

Collaboration Meeting

IMBT/TVFA & BioMech

12th March 2021

The project team

Prof. Markus Krüger

Head of institute

Project owner and supervisor

Jakob Harden

Junior scientist

LabNDB project management,
IT-support

Lukas Briendl

Junior scientist

Support and knowledge for material
database

Matthias Lenz

Laboratory manager

Support for laboratory processes and
workflows, quality management, IT-support

Laboratory Notebook and Database

LabNDB

Who are we?

Institut für Materialprüfung und Baustofftechnologie mit angeschlossener
TVFA für Festigkeits- und Materialprüfung, IMBT/TVFA [2060]
Institute of Technology and Testing of Construction Materials

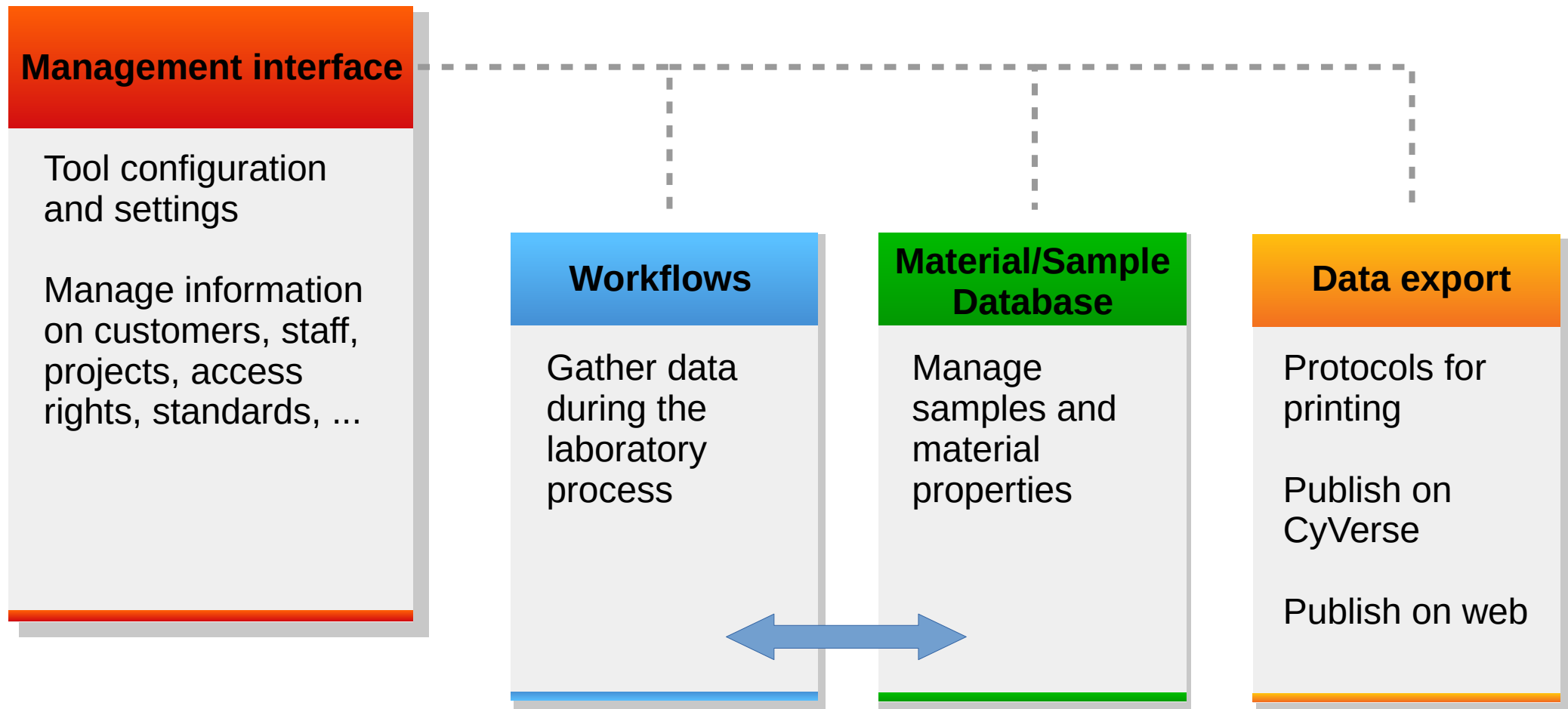
How to get in contact with us?

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Homepage: <https://www.tugraz.at/institute/imbt-tvfa/home/>

Where are we?

Inffeldgasse 24/I, 8010 Graz, Austria
Campus Inffeldgasse - BTZ

Requirements



Management interface

Mandatory	Optional	Future development
<ul style="list-style-type: none">• Project information• Staff information• Customer information• Workflow manager• Material/sample manager• Data export manager• Basic config/settings	<ul style="list-style-type: none">• Test standard manager• Test device manager• Document manager• Basic QM integration• Enhanced config/settings	<ul style="list-style-type: none">• Full QM integration• Full config/settings

until end of 2021

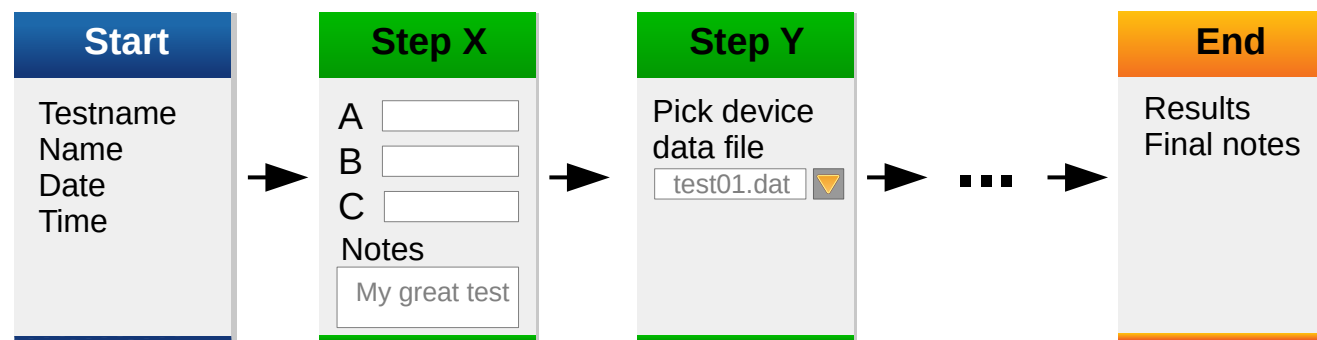
next 5 years (+)

Workflows

Mandatory	Optional	Future development
<ul style="list-style-type: none">General process informationGather test data step-by-step along the processSI unit integrationTest standard integrationBasic QM integration	<ul style="list-style-type: none">Device data uploadPhoto uploadTest standard readerElevated QM integration	<ul style="list-style-type: none">Read data from test devicesIn-place analysis of test dataFull QM integration

← until end of 2021

next 5 years (+) →

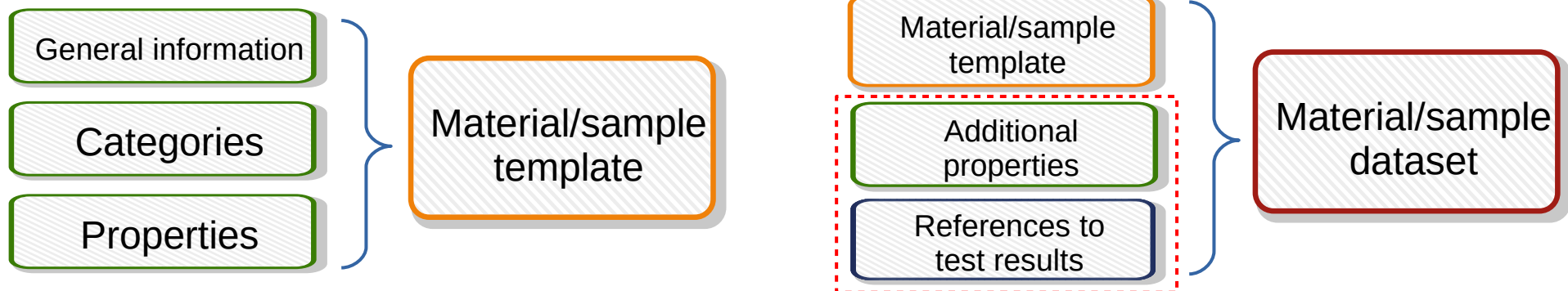


Material/sample database

Mandatory	Optional	Future development
<ul style="list-style-type: none">General informationCategorizationMaterials and samples are defined by a set of propertiesAdditional propertiesSI unit integration	<ul style="list-style-type: none">Basic data analysisReferences to test resultsAdd datasheets (PDF)Basic data aggregation	<ul style="list-style-type: none">Data aggregationData analysis

← until end of 2021

next 5 years (+) →



Data export

Mandatory	Optional	Future development
<ul style="list-style-type: none">Workflow dataMaterials/sample dataFile formats: HDF5, NetCDFTarget: local storage, CyVerse upload	<ul style="list-style-type: none">Additional file formats: PDF, CSV	<ul style="list-style-type: none">Aggregated dataAnalysis dataAdditional target: publish on web

until end of 2021

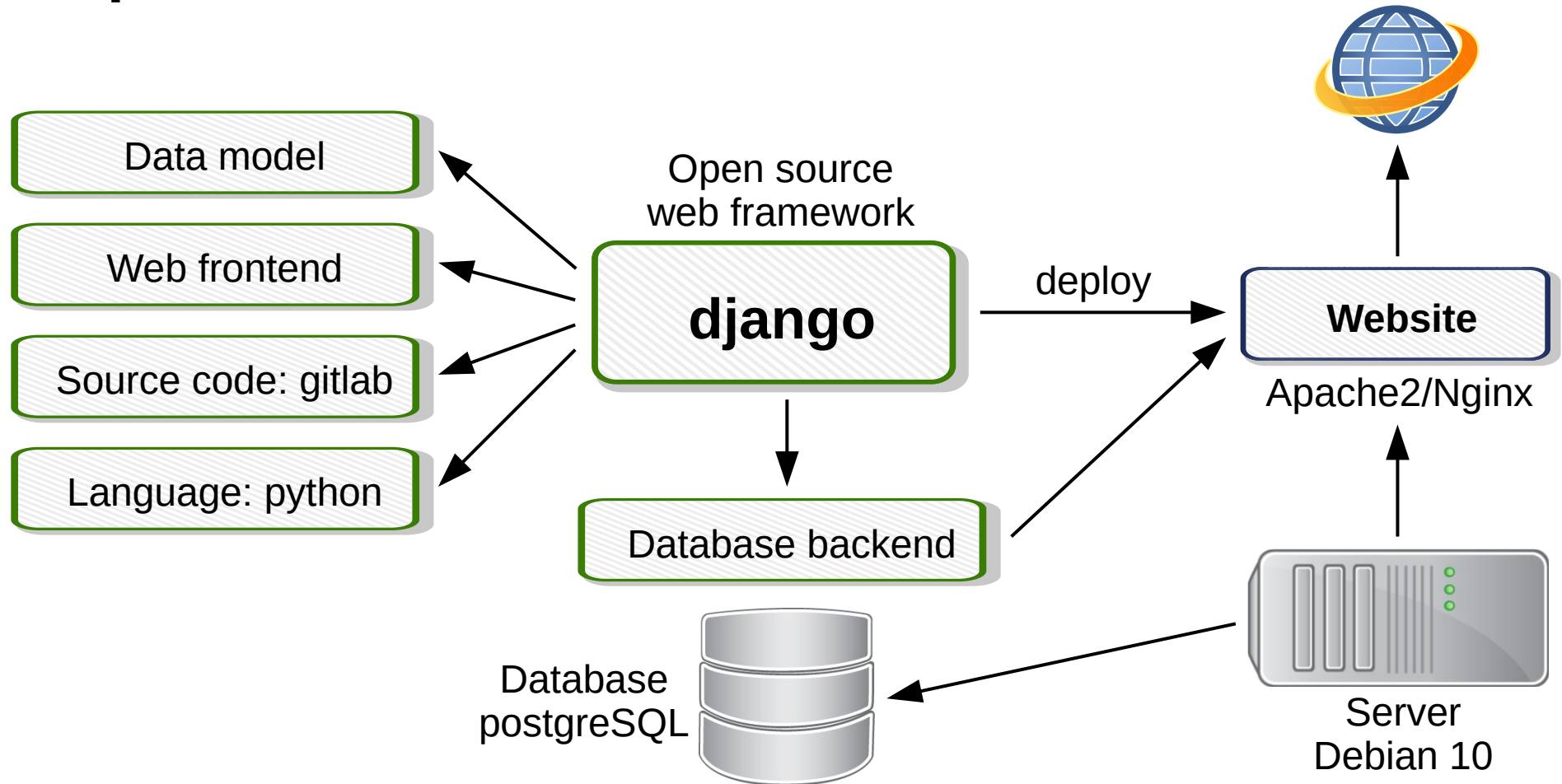
next 5 years (+)



HDF5, NetCDF, PDF, CSV



Development tool chain



Laboratory Notebook and Database

LabNDB

Document usage

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