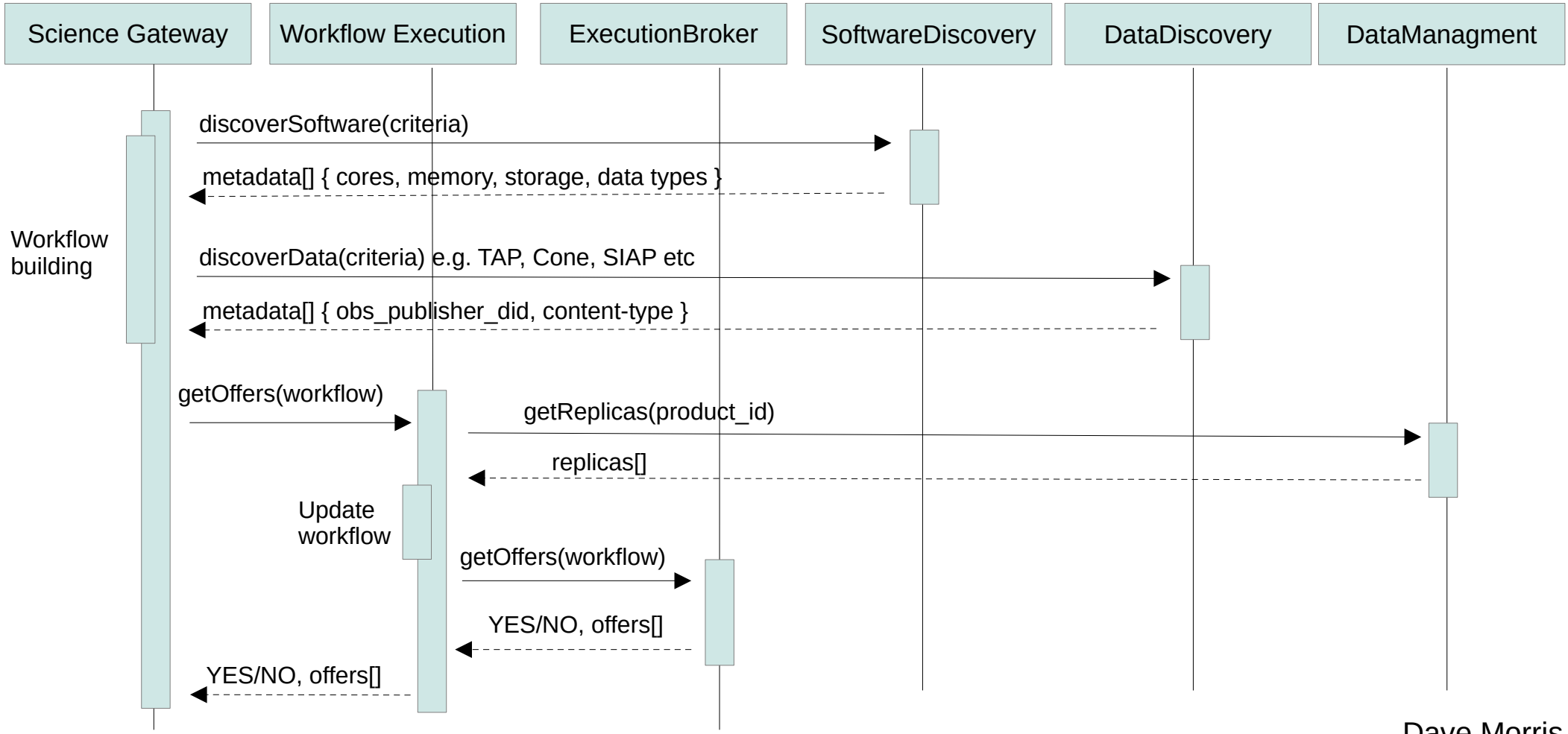
Revised sequence diagram

Adding user interaction to Software Discovery and workflow building



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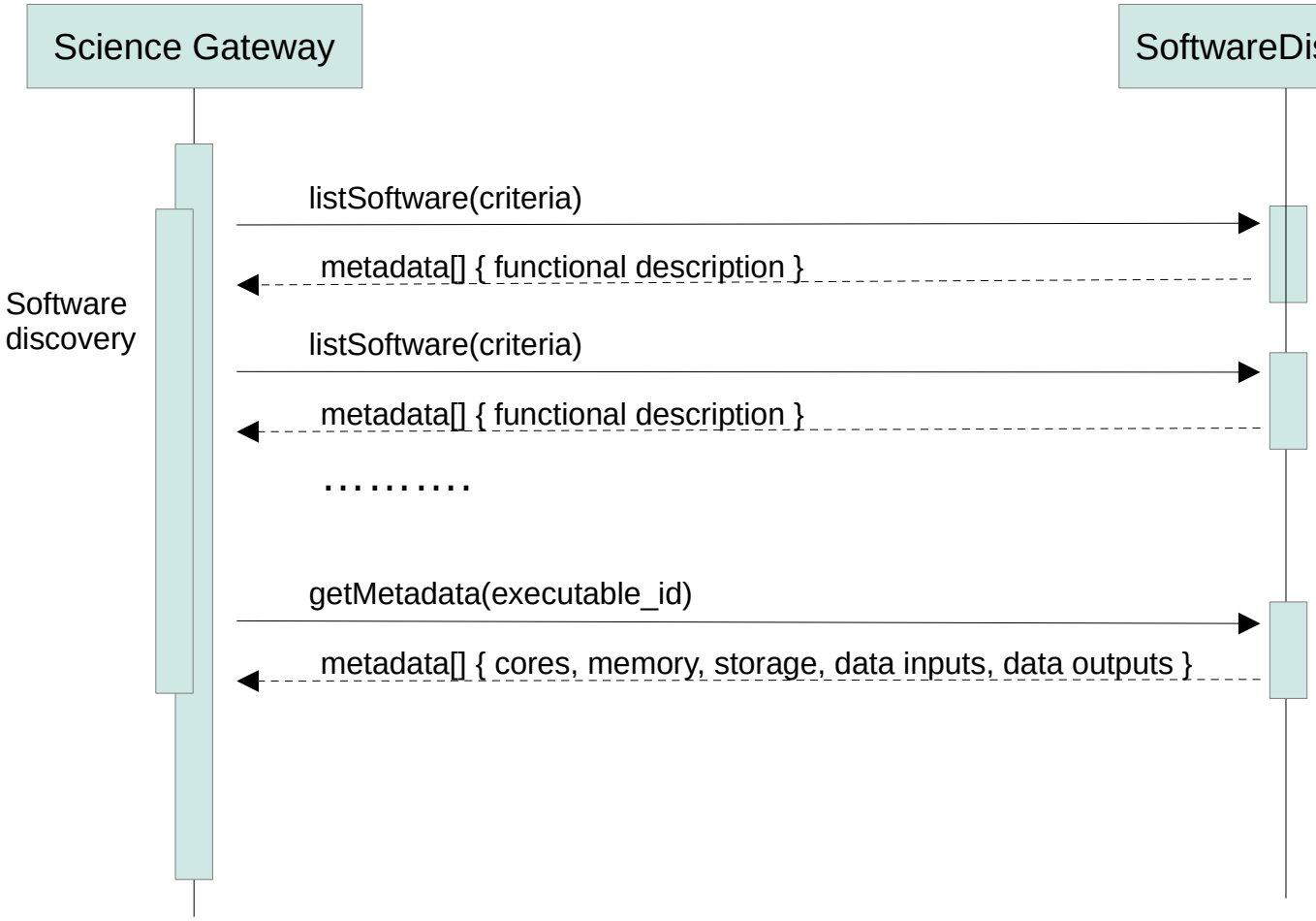
Conversation between Science Gateway and Software Discovery to select the software

Adding user interaction into the Software Discovery process



This does not need to be Complicated.

Search criteria for SRCnet-0.2 can be very simple.

It can be as simple as select <name> from drop-down list to start with

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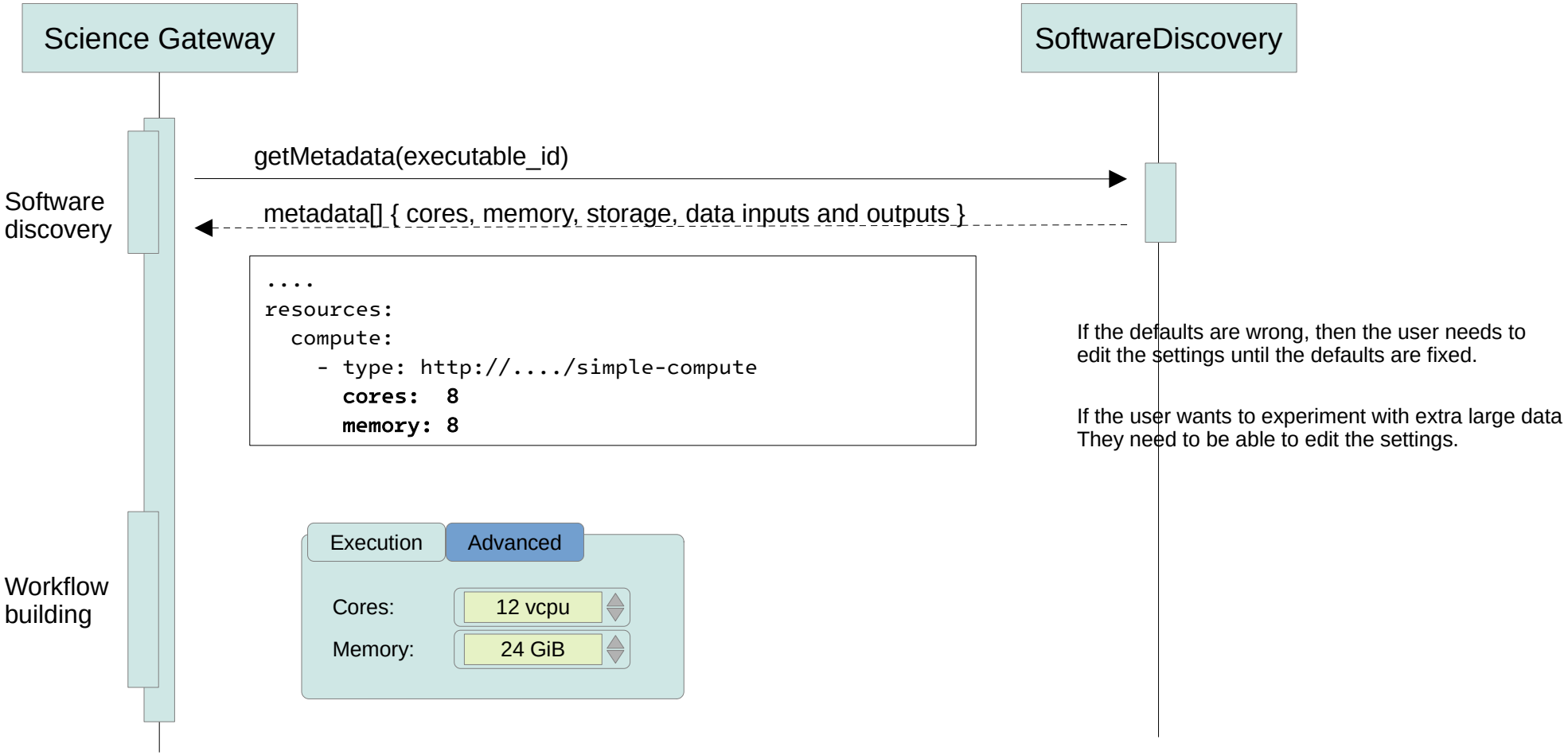
Science Gateway ‘advanced’ tab allows the user to override the default requirements

Enabling the user to correct bad defaults or experiment outside the box



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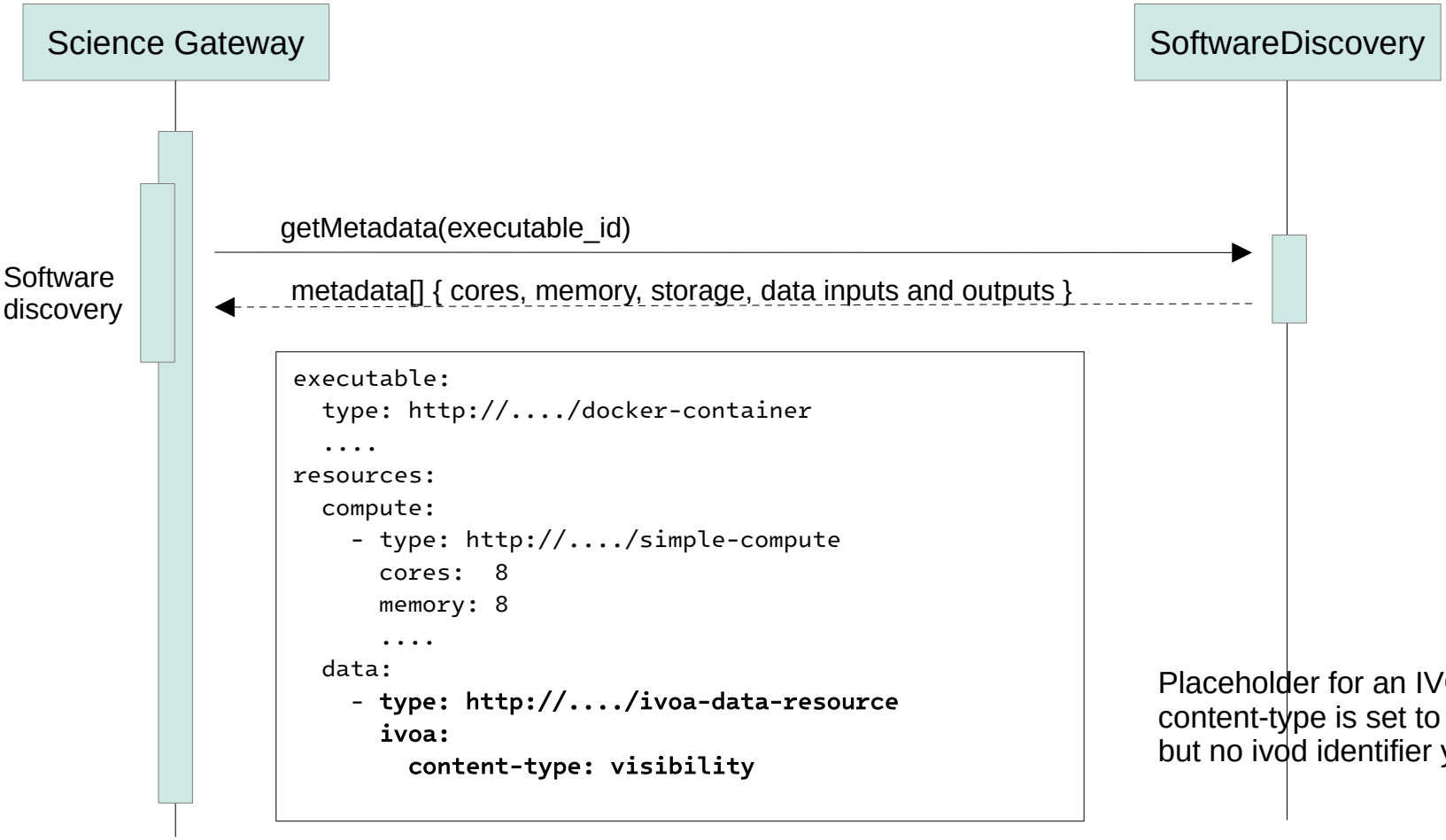
Metadata description includes compute, storage, and **data resources** required by the software

Enabling software developers to provide describe the data inputs and outputs



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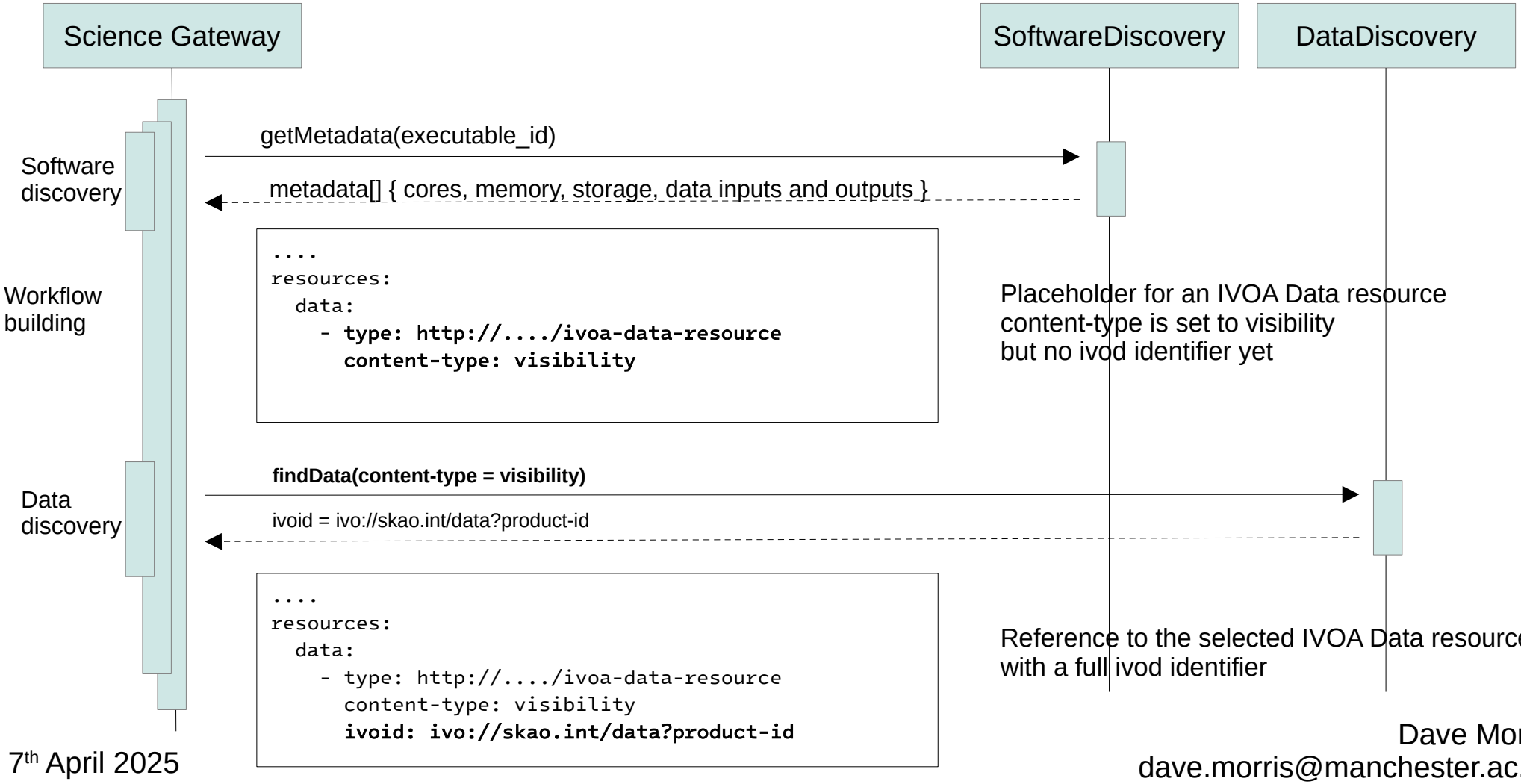
Science Gateway can use the list of data resources to prompt the user to select the relevant data

Selecting the data to match the software inputs



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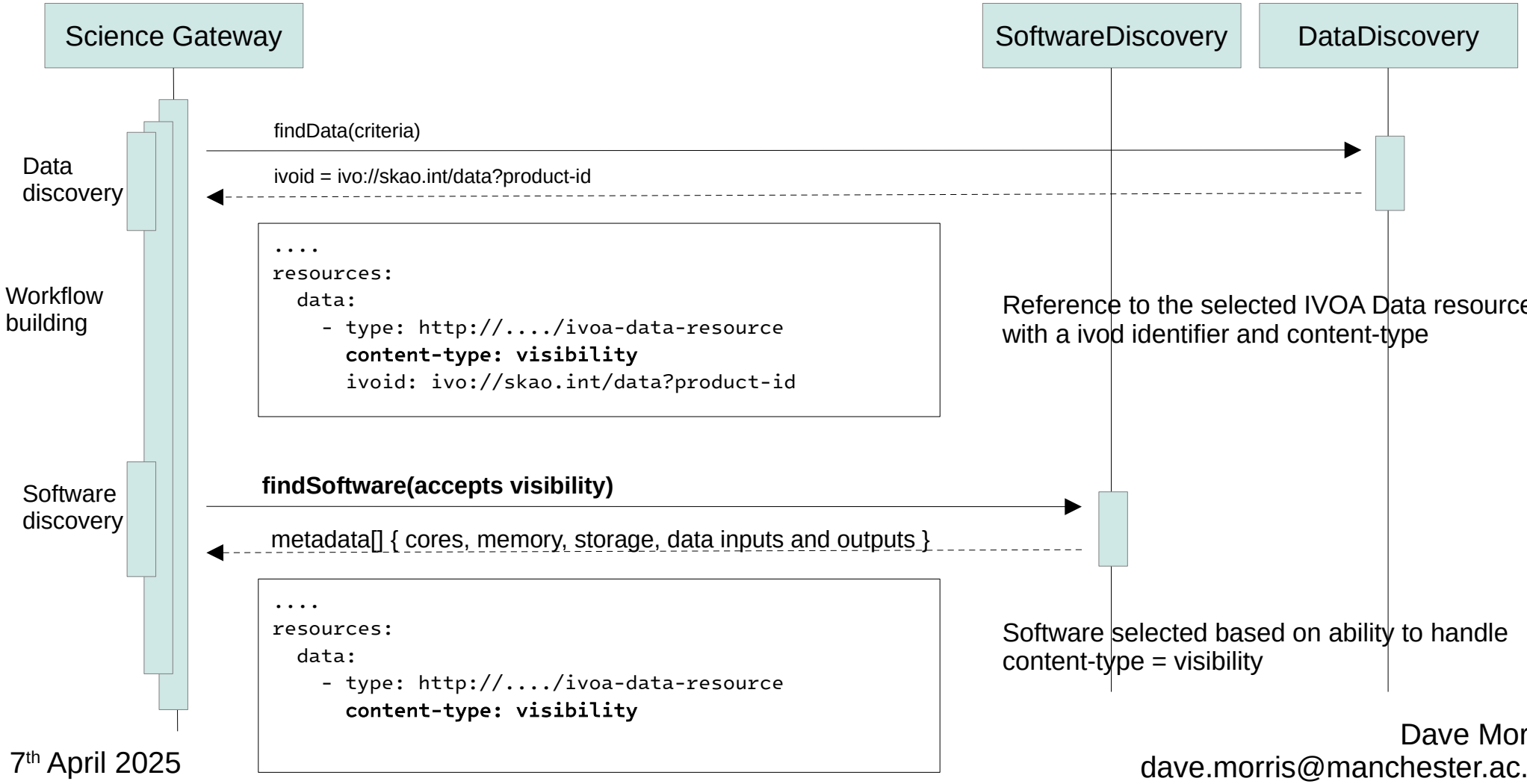
Science Gateway can use the list of data resources to prompt the user to select the relevant data

Or selecting the software to match the data



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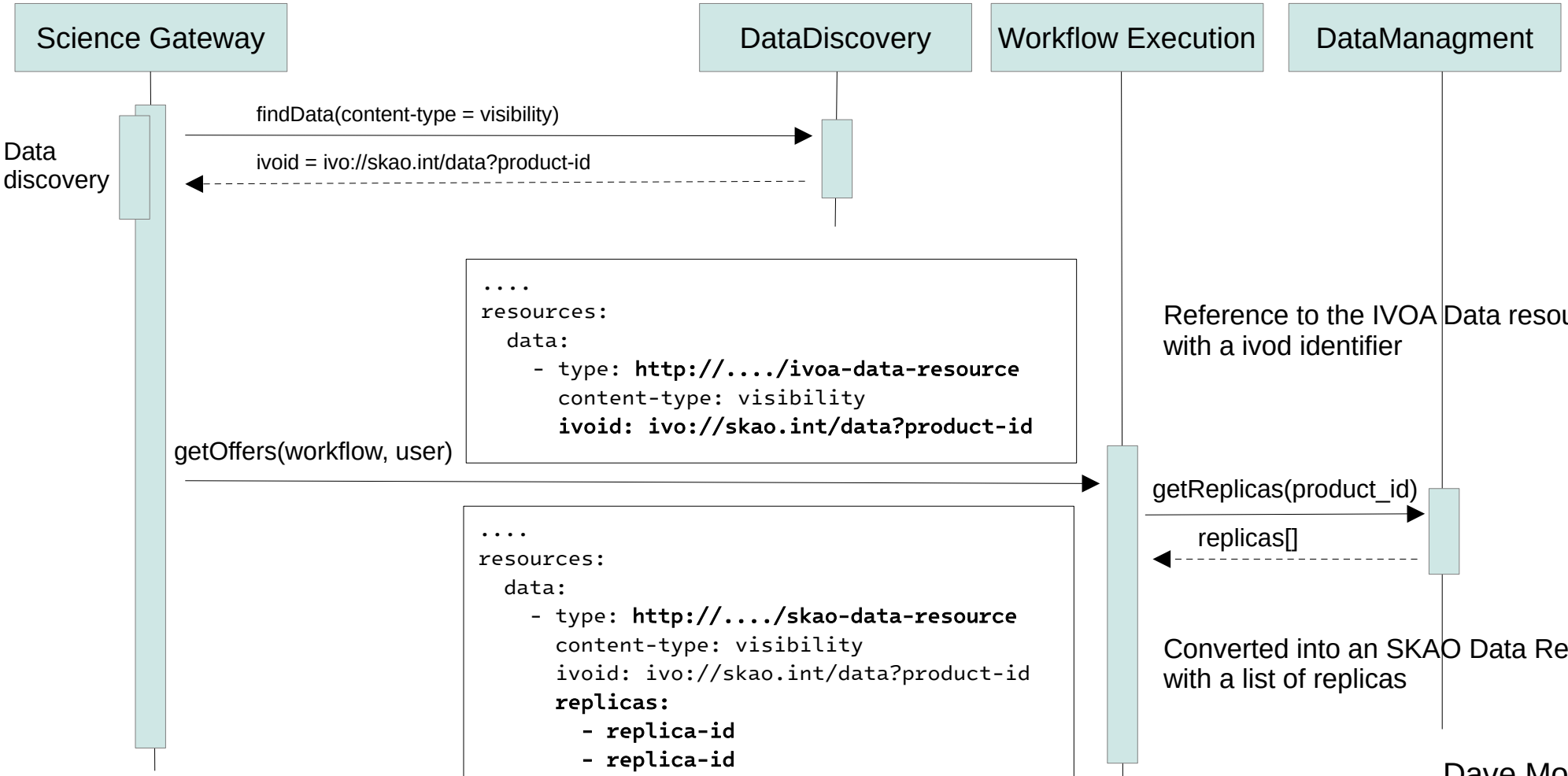
Data discovery returns ivoid references, Workflow Execution expands them to Data Lake replicas

Changing the resource type from ivoa-data-resource to skao.data-resource



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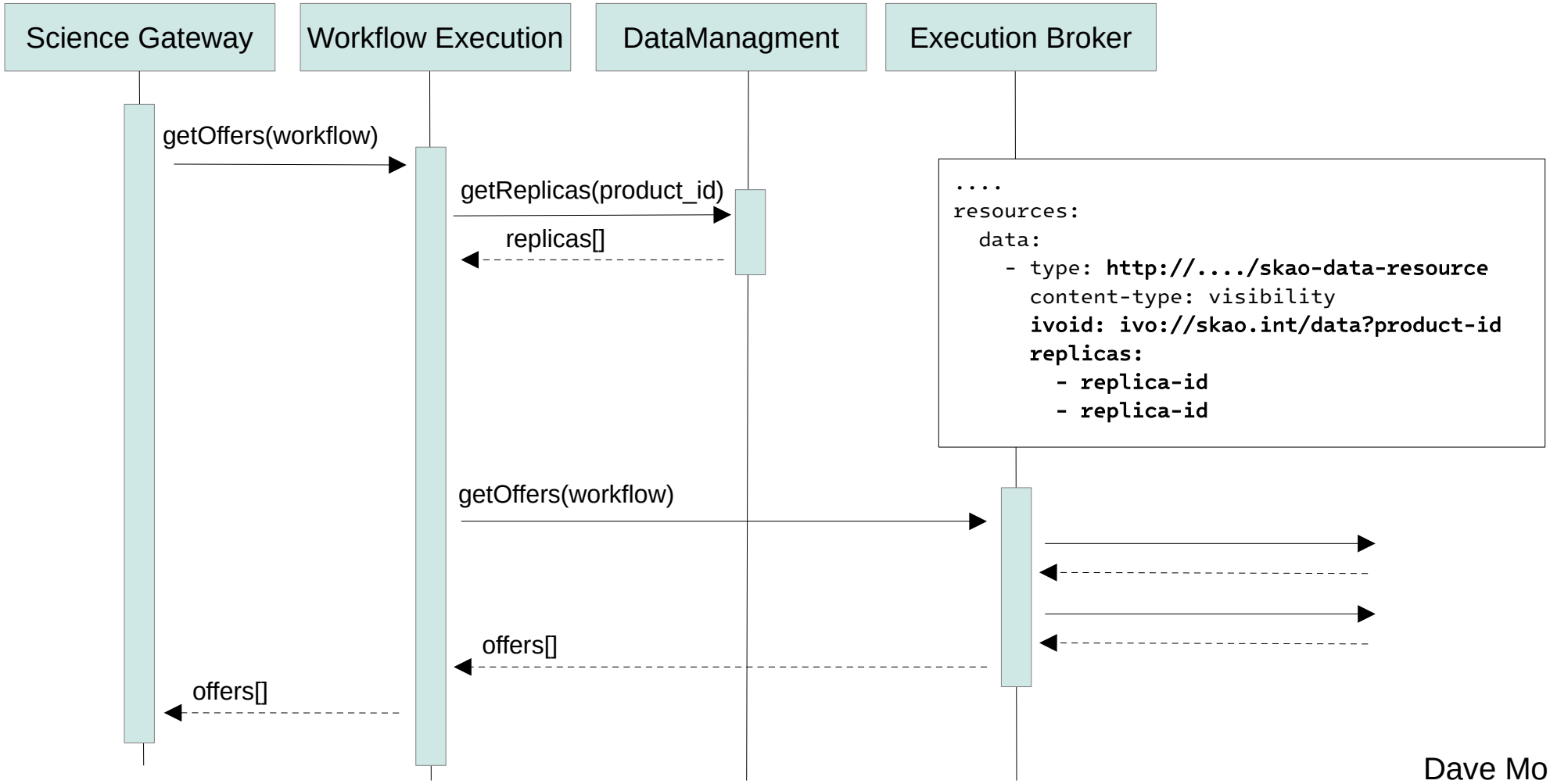
Workflow Execution sends skao-data-resources (with replica lists) to local Execution Brokers

Local Execution Brokers use the replica lists to estimate transfer times



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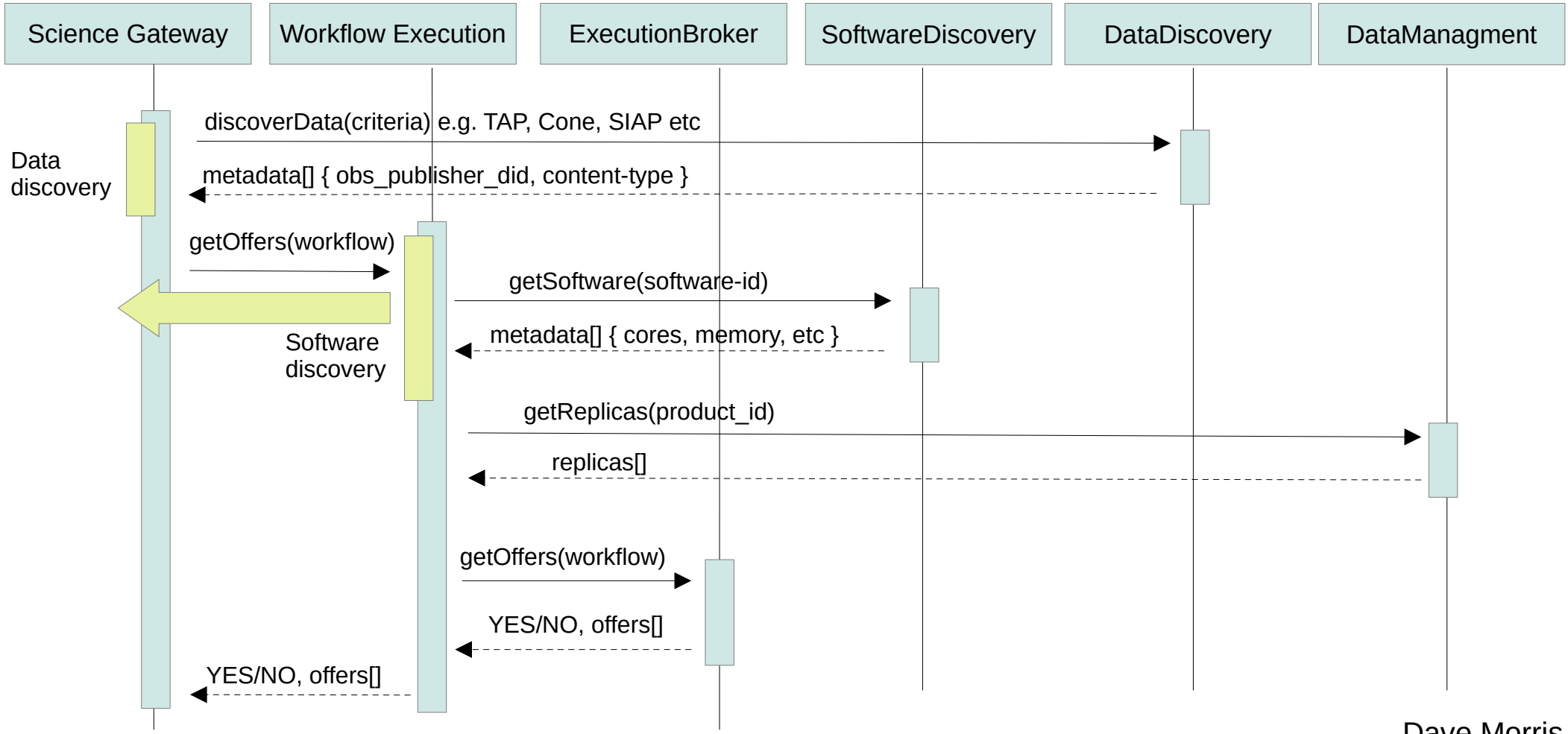
Key change is to move software discovery step from WorkflowExecution into Science Portal

From this:



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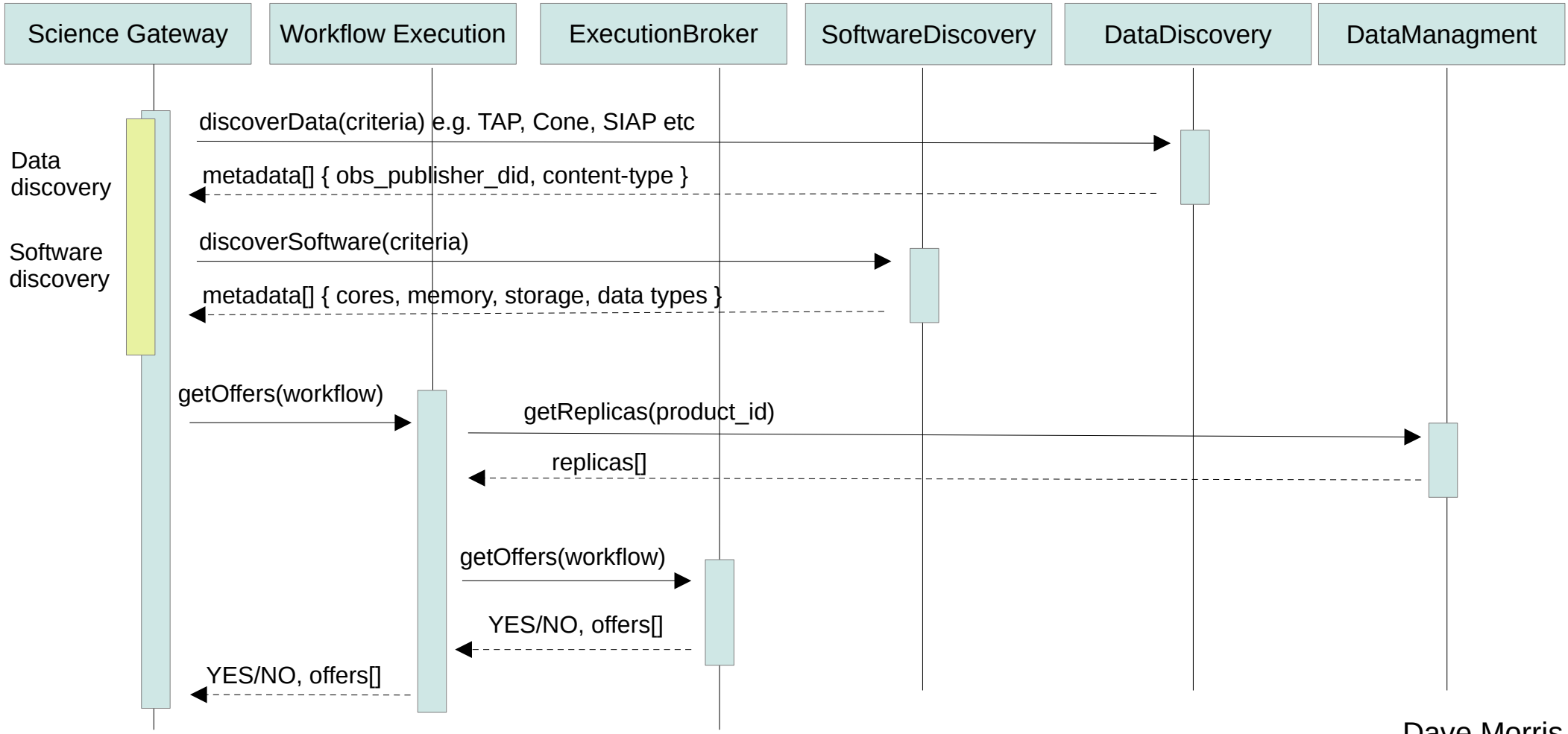

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