## UiPath 2021.4 FTS Release Partner Technical Mastermind AMER & EMEA

Session 2 of 6: Al Center and Document Understanding The webinar will start soon!

29 Apr 2021



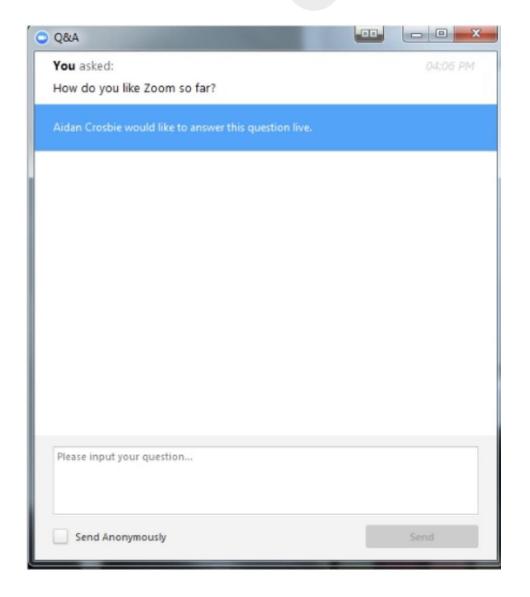


#### **Quick Housekeeping notes**

- Please enter your question in the Q&A box.
- We will address the questions along the way, at the end of the presentation or by follow up email.

#### FAQ: Is this webinar recorded?

Yes, this session is recorded and will be posted on the same page where you registered for attending.



#### 21.4 FTS Partner Enablement Plan



#### Here's a quick look at our schedule





#### **Desktop Products**

Explore the latest features of the Studio family, Robots and the UiPath Assistant

April 27, 2021 3:00pm GMT

Register Now →



#### AI/ML

Enhance your automations with Al

April 29, 2021 3:00pm GMT

Register Now →



#### **Test Suite**

Find out about the latest features on RPA and Software testing

May 4, 2021 3:00pm GMT

Register Now →



#### **Apps, Activities, Connectors**

Start deliver engaging experience using UiPath's low code-app builder

> May 6, 2021 3:00pm GMT

Register Now →



#### **Process Understanding**

Al-powered discovery and prioritization of the most impactful automations

May 11, 2021 3:00pm GMT

Register Now →



#### **Cloud Services**

Rapid expansion of the UiPath Automation Cloud(™) capabilities

> May 12, 2021 3:00pm GMT

Register Now →

#### **Key Themes in the 21.4 FTS release**



- 01 Enterprise-scale management and governance of your automation program
- Al-powered discovery, prioritization and integrated development of the most impactful automations
- Upgrades for all user experiences from everyday business users to professional developers
- 04 Rapid expansion of Automation Cloud capabilities





#### The UiPath Platform enables the fully automated enterprise



#### **End-Users**











**Process Analysts** 

**Automation & Citizen Developers** 

**IT Operations** 

**Business Users** 

**Business Analysts** 

#### **UiPath Automation Platform**



Discover automation opportunities powered by AI and your people



**Build automations** quickly, from the simple to the advanced



#### Manage

Manage, deploy and optimize automation at enterprise scale



#### Run

Run automations through robots that work with your applications and data



#### **Engage**

Engage people and robots as one team for seamless process collaboration



Measure operations and performance to align with business outcomes

#### **Existing Applications**

servicenow





salesforce

**Example Systems of Record: On-premises and SaaS applications** 







Homegrown applications









ORACLE"



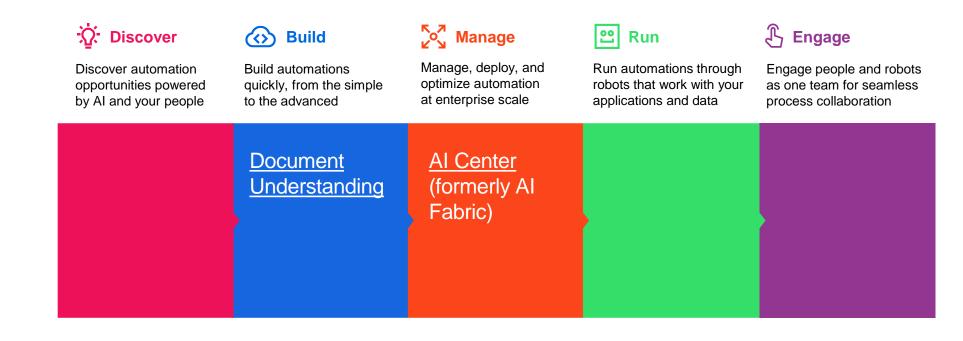








Expedite automation time-to-value and ongoing ROI across the entire lifecycle



## Al Center & Document Understanding

2021.4 Release

**Technical Webinar** 





## Al Center



#### **Al Center Agenda**



- 01 What is Al Center?
- **02** "Automate More!" and Key Differentiators
- 03 ML Overview and UiPath Starter Al Models
- 04 Al Center and Other Products
- 05 New in 2021.4 Enterprise Release
- 06 Al Center Flavours
- 07 Licensing & Pricing

#### **Al Center Agenda**





#### What is Al Center?

Define Al Center



Choose a model

Build an ML Skill in **UiPath Al Center** 

3 Drag and drop ML Skill into RPA workflows in **UiPath Studio** 







01

#### What is Al Center?

Define Al Fabric

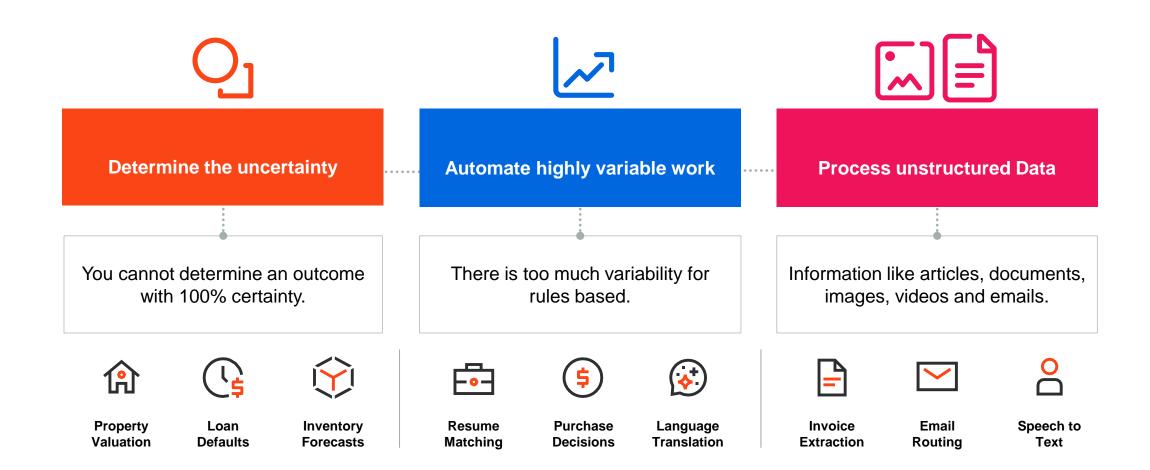
02

#### "Automate More!" and Key Differentiators

- Why you need AI in automation workflows
- What are the key differentiators

### Why do you need Al in automation workflows? Automate More!





#### **Al Center Key Differentiators**



Automate more

Bring your own models

Models from UiPath and partners

Constantly improve ML models with retraining

Multiple deployment options

Deep integration with other UiPath products





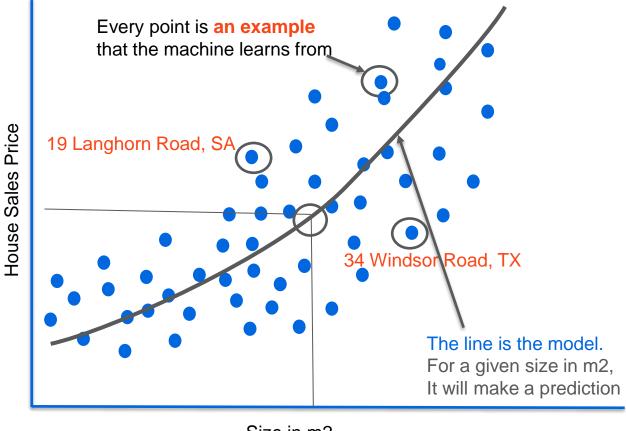
- 01
- What is Al Center?
- Define AI Center
- 02
- "Automate More!" and Key Differentiators
- Why you need AI in automation workflows
- What are the key differentiators
- 03

#### **ML Overview and UiPath Starter Al Models**

- How Machine Learning works
- What are the UiPath Starter AI models

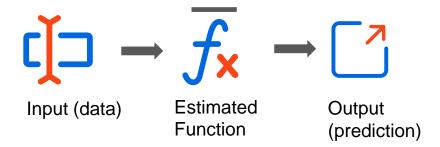
#### **How does Machine Learning work?**

Machine Learning refers to a set of approaches for estimating functions.









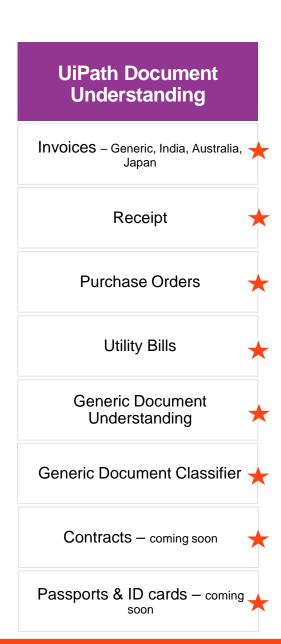
- Regardless of what function we choose, it will never fit the data perfectly.
- We won't have access to unlimited data or all the factors that influence the output (price).
- The goal is to minimize the errors that it makes.





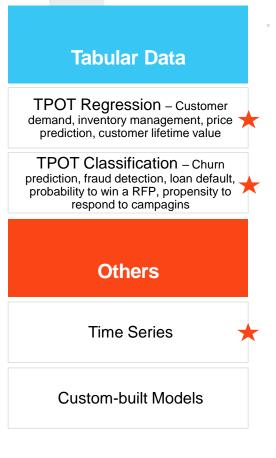
#### **UiPath Starter Al Models**





#### Language **Analysis** Text Classification - English, French, Japanese, light, multi-language Language Detection Language Translation - English to French, English to German, English to Russian, German to English, Russian to English Named Entity Recognition retrainable version coming soon Sentiment Analysis

#### Language Comprehension **Question Answering** Semantic Similarity Text Summarization **Image Analysis** Image Moderation – Explicit, explicit-drawing and more Object Detection - People, masks, products, parcels



vehicles, animals, accessories, furniture, appliances, etc and custom objects:

Image Classifier - Coming soon

#### **Al Center Agenda**



01

#### What is Al Center?

- Define AI Center
- 02

#### "Automate More!" and Key Differentiators

- Why you need AI in automation workflows
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- 03

#### **ML Overview and UiPath Starter AI Models**

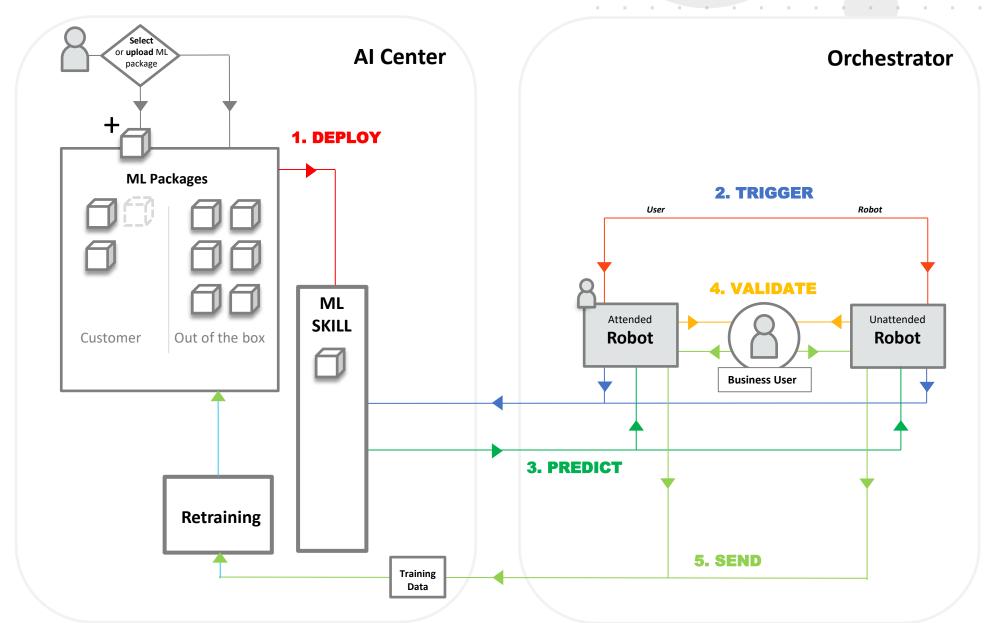
- How Machine Learning works
- What are the UiPath Starter Al models
- 04

#### **AI Center and Other Products**

How AI Center interacts with other products

#### **Al Center and Other UiPath Products**





#### **Al Center Agenda**



What is Al Center?Define Al Center

03

05

- **102** "Automate More!" and Key Differentiators
  - Why you need AI in automation workflows
  - What are the key differentiators
  - Al Fabric and Other Products
    - How AI Fabric interacts with other products
- **ML Overview and UiPath Starter Al Models** 
  - How Machine Learning works
  - What are the UiPath Starter Al models
  - New in 2021.4 Enterprise Release
    - What's new in Al Center

#### Al Center – what's new for 2021



Jan	Feb	March	April	2021.10
Cloud rebranding  Starting Jan 27, 2021, the AI Center cloud environment will use the new name.  Product page, top webpages, blogs, demo videos, Academy course, documentation pages are updated with the new AI Center.	On Feb 1, we released a new patch, which includes,  Private AKS installation support  Use CV services  ML package import and export across different instances  Streamlined on-prem installation  Added ML Classifier model; Updated existing DU models to the latest version and base images  Infrastructure migration from GCP to Azure  New cloud instance — Australia  Task Mining integration  Cloud- Make ML skill public — DU only	Multi-language text classification ML model  Time series ML model  Make ML skill and datasets public  ML Services Activities pack - preview	Fully automated continuous retraining (cloud only)  ML package import/export across instances (on-prem only)  On-prem disaster recovery of your Al Center instance  New cloud instance – US  Improved experience for configuring pipeline parameters  Undeploy an ML skill if it is not active	Community edition  Model marketplace  SOC2 type 1 certification – cloud only (this will be out before 21.10)  Migration between single-node and multi-node  Deploy to a customer's existing Kubernetes cluster  Multi-region GEO support – more geos  Continuous retraining – on-prem

#### **New in 2021.4 Enterprise Release**



- Fully automated continuous retraining (cloud only)
- Auto-undeployment of ML Skills if inactive for a certain period of time
- Improved experience for configuring pipeline parameters
- Hybrid Deployment mode (cloud Al Center + on-prem Orchestrator)

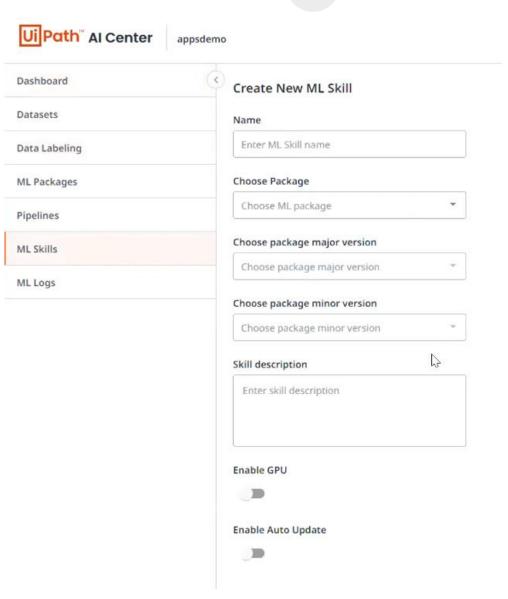
- Backup/restore of data across instances (on-prem only)
- Disaster recovery of your AI Center instance (on-prem only)
- New cloud instance US
- Performance improvements to DU models

#### Fully automated continuous retraining (cloud)

Ui Path Reboot™ Work.

- Enables automatic deployment of new versions of an ML package, thus unlocking a fully automated continuous learning loop
- Does not currently have an option to configure custom conditions such as automatically deploying a new package version if the evaluation score is over a certain threshold – planned for the future

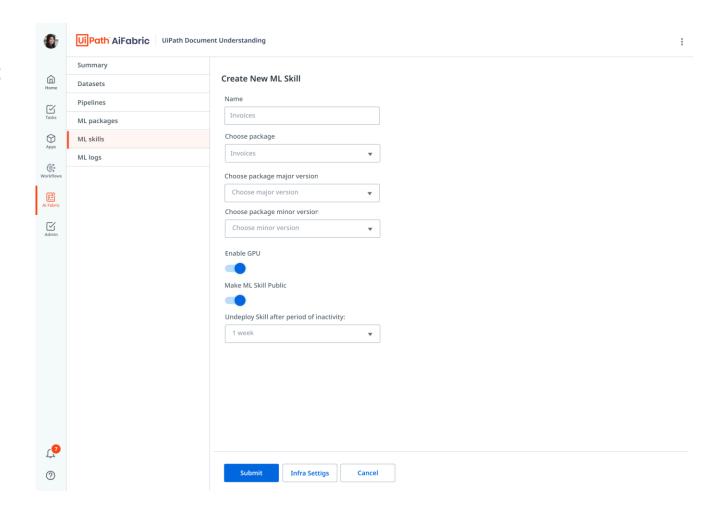
- Available in 2021.4 in the cloud, for non-DU models
- Available in 2021.5 in the cloud, for DU



#### **Auto-undeployment of ML Skills**



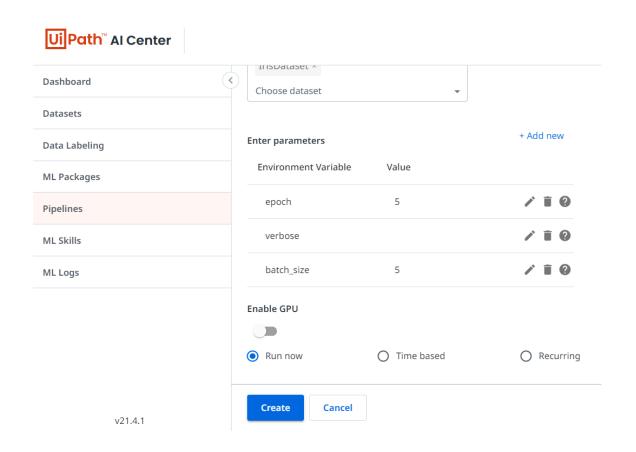
- Optimizes your resources so you are not taking up valuable licenses or infrastructure when not needed;
- ML Skills will automatically be undeployed after a period of inactivity;
- Instead of being fully deleted, after the inactivity period the skill will go to STOPPED state. This state means that pods are removed (no resource consumed) but the Skill is still there, so you cannot use the name with another Skill;
- Users can customize their period of inactivity for a Skill via a dropdown;
- Only enterprise users will have the option to keep their Skill deployed forever;



## Improved experience for configuring pipeline parameters

Ui Path Reboot™ Work.

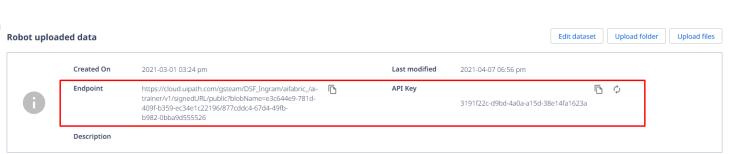
- Having auto-generated parameters in the UI for training different models will make it easier to provide a great user experience without coding;
- No need to remember or to search for the parameters for a particular model anymore – they will now be pre-populated;

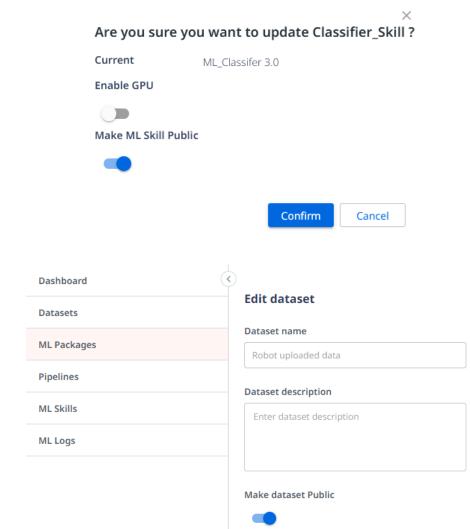


#### Hybrid deployment mode

Ui Path Reboot® Work.

- You can now use cloud AI Center with on-prem Orchestrator;
- Robot can be connected to on-prem Orchestrator and can call ML Skills and upload data to a Dataset using the public endpoints set up in cloud AIC;





#### **Al Center Agenda**



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  - How AI Fabric interacts with other products
- 04 ML Overview and UiPath Starter Al Models
  - How Machine Learning works
  - What are the UiPath Starter Al models
- New in 2021.4 Enterprise Release
  - What's new in Al Center
- 06 Al Center Flavours
  - Discover the newest AI Center deployment options
  - Differentiate between single-node and multi-node installation types

#### **Al Center Flavours**



	Cloud	On-Prem	On-Prem Air-gapped	Hybrid (cloud AIC + on-prem Orch) (NEW)
Deployment	Deploy, manage and improve ML models on <b>UiPath Automation Cloud</b>	Deploy, manage and improve ML models <b>locally</b>	Deploy, manage and improve ML models <b>locally</b>	Deploy, manage and improve ML models on <b>UiPath Automation Cloud</b>
Infrastructure	None. No maintenance.	Customer-managed	Customer-managed	Orchestrator infrastructure and maintenance
Uptime guarantee for enterprise version	Yes	No	No	Yes
Patches	Frequent patches with new features and bug fixes, in accordance with the Cloud Platform release cadence	Patches released with much slower cadence	Patches released with much slower cadence	Frequent patches with new features and bug fixes, in accordance with the Cloud Platform release cadence
Installation & Management	No installation	<ul> <li>Easy installation due to the automatic retrieval of installer &amp; artifacts from the internet</li> <li>Easy management as updates to AIC and/or models can be automatically downloaded</li> </ul>	All resources must be manually downloaded and then loaded in the node. Thus:  • More difficult to install  • More difficult to manage	No installation
Metering	DU metering done in UiPath Cloud	DU metering done in UiPath Cloud	DU metering done in Orchestrator	DU metering done in UiPath Cloud
Internet access	Required	Required	No internet access required	Required

#### **Al Center Agenda**



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#### **Al Center Licensing & Pricing**



#### Cloud

#### Al Robot:

Runs 2 ML skills or 1 training job at a time

#### Al Robot Pro:

 Runs 2 ML skills or 1 training job at a time with GPU available

#### **On-premise**

#### Al Robot:

- Runs 2 ML skills or 1 training job at a time
- On-prem AI robots can utilize available GPUs; there's no need for a pro version

- Al Center environments (dev/test/production) are licensed in the same way.
- Al Robots are required to use Document Understanding ML models. For information, please see slide <u>Document Understanding and Al Center Licensing Dependencies</u>.
- Al Center pricing & licensing are not expected to change with the 21.4 release. For the latest pricing information, check out <u>Al Center Pricing in Highspot</u>.

# Doct

## Document Understanding



#### **Document Understanding Agenda**



- 01 What is Document Understanding?
- 02 Context for Document Understanding
- New in 2021.4 Enterprise Release (Overview)
- 04 Architectural Updates
- 05 New Features (in Detail)
- 06 Minimum Version Requirements
- Document Understanding Licensing & Consumption
- 08 DU Licensing Dependencies with Human-in-the-Loop and Al Center

#### **Document Understanding Agenda**



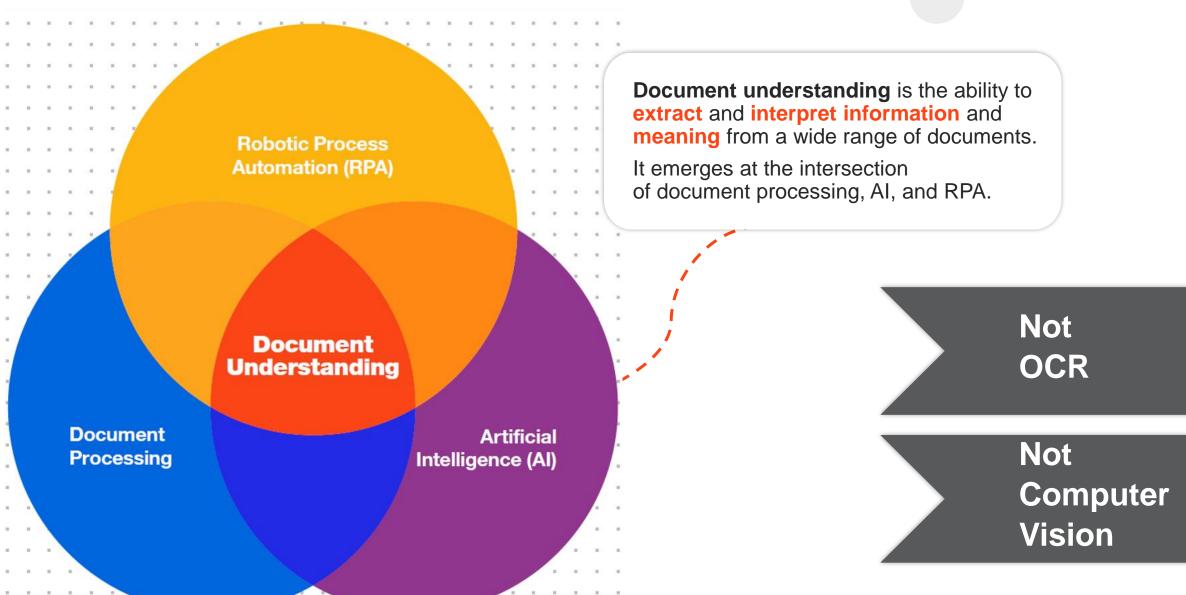
01

#### What is Document Understanding?

- Define Document Understanding
- Why Document Understanding is at the Core of RPA

#### What is document understanding?





## Document processing is a core of RPA. Why?





One of the main promises of process automation is freeing up data trapped in documents



There is no company in the world which does not deal with documents, especially in the industries like banking, finance, insurance, manufacturing, HR, public sector



Any selling process
involves repetitive
document processing
(accounts payable &
receiving, invoices, receipts,
purchase orders, shipment
tracking)

#### **Document Understanding Agenda**



01

#### What is Document Understanding?

- Define Document Understanding
- Why DU is at the Core of RPA

02

#### **Context for Document Understanding**

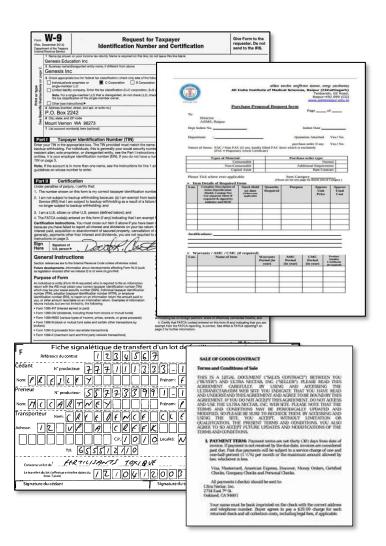
- Business Process context
- Capabilities
- Strengths and Differentiators
- Managing clients' expectations and success criteria

# Document Understanding in Business Processes



Document Understanding on its own is very rarely an end-to-end process. But instead, it is a key piece of collecting the necessary data within a larger workflow:

- Documents must be retrieved from one or more sources eg: as email attachments, downloaded from a site, exported from an application, etc.
- Extracted data must be input into subsequent applications in order to properly utilize it



# **Document Understanding Capabilities**



One of our biggest differentiators between us and a company focused solely on Document Understanding are our RPA capabilities and platform integrations.

We can look beyond data extraction, and make sure we automate the **entire** process, all while being **technology agnostic**. Our platform allows you to pick the technologies that work best for you during each step of the process.

We can leverage all kinds of technologies because of our robust strategic partnerships.

#### **EXTRACTION**

- Hybrid extraction
  - Same project can use templates and ML models
  - Multiple methods can be used to optimize results for large document sets
- Handwriting capabilities

#### Robust ML Extraction

- Custom model creation
- Out of the box models
- Retraining capabilities
- Signature detection
- Checkboxes and Radio Buttons

#### <u>VALIDATION</u>

- BIG DIFFERENTIATOR
  - We can leverage the full power of RPA to aid in all kinds of validation
  - Cross-referencing data
  - Compare data to API or database query results
  - Identifying multiple documents in an input file

#### Validation Station

- Speeds up exception handling time for humans
- Retrain capabilities with 20.10 for ML Models
- Action Center
  - Validation Station integration
  - Email notifications
  - Form building capabilities

# Why UiPath? Key differentiators



# UNIQUE [Only UiPath has it]

- ✓ End-to-end document processing automation: UiPath Document Understanding + UiPath RPA Platform
- Hybrid approach to data extraction:
   Apply various extractors even to the same field or page of a document

# COMPARATIVE [UiPath does it better than competitors]

- ✓ Processing of a wider range of documents:
   UiPath Document Understanding + Partner
   Ecosystem
- ✓ Pre-trained ML models: Invoices, Receipts in GA, Purchase Orders, Utility Bills, Invoices for India, Australia, and Japan in preview; custom model creation
- ✓ Human validation and retraining of ML models via Validation Station:
   Constantly improve the accuracy

# **Managing Expectations and Success Criteria**



The quickest way to have an unhappy customer when starting with DU is by neglecting to set and manage expectations.

Document Understanding is not magic. If done right, it can seem like it ©.

#### Sample questions to ask to ensure a good understanding of the use case:

- Do they process enough documents to warrant the costs?
- Are their documents scanned or digital?
- Are handwriting capabilities required?
- Can you access the document in the form of a file, or does the document solely exist within one of their systems?
- Do they have certain document types that account for most of their document set?
- Is an ML or template approach appropriate? Or a hybrid?
- How many types/versions of documents are expected? How many languages? Can we get sufficient samples?

#### **SUCCESS CRITERIA**

#### Success criteria will vary from automation to automation.

- For example, a handwriting vs machine printed document is going to result in different "acceptable" accuracy levels
- A new ML model might have a lower extraction accuracy at first, but results will improve over time with proper retraining
- If your process is going to have 20 different templates, understanding the time that goes into building and maintaining those vs creating and training an ML model

A large part of successful implementations comes from truly understanding their document set and what solution fits their need and their FUTURE needs as well.

- A templated approach may work in the short term, but long term an ML model may be best.
- At face value, the documents may be able to be extracted, but the larger process could cause problems down the road.

  Analyze the whole process as well as their document set.

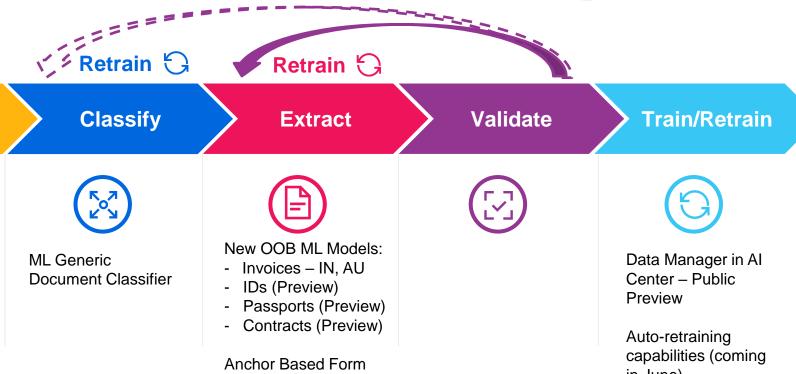
# **Document Understanding Agenda**



- 01 What is Document Understanding?
- **Document Understanding in the Hyperautomation Context** 
  - Business Process context
  - Capabilities
  - Strengths and Differentiators
  - Managing clients' expectations and success criteria
- New in 2021.4 Enterprise Release (Overview)
  - Overview of the 2021.4 new Document Understanding features
  - Enterprise Release 2021.4 additions

# New 2021.4 Features in the **Document Understanding Framework**





Load taxonomy

**Digitize** 



ML model field limit increase to 300 fields



Checkbox support for UiPath **Document OCR** 

Handwriting OCR accuracy improvements

Extractor and Intelligent Form Extractor

Support for handwritten/machine printed text mixed fields

ML Extractor Checkboxes support in June)

# Other additions in the 2021.4 Enterprise Release



- New hosting servers added in US & CA regions for all DU services
- DU Architectural updates: AIC Hybrid Mode
- Auto retraining capability of Data Manager (coming in June)
- Date parsing fix for ML extraction models
- No more limitation on the number of pages in Data Manager
- Multiple improvements and fixes for Data Manager

#### Additional features coming in preview:

- DU Process Template
- Contracts ML model (coming soon)
- IDs and Passports pre-trained data extraction ML models (coming soon)

# **Document Understanding Agenda**

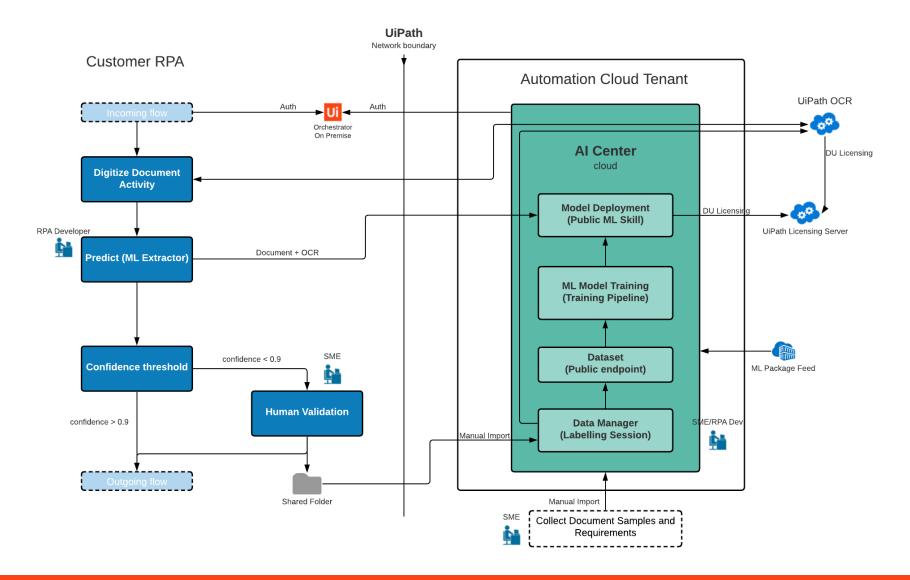


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  - Overview of the 21.4 new Document Understanding features
  - Enterprise Release 21.4 additions
- 04 Architectural Updates
  - Hybrid mode

# **DU Architecture & Metering – Hybrid mode**



#### DU 2021.4 - AIC Cloud + Orchestrator On-Prem



## **Document Understanding Agenda**



- 01 What is Document Understanding?
- **Document Understanding in the Hyperautomation Context**
- New in 2021.4 Enterprise Release (Overview)
- 04 Architectural Updates
- 05 New Features (in Detail)
  - Machine Learning Classifier
  - Anchor-based Form Extractor
  - Improved Handwritten data extraction
  - New Document Understanding ML Models in GA and Preview
  - Data Manager with new capabilities
  - DU Process Template

# Machine Learning Classifier (going GA)



- The ML Classifier is a solution consisting of a trainable ML model in AI Center paired with a Studio activity
- The classifier will be able to identify all logical documents within an input file
- A comparison between the new Classifier capabilities is shown below:
- Note: does NOT yet support document splitting

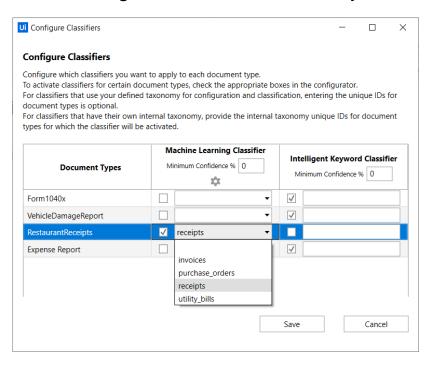
# Machine Learning Classifier - Requires a bigger dataset for initial model training - Time and effort required for initial document labeling + Can be used with fewer sample documents + Simple initial training via the embedded wizard ++ Provides a superior identification of diverse documents

## Machine Learning Classifier & Classifier Trainer



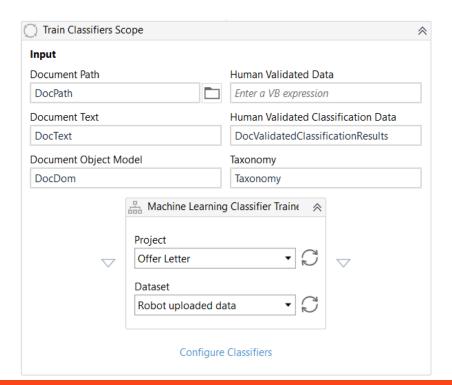
#### **Machine Learning Classifier Activity**

- Pre-trained Classifier works on ML Classifier skills
- Works by default with Invoices, Purchase Orders, Receipts and Utility Bills
- Retrainable for other document types by using Machine Learning Classifier trainer activity



#### **Machine Learning Classifier Trainer Activity**

- Enhances the training set used for classification
- Training helps improve classification results over time



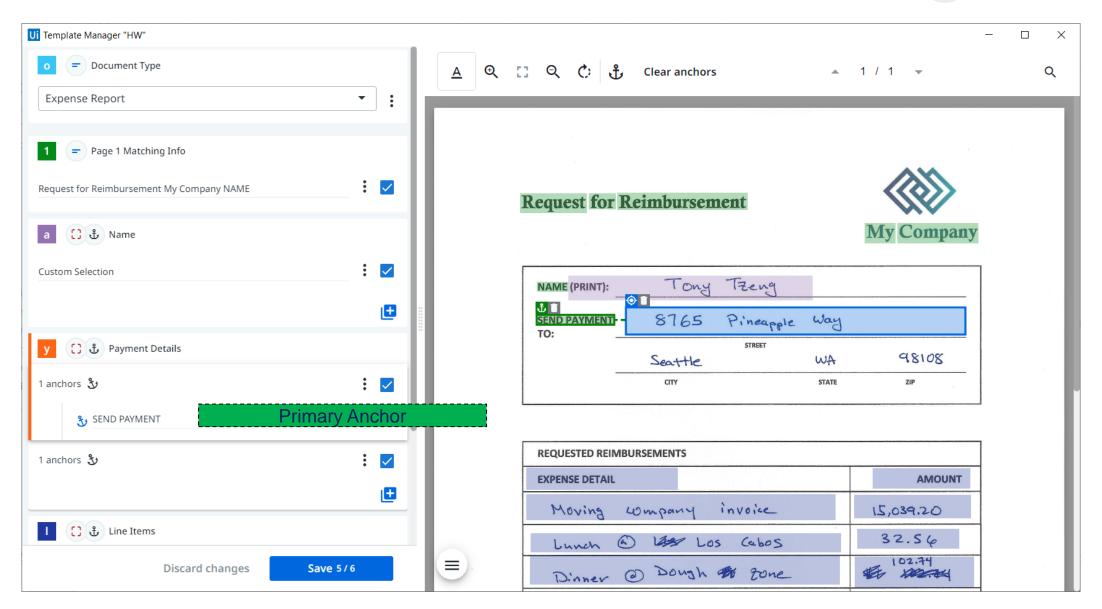
## **Anchor Based Form Extractor**



Ui Template Manager "New-Form"	- D X
o = Document Type	A Q □ Q C: Clear anchors A 1 / 2 → Q
Form1040x •	
1 = Page 1 Matching Info	Department of the Treasury—Internal Revenue Service  Amended U.S. Individual Income Tax Return  OMB No. 1545-0074
Department of the Treasury - Internal Revenue Service Amended U.S. Individual Income Tax Return	## anuary 2020)
2 = Page 2 Matching Info	Your first name and middle initial  James J  If joint return, spouse's first name and middle initial  Last name  Last name  Your social security number  4 2 1 4 5 0 3 6 0  Spouse's social security number  Spouse's social security number
Part I and Dependents Page 2 Part II	Current home address (number and street). If you have a P.O. box, see instructions.  Apt. no.  Your phone number  334-486-7838  City, town or post office, state, and ZIP code. If you have a foreign address, also complete spaces below. See instructions.
r ( 3	Montgomery, Alabama, 36014  Foreign country name  Foreign province/state/county  Foreign postal code
2 anchors 🕉	Amended return filing status. You must check one box even if you are not changing your filing status. Caution: In general, you can't change your filing status from a joint return to separate returns after the due date.
స్తి This return is for calendar year Primary Anchor	Describe
స్తి 2019 Supporting Anchor	Use Part III on the back to explain any changes  and Deductions  1 Adjusted gross income. If a net operating loss (NOL) carryback is  A. Original amount reported or as previously adjusted (see instructions)  B. Net change—amount of increase or (decrease) — explain in Part III  C. Correct amount  amount  c previously adjusted (see instructions)
	included, check here
e (3 the return-2018	4a Exemptions (amended 2017 or earlier returns only). If changing, complete Part I on page 2 and enter the amount from line 29 b Qualified business income deduction (amended 2018 or later returns only)  5 Taxable income. Subtract line 4a or 4b from line 3. If the result is zero
Discard changes Save 13/13	or less, enter -0

# Anchor Based Intelligent Form Extractor and Handwritten Data Extraction





# New Document Understanding ML Models



UiPath Document Understanding launched 5 more ML Models in Preview on both Cloud and On Premises deployments.

All models are retrainable, so their objective is two-fold.
 First, you get new, Out-Of-the-Box, Document Understanding capability.

But perhaps more importantly, you get a leg-up for training a custom ML model for your specific use case, by using these models as Base Models in Al Center (both On Premises and in the Cloud).

New Document Understanding models and public endpoints:

Invoices India: <a href="https://du.uipath.com/ie/invoices\_india">https://du.uipath.com/ie/invoices\_india</a>
Invoices Australia: <a href="https://du.uipath.com/ie/invoices\_au">https://du.uipath.com/ie/invoices\_au</a>

• Contracts: coming soon

Passports: coming soon

• IDs: coming soon

# Invoices India ML Model (GA)

#### Challenges

About 90% of Indian invoices specific information, such as:

- GSTIN number
- CGST
- SGST
- IGST tax rates and values.



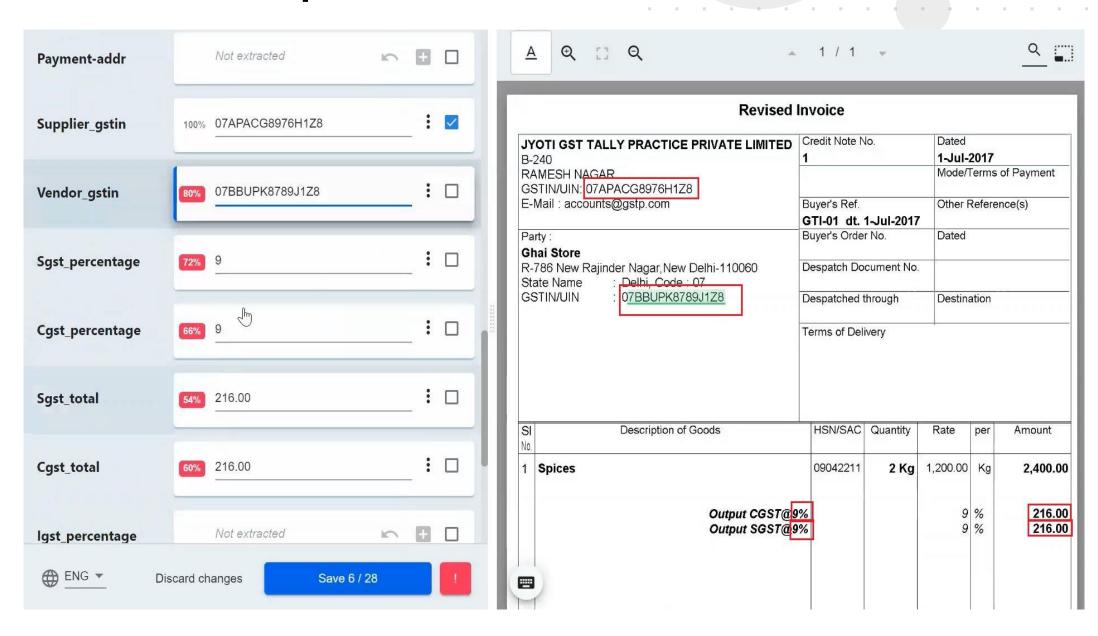
#### **Retrained Invoices-India Model**

- name
- vendor-addr
- billing-name
- billing-addr
- shipping-addr
- invoice-no
- payment-terms
- due-date
- · po-no
- date
- net-amount
- tax
- total
- currency
- items
  - ✓ line-no
  - ✓ description
  - ✓ item-po-no
  - ✓ quantity
  - ✓ unit-price
  - ✓ line-amount

- supplier\_gstin
- vendor\_gstin
- sgst\_percentage
- cgst\_percentage
- sgst\_total
- cgst\_total
- igst\_percentage
- igst\_total

## **Indian Invoice Example**





# **Invoices Australia ML Model** (GA)



Most of the Australian invoices contain specific Bank Information:

- Australian Business Number(ABN)
- Bank Account Name
- Bank Account Number
- BSB



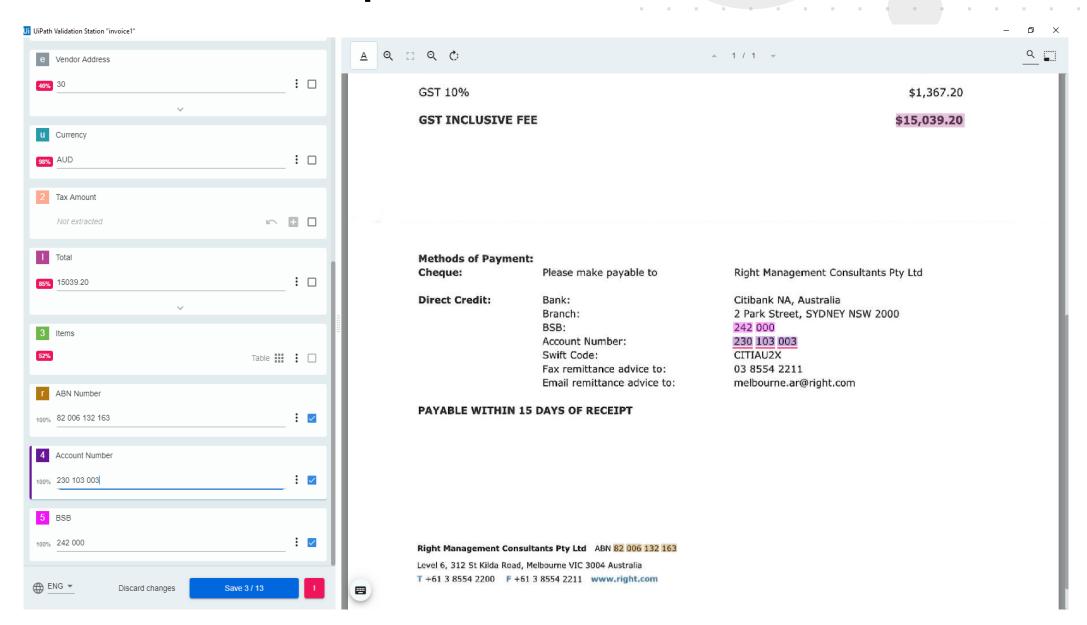
#### **Retrained Invoices-Australia Model**

- name
- vendor-addr
- billing-name
- billing-addr
- shipping-addr
- invoice-no
- payment-terms
- due-date
- po-no
- date
- net-amount
- tax
- total
- currency
- items
  - ✓ line-no
  - ✓ description
  - ✓ item-po-no
  - ✓ quantity
  - ✓ unit-price
  - ✓ line-amount

- abn
- account-name
- account-number
- bsb

# **Australian Invoice Example**





# Passports (Preview)



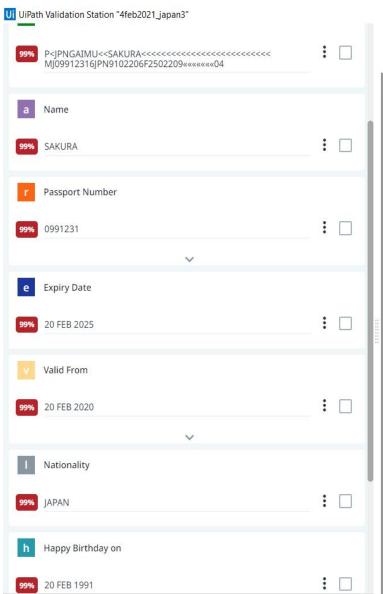
- Supports all countries passports
- Extracts data from two pages of passport
- Retrainable model
- Works better with Google Cloud Vision OCR

#### **Passports ML Model**

- passport-no
- first-name
- last-name
- sex
- nationality
- issued-date
- expiration-date
- birth-date
- birth-place
- personal-id
- mrz
- address
- state
- state-code
- authority
- document-type-code
- document-type

# **Passports (Preview)**







# **Identity Cards (Preview)**



Identity Cards model data extraction is supported in below country formats

- Austria
- Australia
- Belgium
- Canada
- Croatia
- Cyprus
- France
- Hungary
- India
- Italy

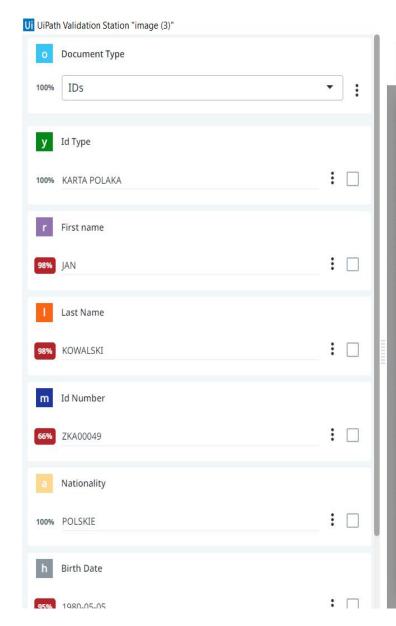
- Netherlands
- Poland
- Romania
- Switzerland
- UK
- USA

#### **ID Cards ML Model**

- id-no
- id-no2
- document-type
- first-name
- last-name
- sex
- nationality
- issued-date
- expiration-date
- birth-date
- birth-place
- personal-id
- mrz
- address
- state
- state-code
- authority

# **Identity Cards (Preview)**







# **Legal Contracts (Preview)**



#### Legal Contracts model is NOT retrainable and comes pre-trained with below set of fields

Non-Transferable\_License

Anti-assignment

IP\_Ownership\_Assignment

Uncapped\_Liability

Covenant\_not\_to\_Sue

Non-Compete

Price Restrictions

Expiration\_Date

Joint\_IP\_Ownership

Agreement\_Date

Audit\_Rights

Notice\_Period\_to\_Terminate\_Renewal

ROFR/ROFO/ROFN

Termination\_for\_Convenience

License\_Grant

Irrevocable\_or\_Perpetual\_License

Source\_Code\_Escrow

Affiliate\_License-Licensee

Revenue/Profit\_Sharing

Insurance

Warranty\_Duration

Third\_Party\_Beneficiary

Most\_Favored\_Nation

Change\_of\_Control

No-Solicit\_of\_Employees

Volume\_Restriction

Renewal\_Term

Liquidated\_Damages

Affiliate\_License-Licensor

Governing\_Law

Non-Disparagement

Document\_Name

Minimum\_Commitment

Parties

Post-termination Services

No-Solicit\_of\_Customers

Exclusivity

Cap\_on\_Liability

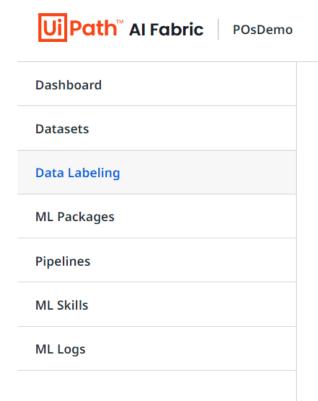
Effective\_Date

Unlimited/All-You-Can-Eat\_License

# Data Manager Integration with AI Center (going GA)

- Data Manager is a web application that facilitates labelling documents in order to train/retrain Document Understanding ML models. It can:
  - Import documents
  - Create or import a labelling schema
  - Pre-label documents with an existing ML model
  - Label documents
  - Export documents as a dataset usable by pipelines within AI Center
- Embedded in Al Center since 2020.10 (in preview until now)





#### **Create new Data Labeling App**



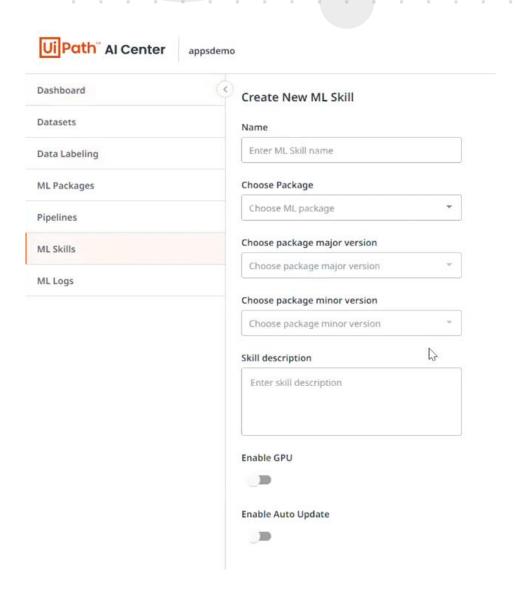
#### **Data Labeling Session**

Name \$	Export Dataset \$
Pos	POs_Dataset

# **Auto Retraining (coming in May)**

Ui Path Reboot™ Work.

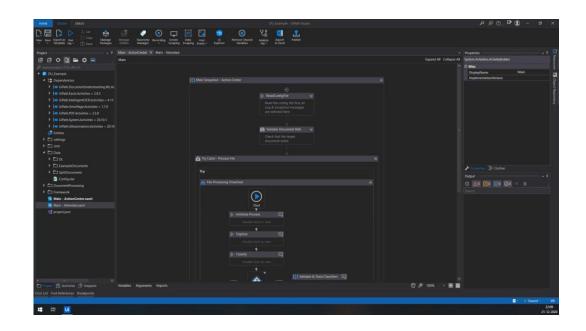
- Enables automatic deployment of new versions of an ML package, thus unlocking a fully automated continuous learning loop
- Does not currently have an option to configure custom conditions such as automatically deploying a new package version if the evaluation score is over a certain threshold – planned for the future
- Users no longer have to export data from DU models and then deploy an ML skill manually
- Available in 2021.4 in the cloud, for non-DU models
- Available in 2021.5 in the cloud, for DU



## **DU Process Template**

- Easy to get new Document Understanding projects started
- Suitable for all use-cases: from quick demos to scalable implementation projects
- Production-ready. Implements built-in logging, exception handling and retry mechanisms
- Common architecture for both Attended and Unattended (+ Action Center) implementations. Easy to switch between solutions.
- Designed to make development, testing, deployment, debugging and scaling much easier.
- Follows the best practices pertaining to RPA, Document Understanding, Orchestration Processes and Longrunning Workflows.
- Current version can be downloaded from our <u>forum</u>;
   planned to be included as a Studio Template.





## **Document Understanding Agenda**



- 01 What is Document Understanding?
- **Document Understanding in the Hyperautomation Context**
- New in 2021.4 Enterprise Release (Overview)
- 04 Architectural Updates
- New Features (in Detail)
  - Machine Learning Classifier & Machine Learning Classifier Trainer
  - Anchor based Form Extractor
  - Anchor based Intelligent Form Extractor & Improvised Handwritten data Extraction
  - New Document Understanding ML Models in GA and Preview
- 06 Minimum Version Requirements

## **Minimum Version Requirements**



- DU + AI Center on-premise, online: require Orchestrator 2020.4
- DU + AI Center on-premise, air-gapped: require Orchestrator 2020.10
- Orchestrator Standard needed will not work with Orchestrator Basic
- Studio version: 19.8+
- DU + Action Center:
  - DU actions are fully supported in Orchestrator Actions starting in 2020.10:
    - Document Validation Action requires Orchestrator 2020.4
    - Document Classification action requires Orchestrator 2020.10

# **Document Understanding Agenda**



- 01 What is Document Understanding?
- **Document Understanding in the Hyperautomation Context**
- New in 2021.4 Enterprise Release (Overview)
- 04 Architectural Updates
- 05 New Features (in Detail)
- 06 Minimum Version Requirements
- Document Understanding Licensing & Consumption
  - Document Understanding Licensing
  - Page Unit consumption by feature

## **Document Understanding Licensing**

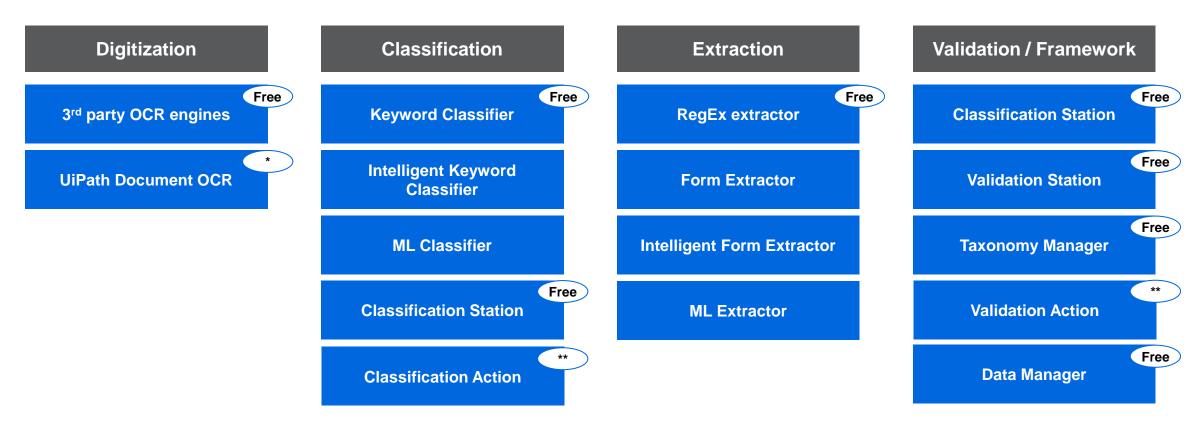


- Document Understanding SKUs consist of page units; SKUs are stackable
- No distinct licensing between different environments (dev/test/prod). Customers must allocate & monitor usage
- Expiration of page units:
  - Upon full consumption OR
  - 12 months from the activation date OR
  - On Orchestrator renewal date (whichever comes first)
- Consequently, if the Orchestrator license is due for renewal in under 12 months, DU page units should be provisioned to only cover consumption until the renewal date!
- For a DU trial, customers should request an Enterprise Trial in the UiPath Cloud Platform

# Page Unit Consumption by DU Features



#### Document Understanding features are charged based on usage – items below may be subject to change



<sup>\*</sup> UiPath Document OCR is free to use with a valid Document Understanding license key. So a license is required, but the OCR will not consume license pages

<sup>\*\*</sup> Classification Action & Validation Action activities are free to use. **Action Center licenses are required** in order to allow users to perform the classification/validation actions.

# **Document Understanding Agenda**



- 01 What is Document Understanding?
- **O2** Document Understanding in the Hyperautomation Context
- New in 2021.4 Enterprise Release (Overview)
- 04 Architectural Updates
- 05 New Features in Detail
- 06 Minimum Version Requirements
- 07 Document Understanding Licensing & Consumption
- DU Licensing Dependencies with Human-in-the-Loop and Al Center
  - Document Understanding  $\Leftrightarrow$  Human-in-the-Loop Licensing Dependencies
  - Document Understanding ⇔ AI Center Licensing Dependencies

# Document Understanding and HitL Licensing Dependencies



#### HitL via Classification / Validation Station

- HitL tasks are completed on the machine running the job (attended mode)
- Attended Licenses are required for the robots running DU jobs

#### **HitL via Action Center**

- HitL tasks are completed in Action Center
- Unattended Licenses are required for the robots running DU jobs
- Action Center Licenses are required for the users performing the tasks

# Document Understanding and Al Center Licensing Dependencies



- Document Understanding ML models are hosted in AI Center
- Al Robots are required in order to train/retrain DU ML models or run DU ML skills
- For AIC & DU on-prem: No action needed AI Center installation script includes provisioning of AI Robots
- For AIC & DU cloud: Make sure to include AI Robot licenses in order to enable ML training & serving!
  - Check with the DU product team for available discounts or promo packs
- These are "regular" Al Robots, intended to be used for DU models ONLY. Use for non-DU models requires
  paid purchase of additional Al Robots
- If customers use big datasets (over 500 pages) for training their DU models, it is required they use a GPU!
   Note that:
- For Al Center cloud, this translates into an Al Robot PRO license
- For AI Center on-premise, the customer must provision the GPU(s)

# Help us help you – share data with us



Make Document Understanding better, faster, more accurate to achieve better results at no additional cost

- A customer encounters a limitation or would like to request an enhancement of a Document Understanding component for their own benefit (including ML model retraining)
- The customer joins UiPath Insider Preview Program
- The customer **shares sample documents or workflows** exhibiting the limitation or enhancement
- UiPath uses the data to improve the product at its own cost, unblocking the customer use case
- The customer gets improved capabilities (including retrained ML models with higher accuracy) at no cost
- UiPath makes the enhanced capabilities available to other customers

<sup>\*</sup> Alternative option - UiPath Data Sharing Agreement, please ask your contact at UiPath to generate it in SFDC.

Q&A



### 21.4 Partner Enablement Plan



#### Here's a quick look at our schedule



#### **Desktop Products**

Explore the latest features of the Studio family, Robots and the UiPath Assistant

April 27, 2021 3:00pm GMT

Register Now →



#### AI/ML

Enhance your automations with Al

April 29, 2021 3:00pm GMT

Register Now →



#### **Test Suite**

Find out about the latest features on RPA and Software testing

May 4, 2021 3:00pm GMT

Register Now →



#### **Apps, Activities, Connectors**

Start deliver engaging experience using UiPath's low code-app builder

> May 6, 2021 3:00pm GMT

Register Now →



#### **Process Understanding**

Al-powered discovery and prioritization of the most impactful automations

May 11, 2021 3:00pm GMT

Register Now →



#### **Cloud Services**

Rapid expansion of the UiPath Automation Cloud(™) capabilities

> May 12, 2021 3:00pm GMT

Register Now →

