Industrial Edge

App udvikling til Edge

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Dagens værter

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Agenda

- Industrial Edge oversigt
- Flow Creator
- Udvikling af App
- CI/CD



Industrial Edge system





Global App Repository Industrial Edge Hub (Cloud) (Siemens operated) ÂÂ 5 E Industrial Edge Management (local) Local App Repository (Flexible location) Industrial Edge Core on Industrial Devices Local App Execution (In-Factory) Industrial PCs Human Machine Communication Any certified **SIEMENS** Interfaces (HMI) Hardware

Industrial Edge system

Industrial Edge Device

The Industrial Edge Runtime integrates apps of any kind in a modular, secure and scalable way into automation





Flow Creator

The Industrial Edge Flow Creator (IE Flow Creator) application is a web browser-based programming tool that works on any platform.



Advantages of IE Flow Creator application

As Industrial Edge Flow Creator is a web-based application, you can easily re-create your programs in the application as flows and deploy them simultaneously with a single click.

A built-in library allows you to save functions, templates, and flows for reuse.

JavaScript based functions can be easily created.

The flows are saved using JSON and can be easily imported and exported.

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Dashboard





Siemens Industrial Edge Development Basics

Runtime Architecture



Let's have closer look

docker



Industrial Edge applications

- Industrial Edge applications are Docker Compose-based
- Choose from a variety of programming language available
- Free choose of Linux-based docker images

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What is Docker

Docker is a platform designed to help developers build, share, and run modern applications





A Docker container image is a lightweight, standalone, executable package of software that includes everything needed to run an application: code, runtime, system tools, system libraries and settings.





Docker - Workflow



Siemens Industrial Edge App Development

Workflow

Industrial Edge Management	Install apps		Wo	Workflow	
		4	1	Create Docker- Compose application	
Apps	Upload apps		2	Build image on docker engine	
Development Workspace			3	Publish application to the Industrial Edge Management	
			4	Install application to Industrial Edge Device	
	ustrial Edge App 3				
Development Environment X	cker Engine 🐡 docker 2				
Source files Do	cker images			\square	
Source Code e.g Dockerfile my	., service1				
,	service2	Edge Device		SIEMEN	

Development Demo Web App .Net Core





CICD Continuous integration and continuous delivery



CI/CD bridges the gaps between development and operation activities and teams by enforcing automation in building, testing and deployment of applications



CICD App Development Workflow







Kontakt

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