



DIRECTIONS 4 PARTNERS



DIRECTIONS4PARTNERS VIRTUAL 2020

3-5 November 2020

AUTOMATING AND EXTENDING AZURE DEVOPS



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COSMO CONSULT

Business-Software for People



Pipelines: Continuous integration and delivery



Artifacts: Create and share packages



Boards: Manage, structure and control your work

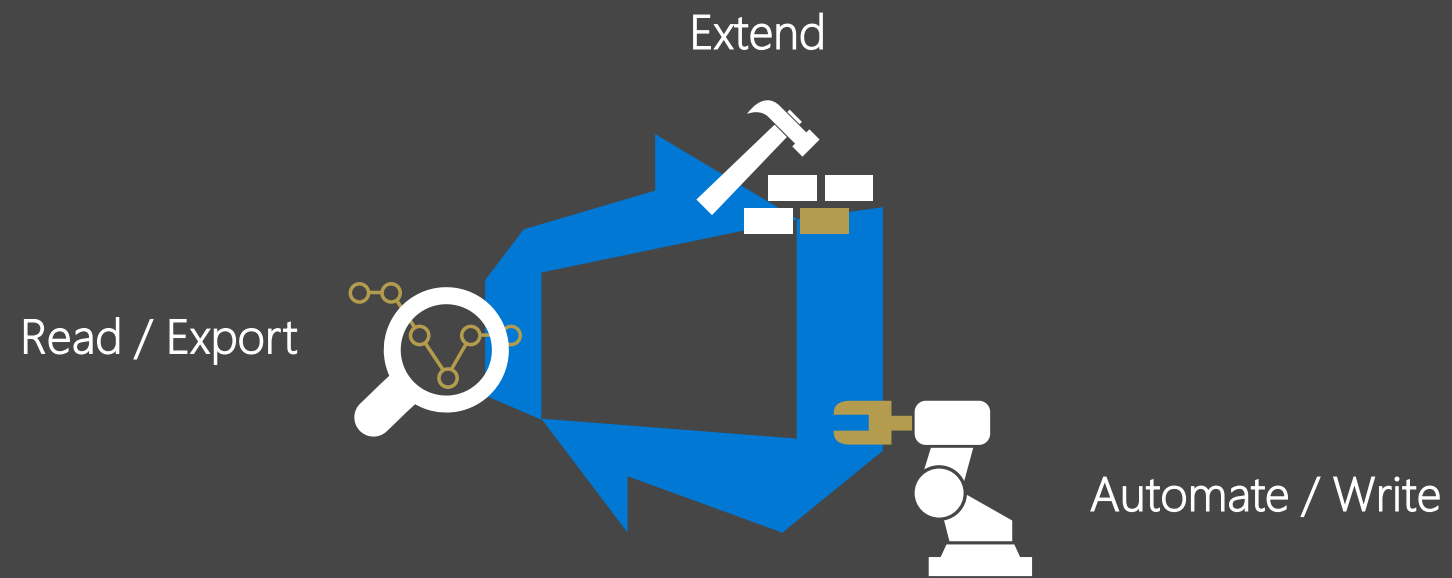


Test plans: Manual and exploratory testing



Repositories: Version control your code





READ / EXPORT

Get data out of Azure DevOps

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REST API

- Read data as JSON
- Queries, individual WorkItems, hierarchies...
- Quick and easy

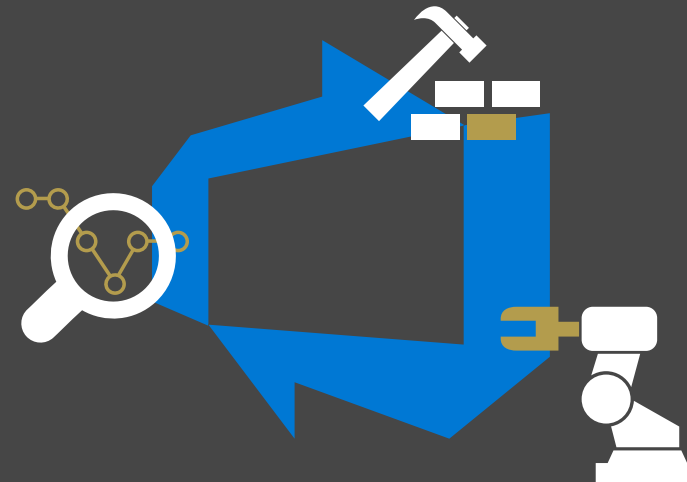
.NET CLIENT LIBRARY

- Read data as objects
- (Almost) same options as with REST API
- A bit more setup, but more powerful

OFFICE INTEGRATION

- VERY simple
- Less flexibility, but if it can do what you need, then go for it

Read / Export



Extend

EXTEND

Make Azure DevOps do something that it couldn't do before

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-

MARKETPLACE

- Store of mostly free and often open source extensions
- Used by Microsoft to get feedback on new features (DevLab)

CREATE YOUR OWN

- HTML / TypeScript / React / SASS
→ A typical web development stack
- Do whatever you want (as long as it works in a browser)

Automate / Write

AUTOMATE / WRITE

Bring data into Azure DevOps
Automate manual steps, e.g. setup
Automate „workflows“ by calling other systems

-
-

REST API / .NET CLIENT / OFFICE

- Similar as before

SERVICE HOOKS

- React to events in DevOps (WorkItem created, code committed, build failed...)
- Execute predefined actions for a list of services
- Call an arbitrary endpoint which in turn can do something else



READ / EXPORT

Get data out of
Azure DevOps



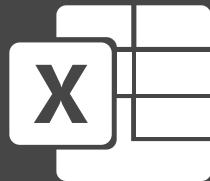
REST API

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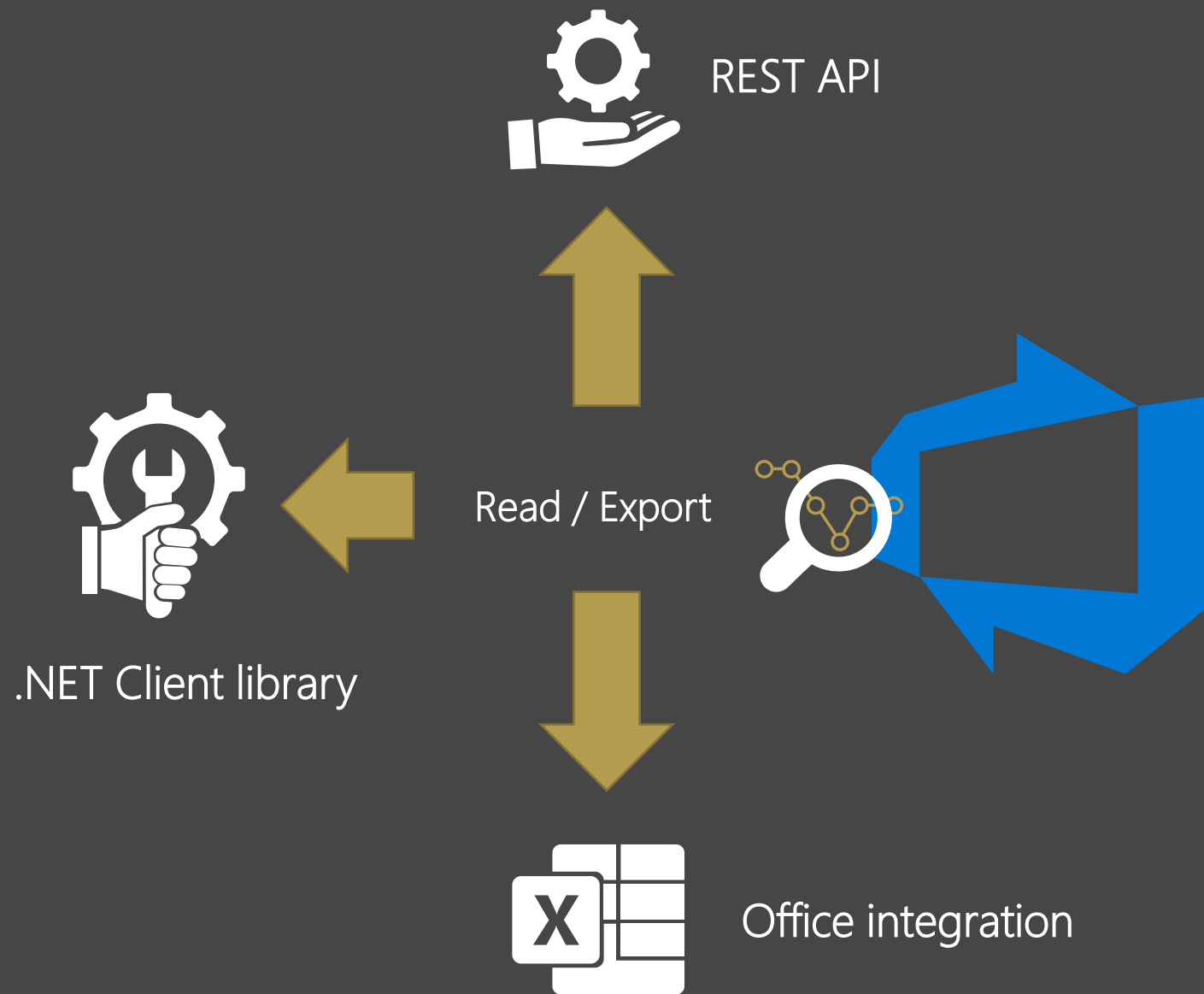
.NET CLIENT LIBRARY

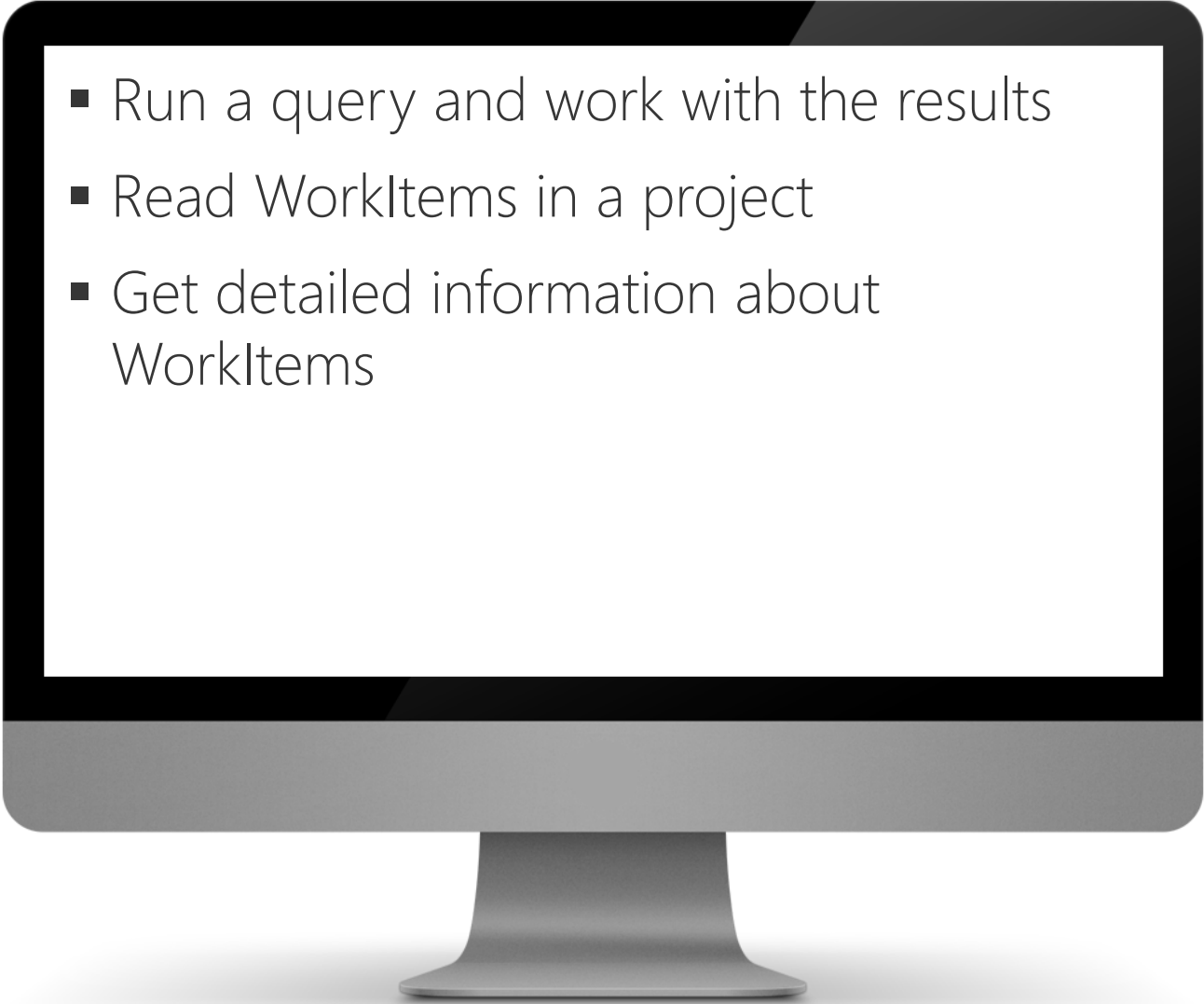
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- Run a query and work with the results
 - Read WorkItems in a project
 - Get detailed information about WorkItems

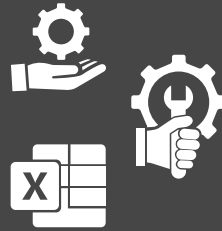
DEMO

- <https://docs.microsoft.com/en-us/rest/api/azure/devops>
- <https://developer.microsoft.com/en-us/azure-devops/develop/extensions>
- <https://github.com/microsoft/azure-devops-dotnet-samples>



AUTOMATE / WRITE

Bring data into Azure DevOps
Automate manual steps, e.g. setup
Automate „workflows“ by calling
other systems

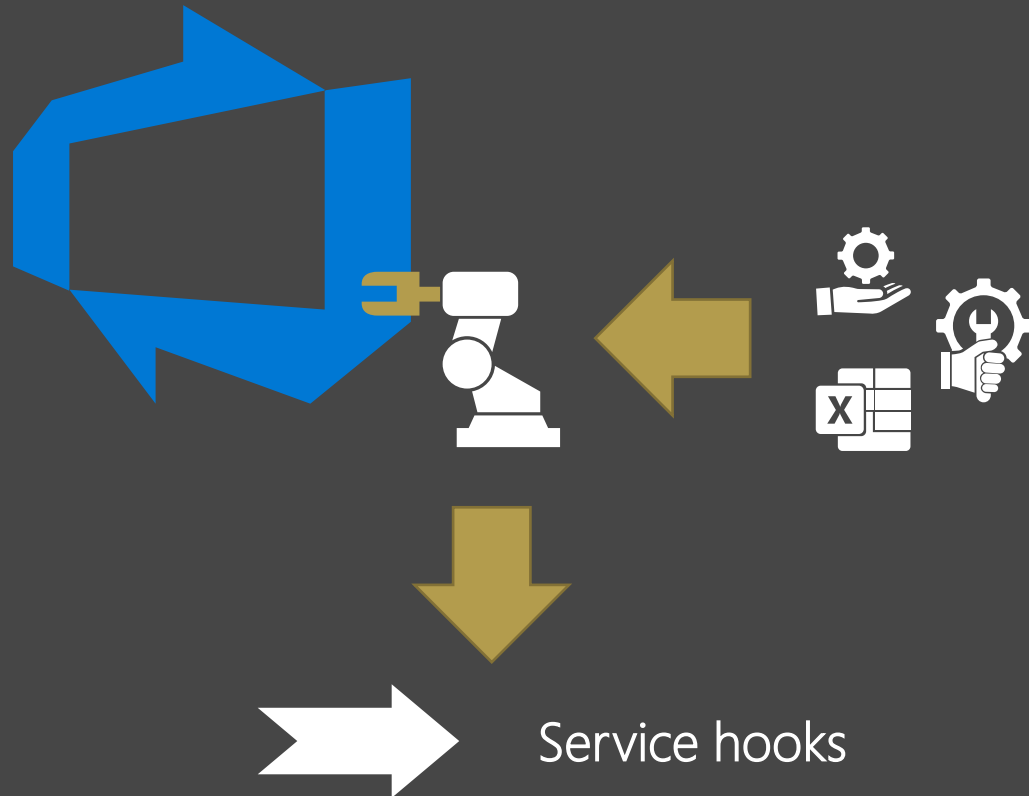


REST API / .NET CLIENT / OFFICE

- Similar as before

SERVICE HOOKS

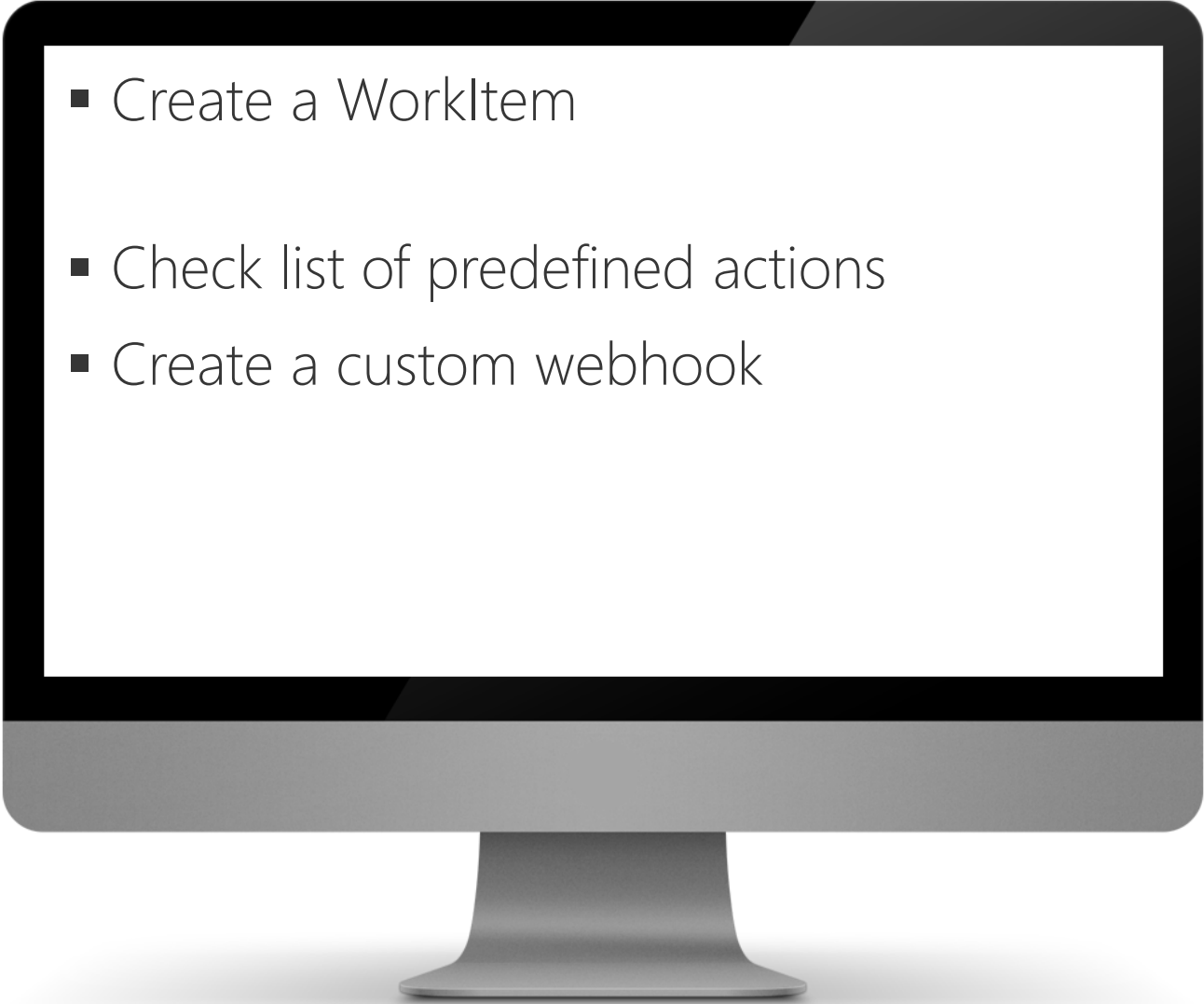
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- Execute predefined actions for a list of services
- Call an arbitrary endpoint which in turn can do something else



REST API /
.NET Client /
Office

Service hooks



- 
- A computer monitor with a black bezel and a grey base. The screen is white and displays a list of three items, each preceded by a small square bullet point.
- Create a WorkItem
 - Check list of predefined actions
 - Create a custom webhook

DEMO



EXTEND

Make Azure DevOps do something
that it couldn't do before



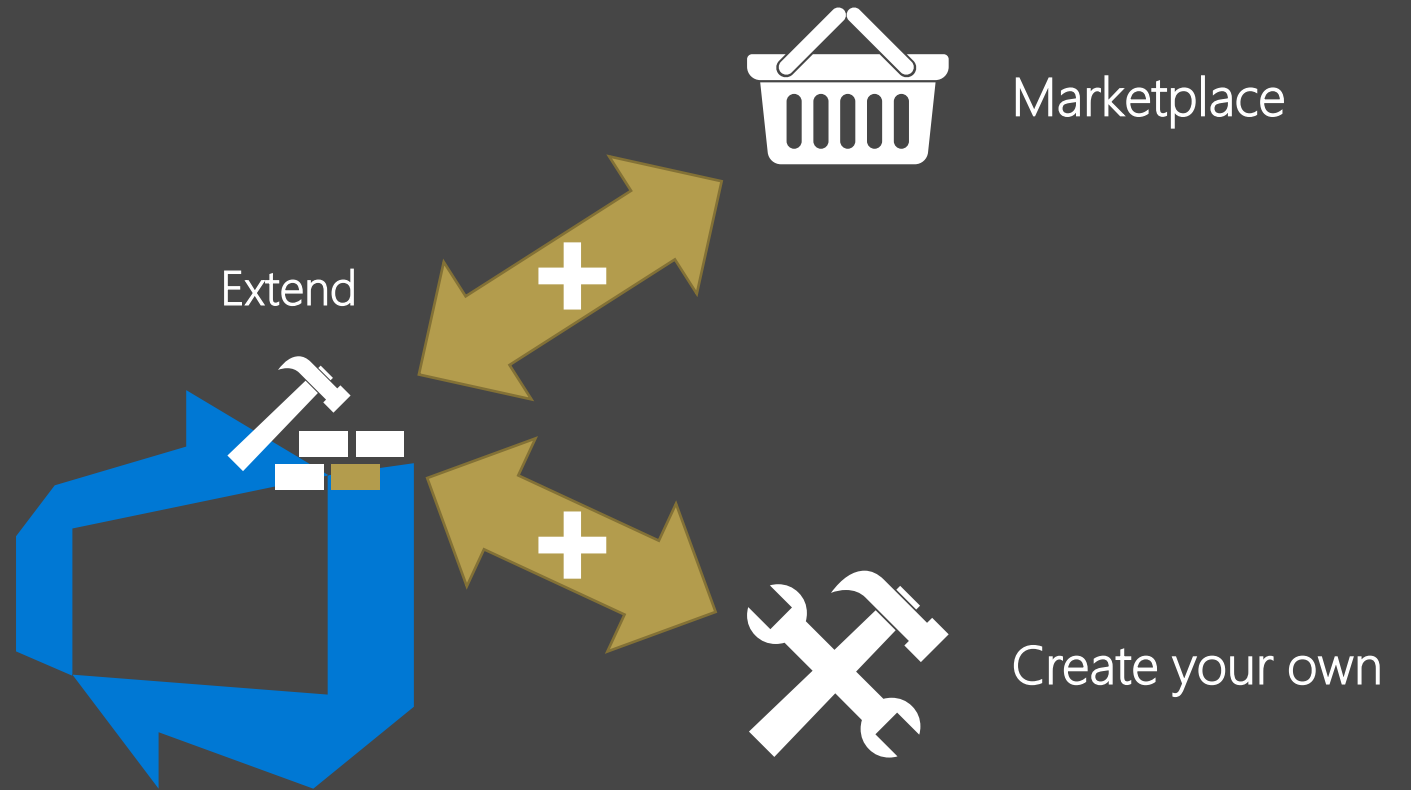
MARKETPLACE

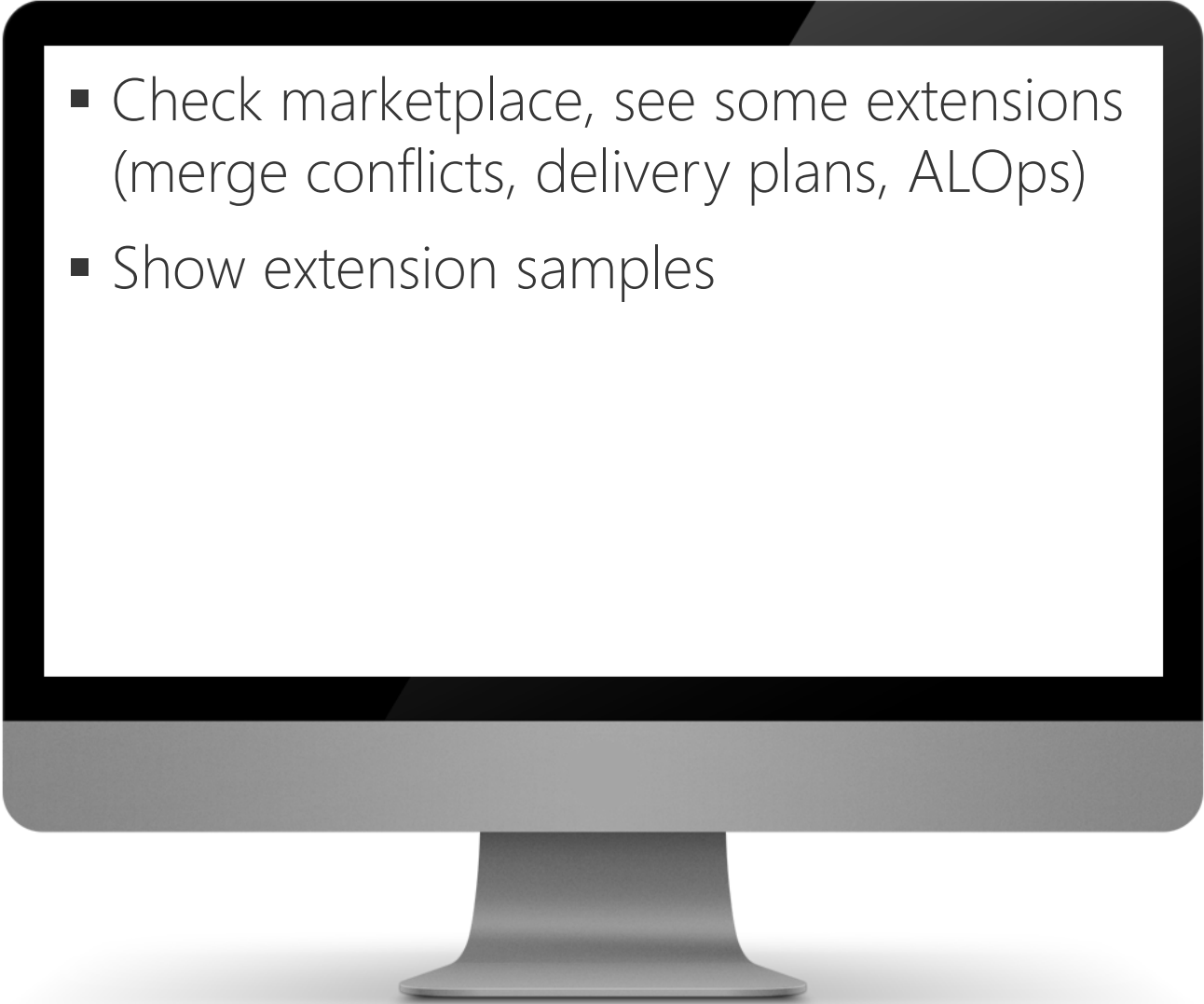
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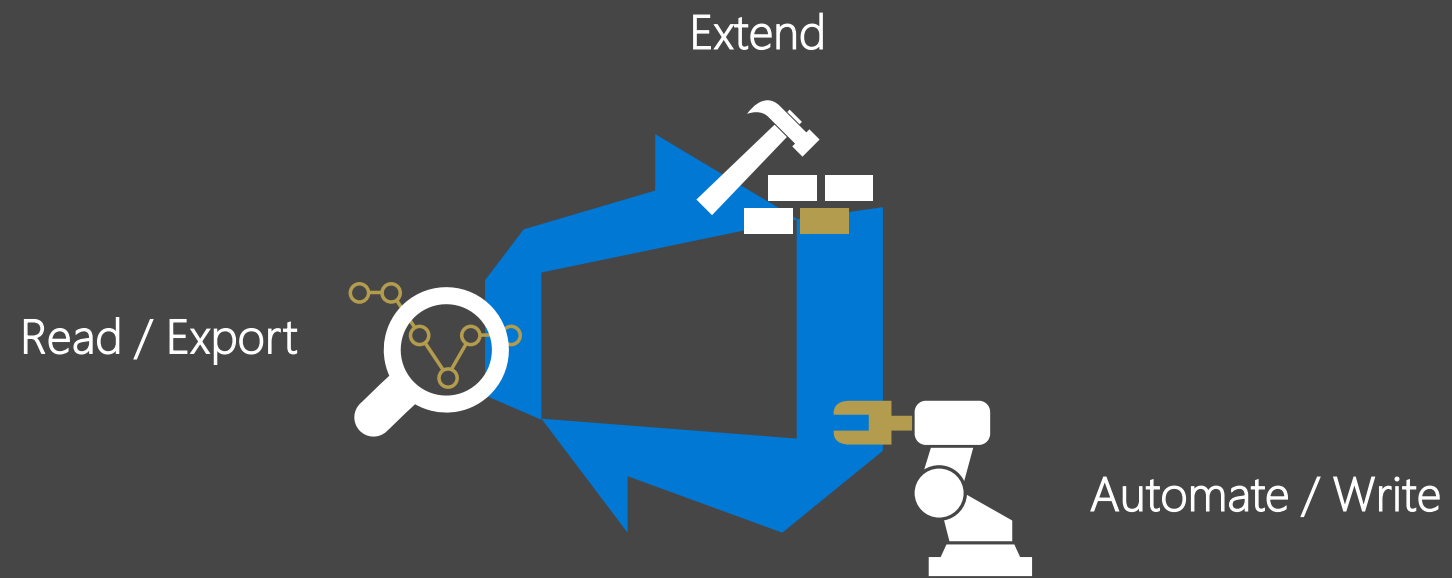


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- Check marketplace, see some extensions (merge conflicts, delivery plans, ALOps)
 - Show extension samples

DEMO

- <https://marketplace.visualstudio.com/azuredevops>
- <https://docs.microsoft.com/en-us/azure/devops/extend/overview>
- <https://docs.microsoft.com/en-us/azure/devops/extend/develop/samples-overview>







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THANK YOU
FOR YOUR TIME



Directions4Partners Virtual 2020

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