Live Coding Session – Integration API

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Agenda

Lean data integration

Introduction to the Integration API

Live coding session: How to load data into LeanIX

Introduction to the Integration API

LeanIX | EA 19

- ✓ Easy to use REST API

- ✓ Processing rules configured once and behind the API

- ✓ Generic JSON abstracts from LeanIX data model

- ✓ Build and maintain lean connectors for external data

Available in all Editions

No extra charge

Available now

Introduction to the Integration API

Easy access to API

- No configuration needed, just send the raw data
- **One "start" call process all incoming or outgoing information**

Reliable, repeatable, auditable

- Processing is always executed as configured behind the API
- **No further tracking of potential changes of external API calls required**
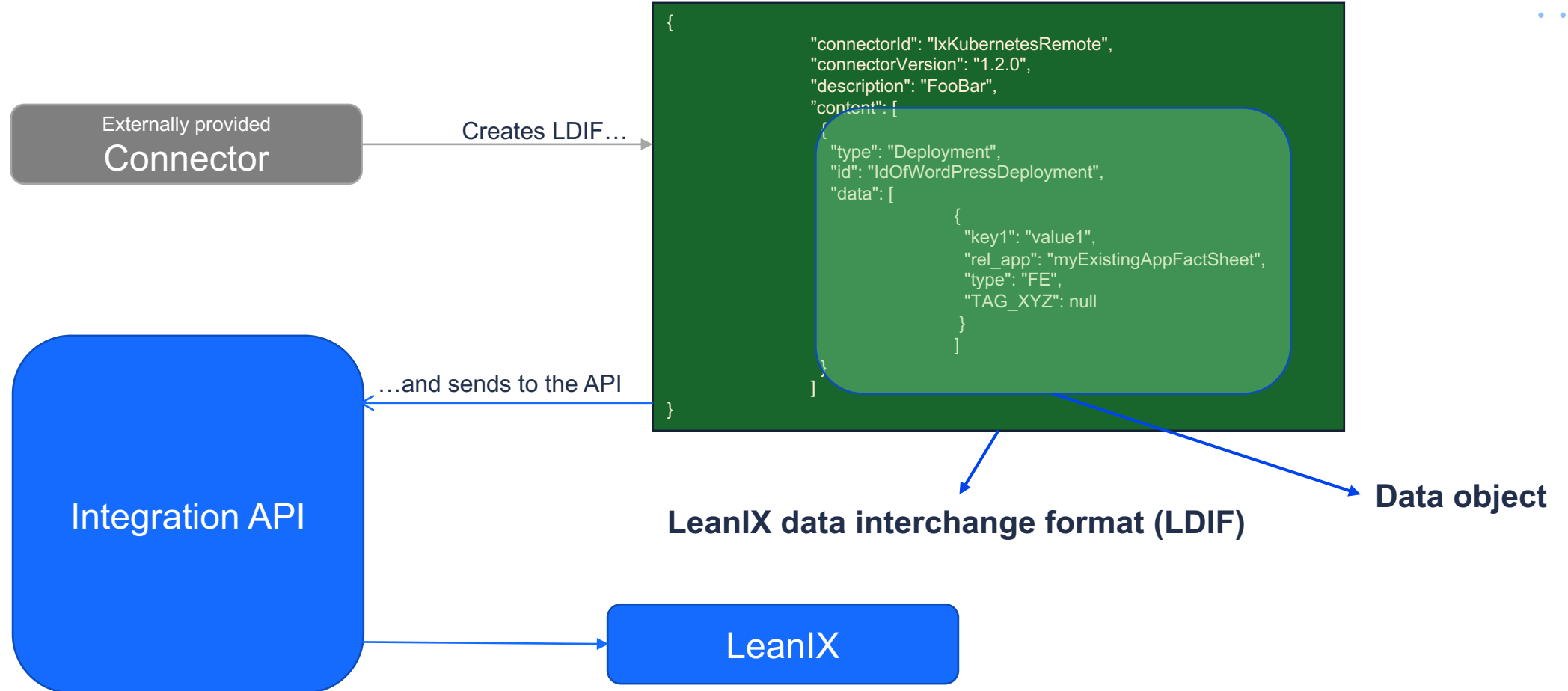
Powerful mapping and aggregation features

- Keep it simple for simple use cases
- Handle complex manipulations of incoming or outgoing data
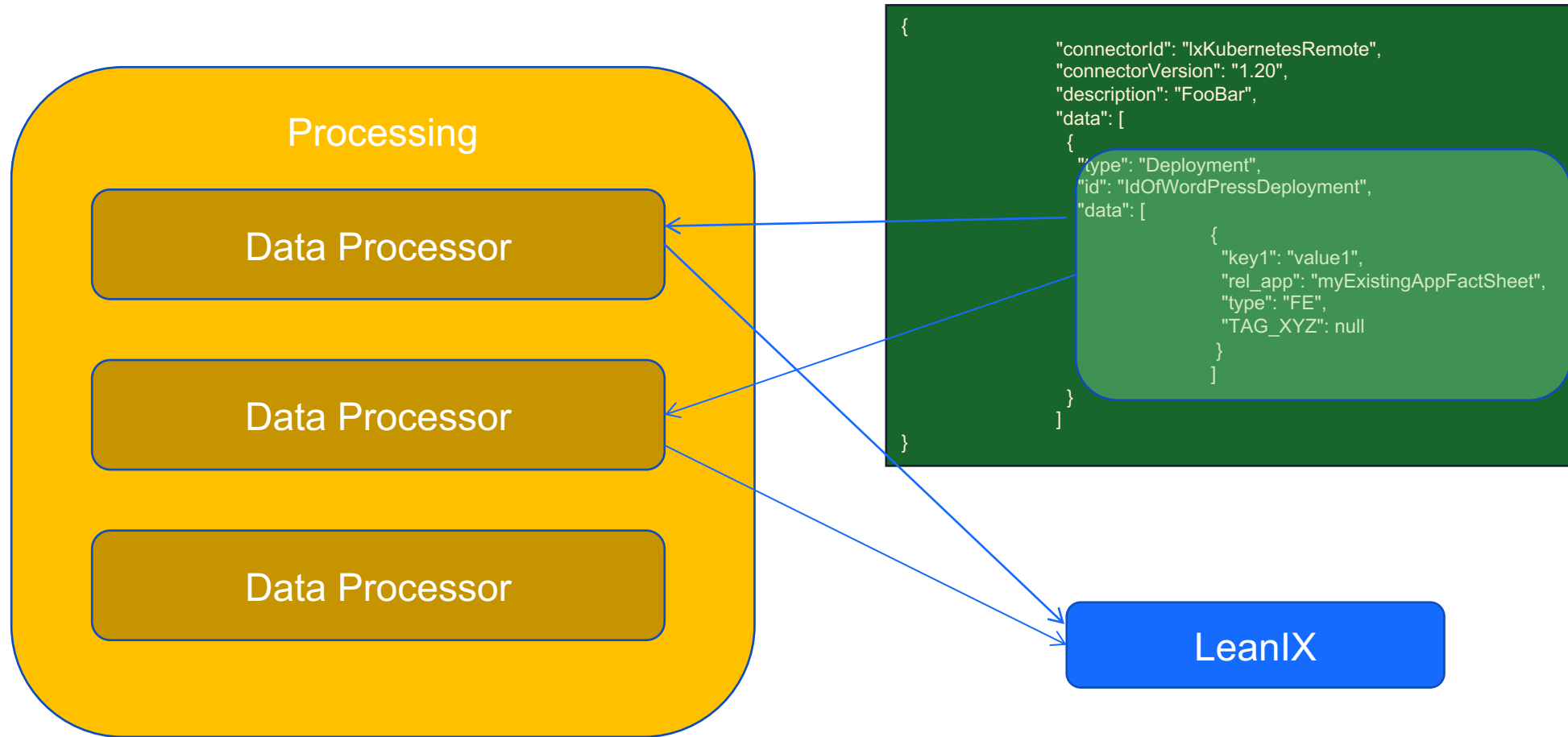- **Powerful expression-based processing**

Fully decoupled connector development

- Build small and easy to maintain connectors
- Connectors are exactly tailored to the needs
- **Focus development on the foreign system only**

Introduction to the Integration API

Externally provided
Connector

Creates LDIF…

```json
{
    "connectorId": "lxKubernetesRemote",
    "connectorVersion": "1.2.0",
    "description": "FooBar",
    "content": [
        {
            "type": "Deployment",
            "id": "IdOfWordPressDeployment",
            "data": [
                {
                    "key1": "value1",
                    "rel_app": "myExistingAppFactSheet",
                    "type": "FE",
                    "TAG_XYZ": null
                }
            ]
        }
    ]
}
```

…and sends to the API

Integration API

LeanIX data interchange format (LDIF)

Data object

LeanIX

Introduction to the Integration API

Processing

Data Processor

Data Processor

Data Processor

```json
{
    "connectorId": "lxKubernetesRemote",
    "connectorVersion": "1.20",
    "description": "FooBar",
    "data": [
    {
        "type": "Deployment",
        "id": "IdOfWordPressDeployment",
        "data": [
            {
                "key1": "value1",
                "rel_app": "myExistingAppFactSheet",
                "type": "FE",
                "TAG_XYZ": null
            }
        ]
    }
    ]
}
```

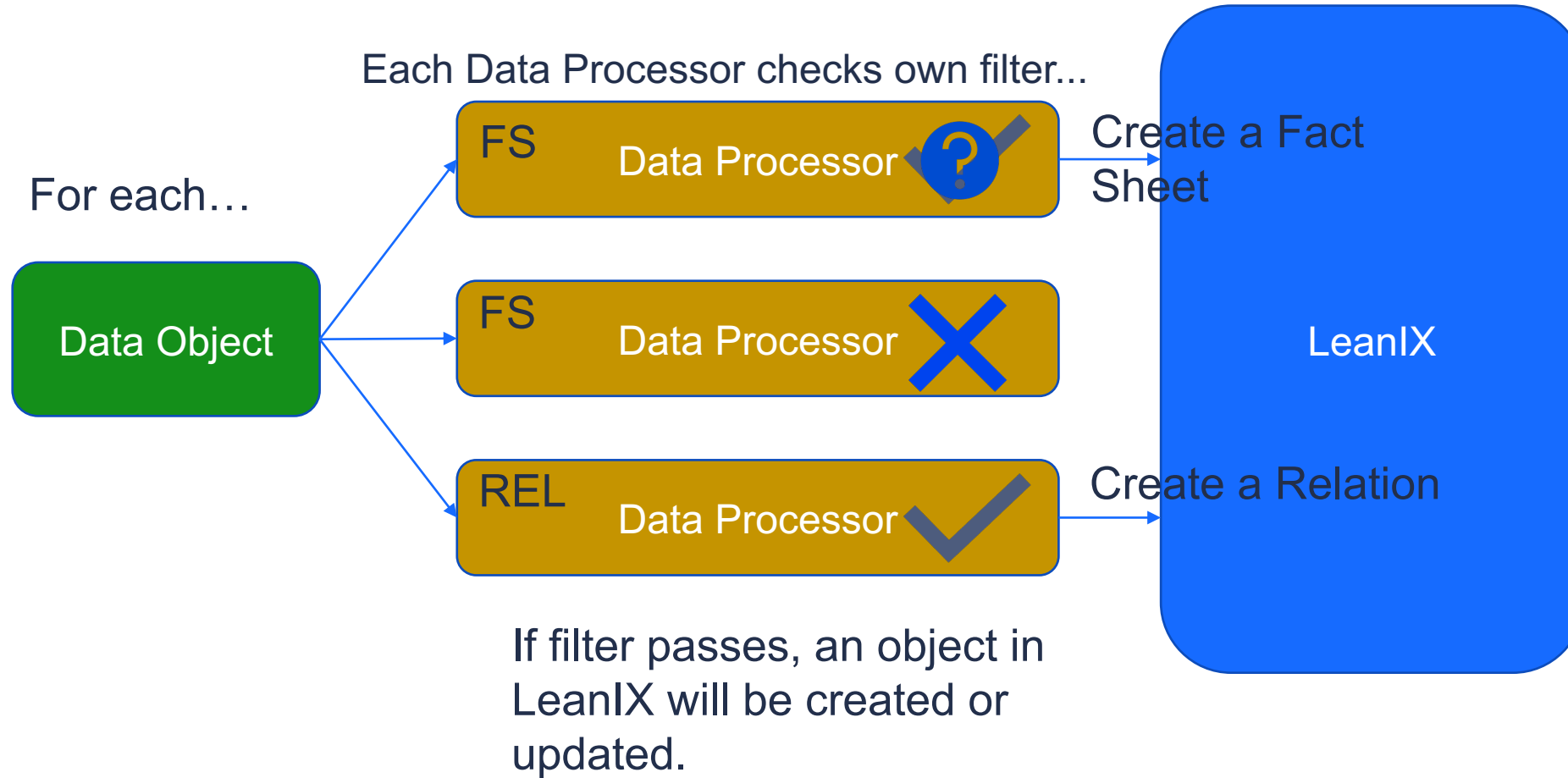LeanIX

Each processor creates or updates one entity in LeanIX (if the filter matches)

Introduction to the Integration API

Each Data Processor checks own filter...

For each…

Data Object

FS **Data Processor** ?

Create a Fact Sheet

FS **Data Processor** ✗

LeanIX

REL **Data Processor** ✓

Create a Relation

If filter passes, an object in LeanIX will be created or updated.

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The task:

- Load some process data from an external system

- The data has already been converted to LDIF

How we will solve:

- Write some configuration behind the Integration API

- Write some JAVA code to call our API

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```json
{
    "connectorType": "loadProcess",
    "connectorId": "powerSession",
    "connectorVersion": "1.0.0",
    "lxVersion": "1.0.0",
    "processingDirection": "inbound",
    "description": "Imports Projects from default project connector",
    "content": [
        {
            "type": "prc",
            "id": "123-456",
            "data": {
                "displayName": "HR_Hiring",
                "owner": "0007",
                "processDescription": "My full description of the hiring process.",
                "internalDescription": "There is some additional information we want to document here.",
                "startActive": "09.08.2019",
                "flags": [
                    "anyFlag",
                    "User_US-West",
                    "User_US-East"
                ]
            }
        },
        {
            "type": "prc",
```

Live coding session

Requirements

- Load the processes as "Process Fact Sheet"

  - Name will be the "displayName" of the process plus the "id" in brackets

- Map "processDescription" to Description field

- Append the "internalDescription" to the Description field

- Lifecycle "Active From" needs to be set based on input field "startActive"

- Each process starting with name "HR_" needs to be a child of a process "Main HR Process"

- All Processes with a flag "User_XXX" will need a "uses" relation to the corresponding user group "XXX"

- Replace the owner (referenced by id) with the real name and write to alias field using this mapping: 0007=James@leanix.net", 4711=Paul@leanix.net, 0815=Mary@leanix.net

Thank you!
Any questions?

EA CONNECT DAYS 2019

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Bonn

Use last slide if want to promote next webinar/conference you will take part