

IBM Robotic Process Automation

Mangesh Patankar
Cloud Architect – Hybrid Cloud Build Team



Please note

IBM's statements regarding its plans, directions, and intent are subject to change or withdrawal without notice and at IBM's sole discretion.

Information regarding potential future products is intended to outline our general product direction and it should not be relied on in making a purchasing decision.

The information mentioned regarding potential future products is not a commitment, promise, or legal obligation to deliver any material, code or functionality. Information about potential future products may not be incorporated into any contract.

The development, release, and timing of any future features or functionality described for our products remains at our sole discretion.

Performance is based on measurements and projections using standard IBM benchmarks in a controlled environment. The actual throughput or performance that any user will experience will vary depending upon many factors, including considerations such as the amount of multiprogramming in the user's job stream, the I/O configuration, the storage configuration, and the workload processed. Therefore, no assurance can be given that an individual user will achieve results similar to those stated here.

Agenda:

Why Automation?

Robotic Process Automation

Benefits

IBM Cloud Pak for Business Automation

IBM RPA – Deployment Options

Features

Use Cases and Demo



Today, knowledge workers spend their time performing repetitive, data-intensive, low-value tasks



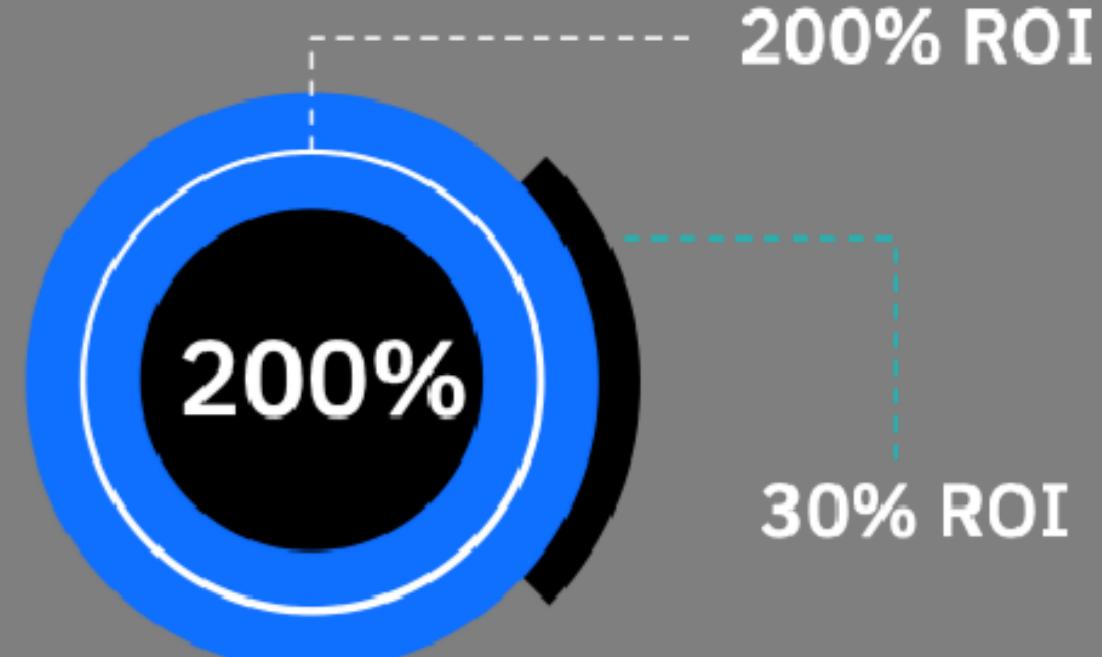
20
hours

According to WorkMarket, 53 percent of employees believe they could save up to 20 hours a month by automating tasks

Source: WorkMarket's 2020 In(Sight) Report

RPA offers a potential of ROI of 30-200% in the first year

- McKinsey Global Institute | The next acronym you need to know: RPA



Robotic Process Automaton (RPA) is often the first step to introduce automation



How RPA Works

RPA is the use of software bots to automate repetitive, routine tasks performed by knowledge workers

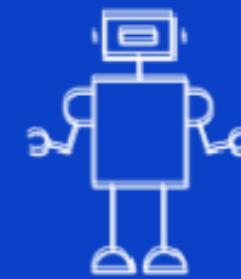


What RPA Does

RPA 'bots' replicate the actions of humans interacting with application user interfaces – with no changes



VS



Physical Robots

Perform repetitive **physical** tasks such as assembling cars or vacuuming your floor

Software Robots

Perform repetitive **software** tasks such as copy and pasting info from a spreadsheet

How do you find the best tasks to automate? You're ready for Robotic Process Automation if you see ...



Swivel Chair Integration

Rekeying data in-and out of spreadsheets, web-based and/or legacy applications



Manual Data Entry

Processing errors due to rekeying data can cause user errors and inaccurate info



Repetitive Tasks

Activities that knowledge workers repeat over and over each day or specific times



High Volume Activities

Tasks that do not take a long time, but tasks that knowledge workers do frequently



Boost Productivity

Create a “always on” digital workforce enabling employees to spend more time on innovation



Reduce Human Errors

Virtually eliminate copy-and-paste mistakes from entering the same data into multiple systems



Accelerate Time to Value

Create, test and deploy new automation schemes in hours, instead of days or months



Increase Throughput

Fulfill automated tasks in seconds or minutes, round the clock



Lower Operational Costs

Experience cost efficiencies that occur when you automate routine, manual tasks and shift employees toward higher-revenue efforts



Scale on Demand

Quickly reduce or add bots as needs fluctuate and give your business an advantage by creating customer experiences that can scale

Robotic Process Automaton (RPA) benefits ...



To automate more types of work, beyond the repetitive, at scale, your bots need ...



Capture

Understand a wider range of unstructured documents to facilitate data-rich scenarios



Decisions

Be a bit more agile, leveraging the decisions-making skills of an expert



Workflow

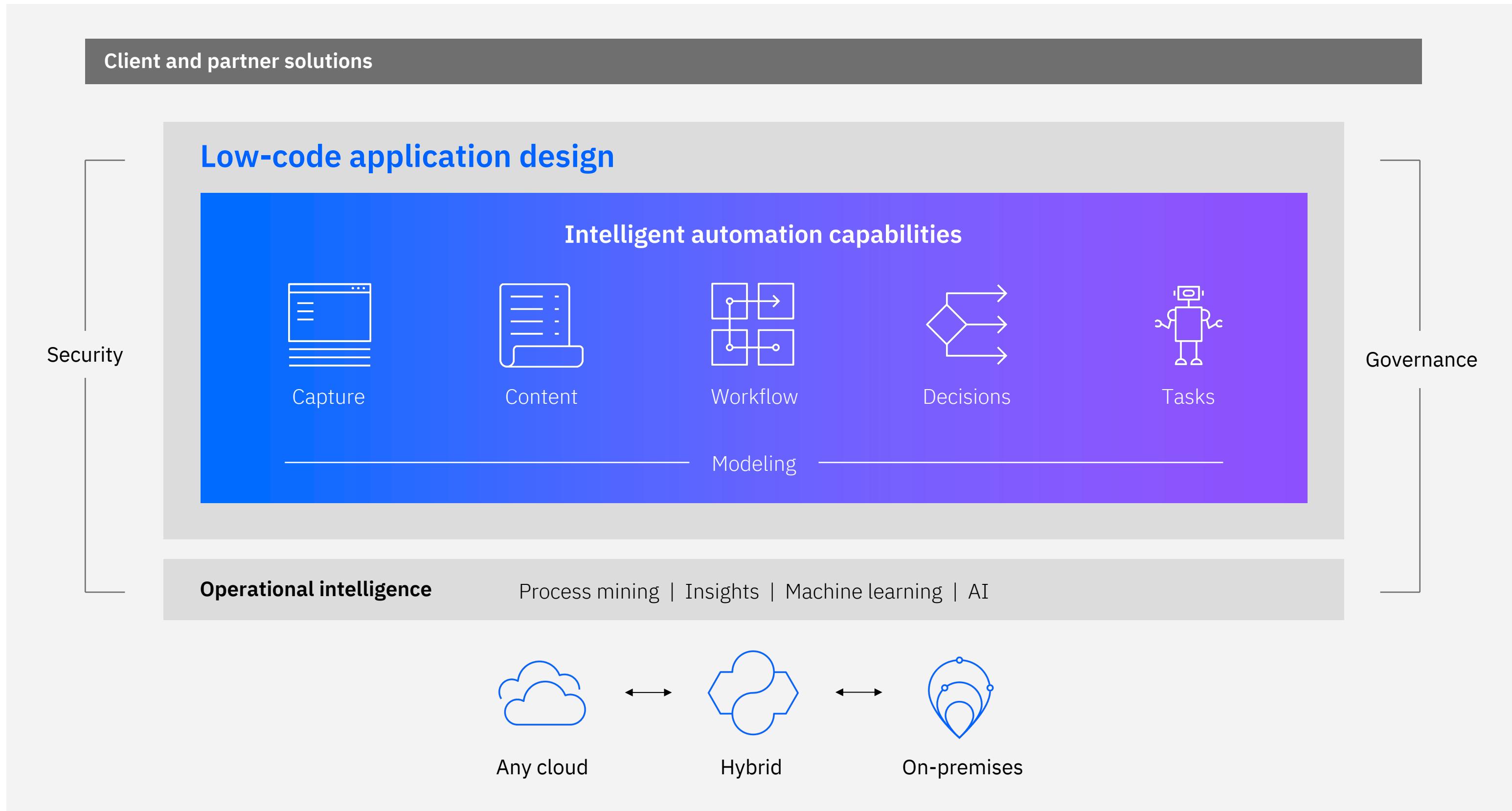
Coordinate work with humans to start-to-finish process



Content Management

Organize and store content for easy retrieval

IBM Cloud Pak for Automation



IBM Robotic Process Automation 21.0.0

Deployment options



Standalone
on-premise

IBM Robotic Process
Automation



Unattended bots



Dashboards



Attended bots



IVA/IVR chatbots
(currently SaaS only)



OCR



Standalone
SaaS

IBM Robotic Process
Automation as a Service



Workload
management



Low code



Native AI
functionality

Platform:
Cloud Pak



Business Automation



Integration

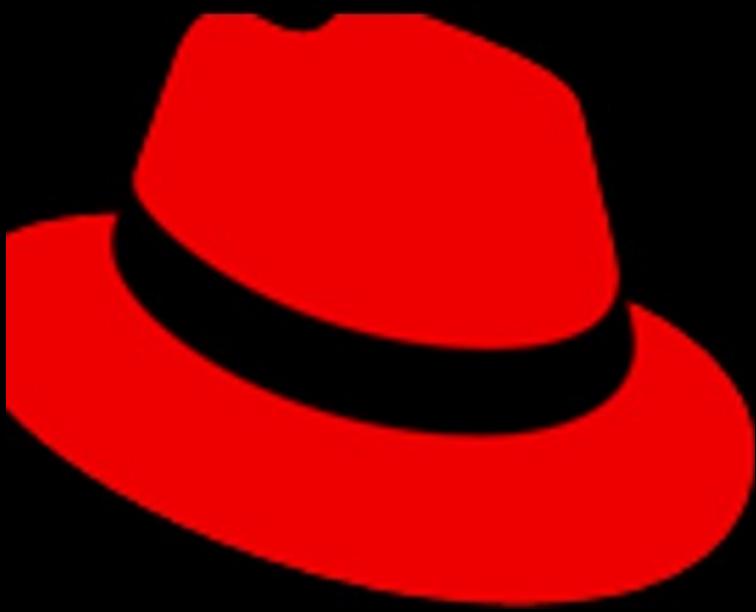


Network Automation



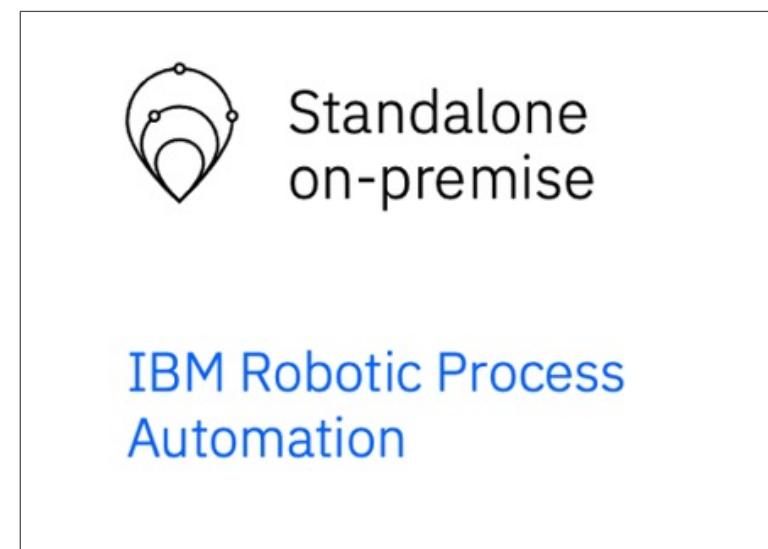
Watson AIOps

RPA on Red Hat OpenShift



RPA container offerings

IBM RPA server container-based deployment on Red Hat OpenShift now available with RPA standalone on-premise and CloudPak offerings



Platform:
Cloud Pak



[Business Automation](#)



[Integration](#)

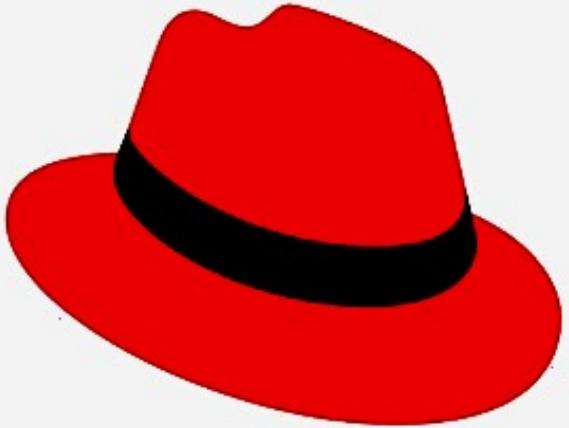


[Network Automation](#)



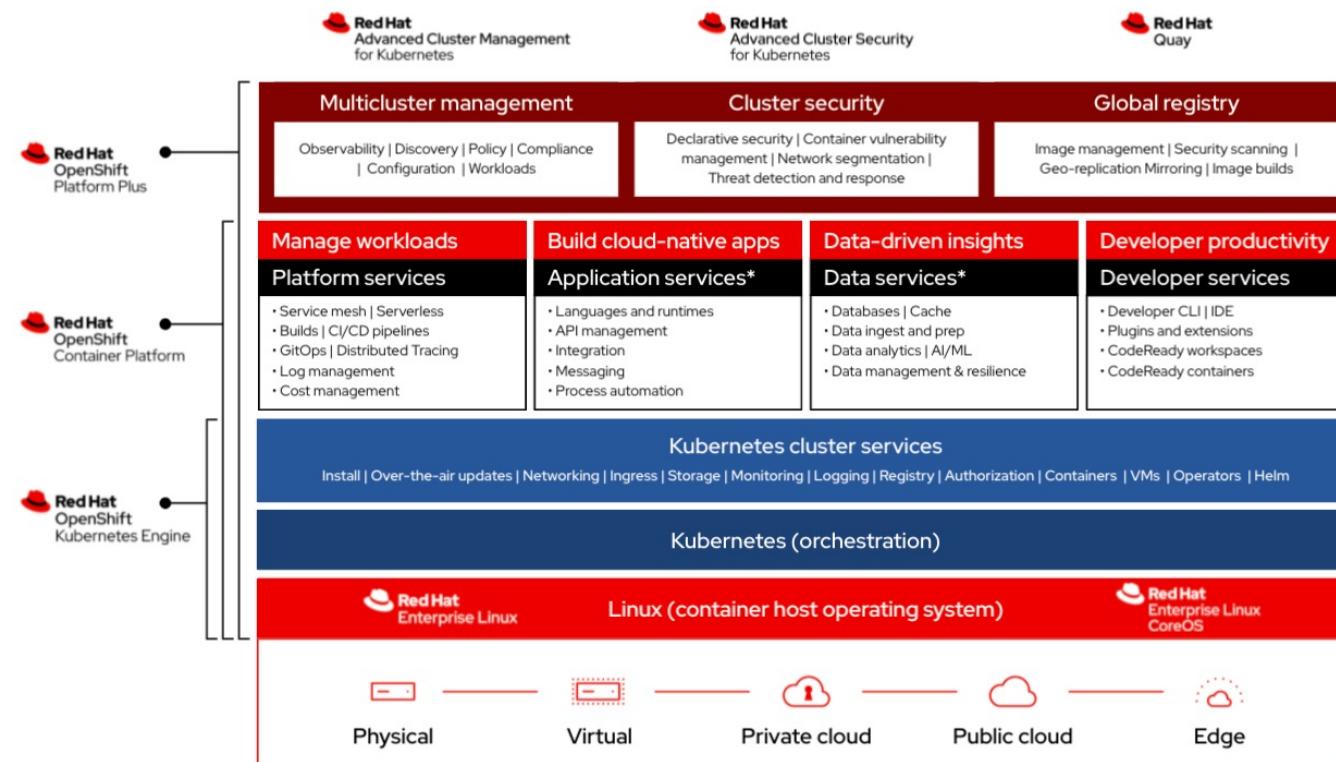
[Watson AIOps](#)

RPA on Red Hat OpenShift



Benefits

OpenShift Container Platform simplifies and accelerates the development, delivery, and lifecycle management of hybrid applications



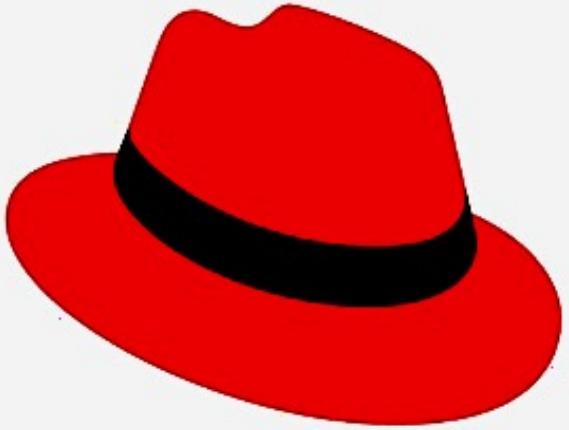
Overview

[https://www.openshift.com
/products/container-
platform](https://www.openshift.com/products/container-platform)

Datasheet

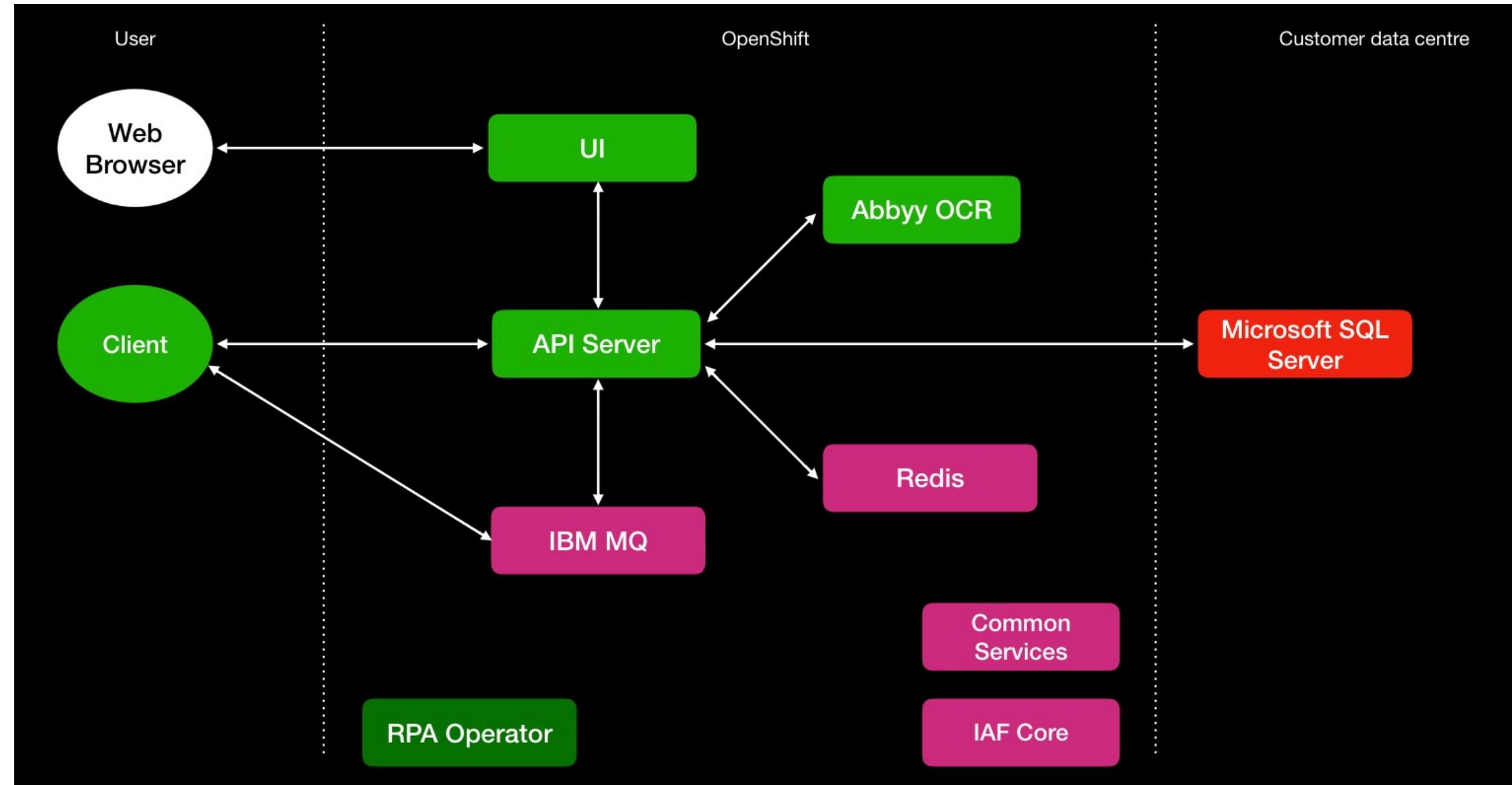
[https://www.redhat.com/e
n/resources/openshift-
container-platform-
datasheet](https://www.redhat.com/en/resources/openshift-container-platform-datasheet)

RPA on Red Hat OpenShift

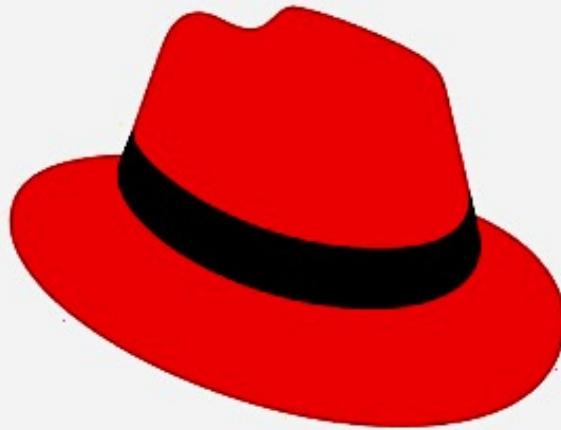


Architecture

RPA Operator includes RPA UI, RPA API, MQ, ABBYY, Redis, Common Services and IAF Core



RPA on Red Hat OpenShift



Install RPA

IBM RPA product documentation provides full details for accessing the RPA images and installing RPA Server on OpenShift

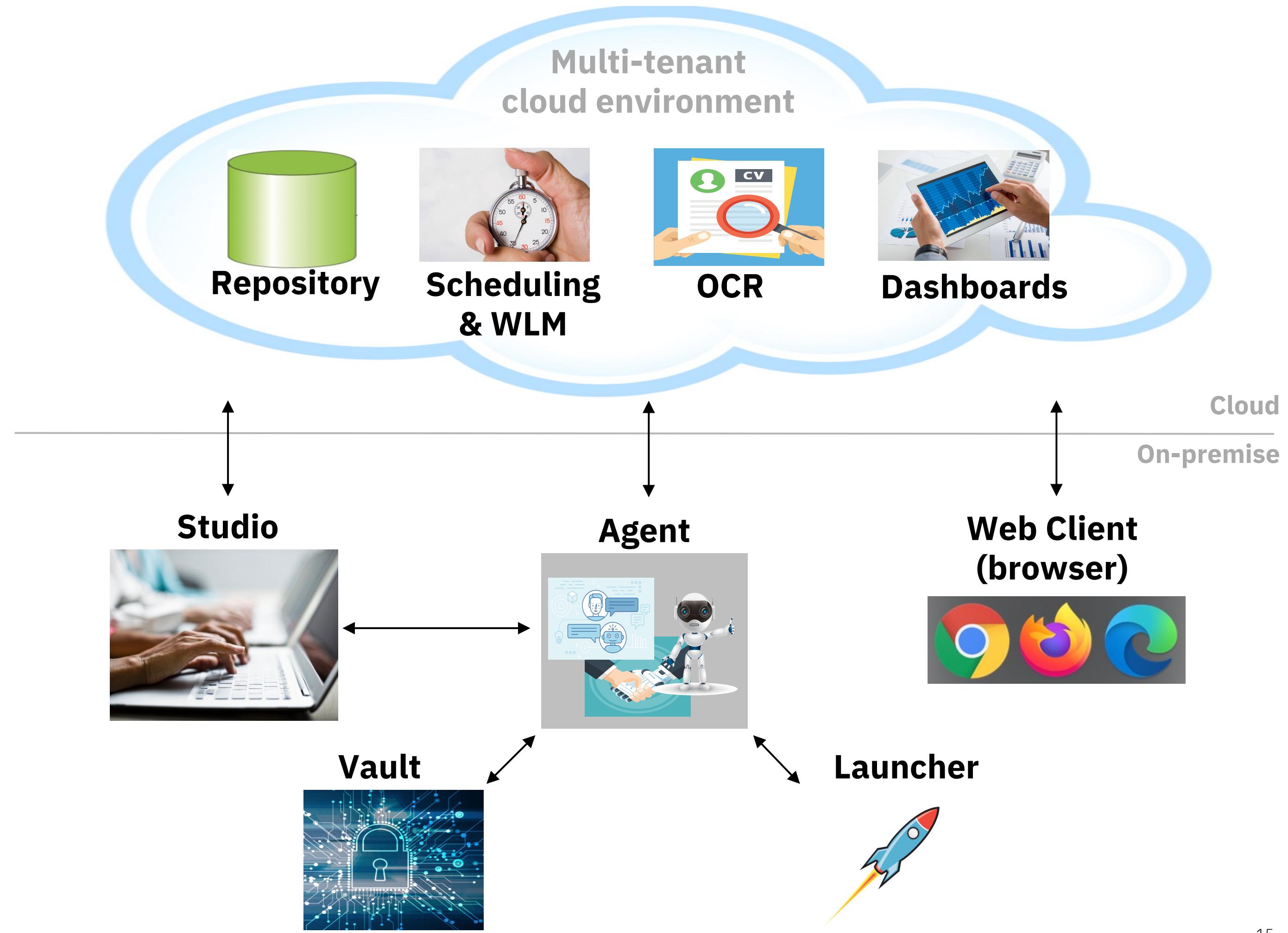
- Pre-installation requirements
- Known issues and limitations
- Supported architecture
- Accessing RPA images
- Air gap installation
- Operator dependencies
- Installing the RPA operator
- Configuring basic custom resource
- Storage configuration
- External database
- TLS certificates
- Validating a successful installation
- Accessing the RPA user interface
- Obtaining licensing information

NOTE: Customers access the IBM RPA container images from the IBM Entitled Registry, as described in the IBM RPA docs.

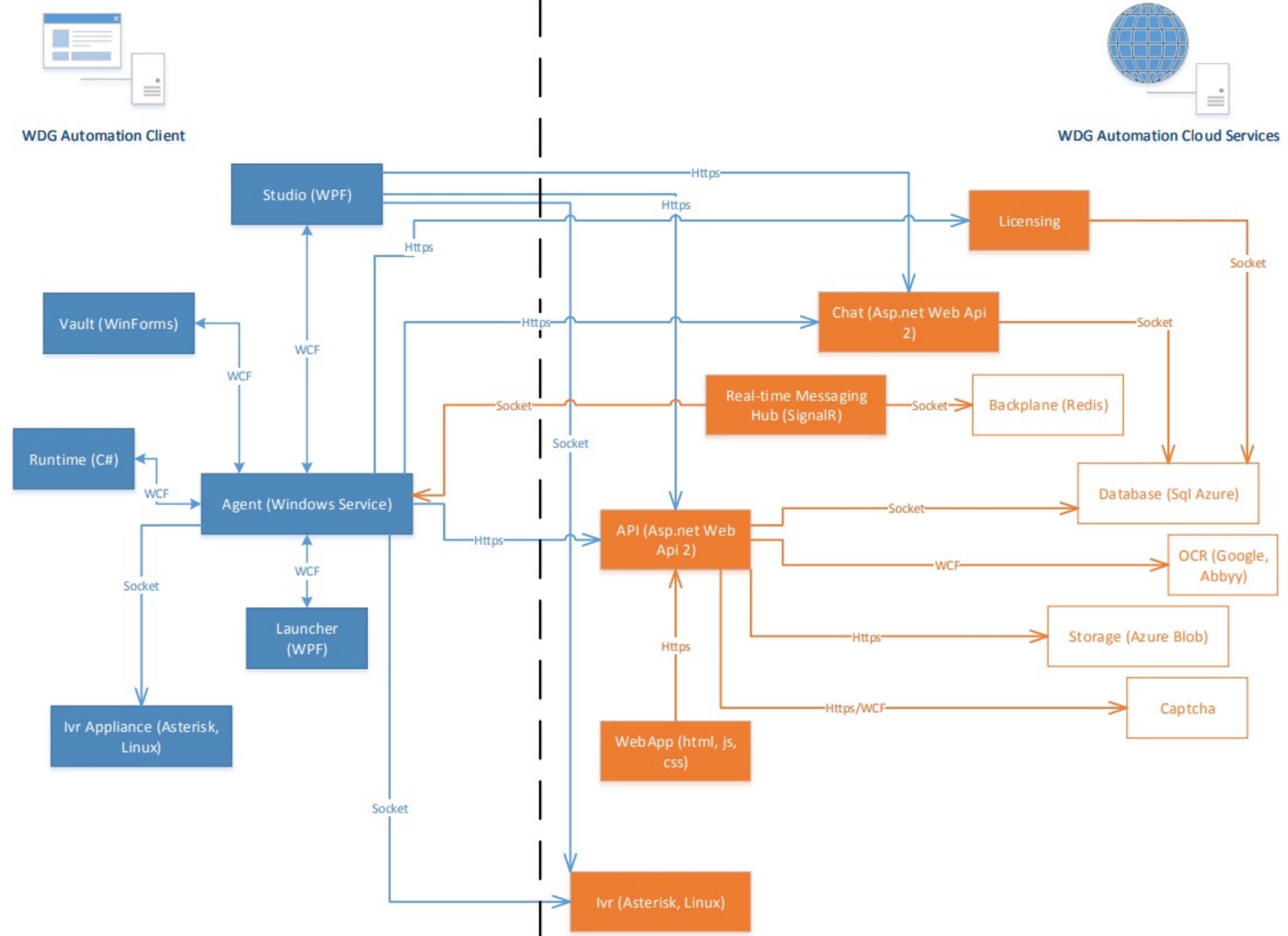
<https://www.ibm.com/docs/en/rpa/21.0?topic=installing-openshift-container-platform>

Product Overview

High Level Architecture: RPA as a Service



Client Server Architecture



Product Overview

High Level Architecture for IBM Robotic Process Automation with WDG Automation - On-Premises Offering

Restrictions:

Language

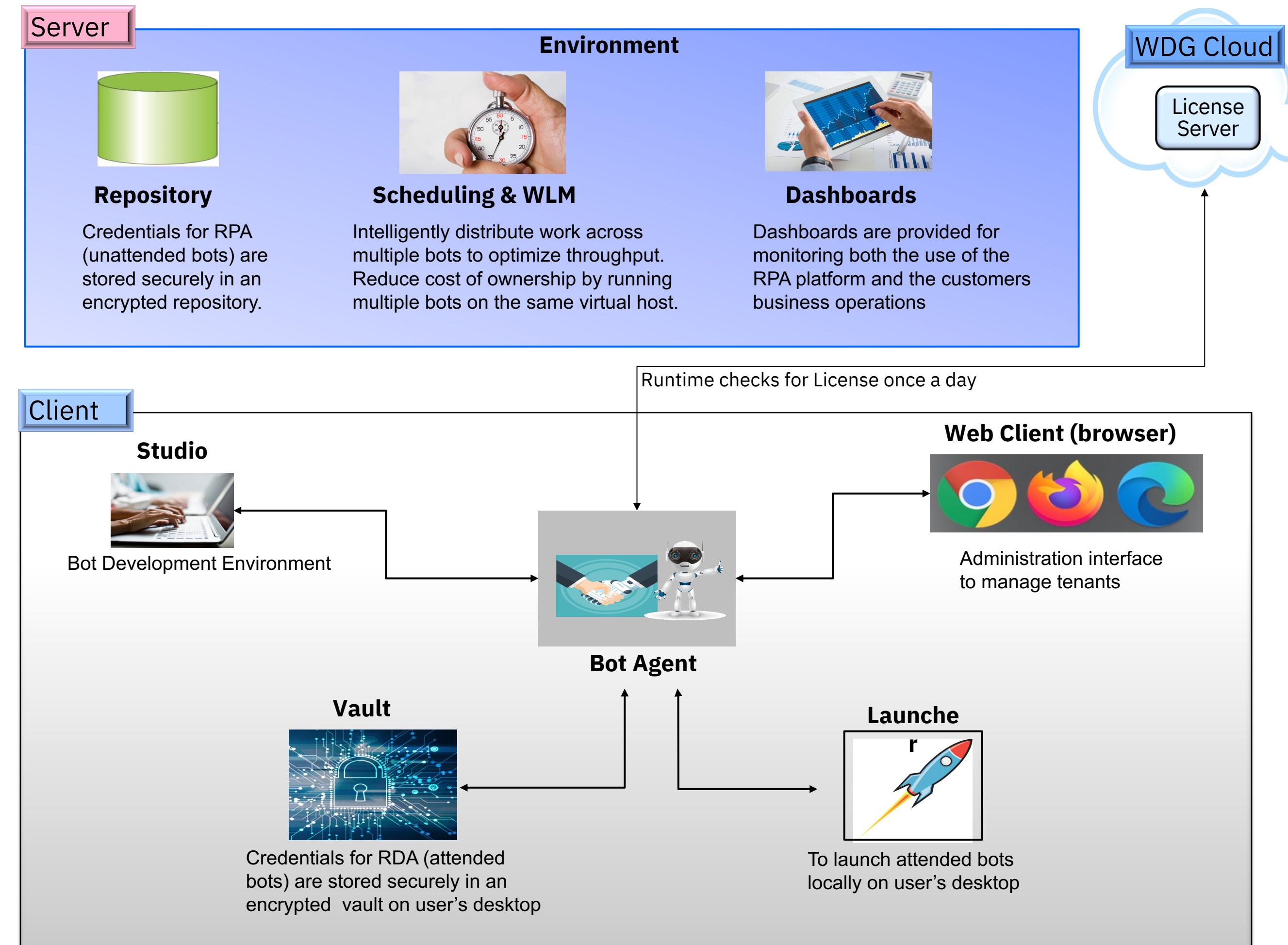
- Initially English & Portuguese (Brazil) Only
- Dec Release would include other Languages

Operating System

- Windows Only

Countries

- Sold World-Wide except for Russia and Israel



Product Overview

Capabilities and Limitations of the On-Prem Offering

Capabilities

Bot authoring

Select from hundreds of prebuilt commands to assemble bot scripts.

Recorder

Use a low-code approach to record user interactions to automatically generate bot scripts to accelerate time to value.

Bot scheduling

Manage the time periods in which unattended bots are to be run.

Workload management

Intelligently distribute work across multiple bots to optimize throughput.

Concurrent execution

Reduce cost of ownership by running multiple bots on the same virtual host.

Unattended bots

Use a digital workforce to automate repetitive tasks without human intervention

Attended bots.

Enable a human workforce to augment work using bots to perform repetitive tasks on demand.

Optical Character

Limitations

Intelligent Virtual Agent (Chatbot & Interactive Voice Response) is not available in the On-Prem offering

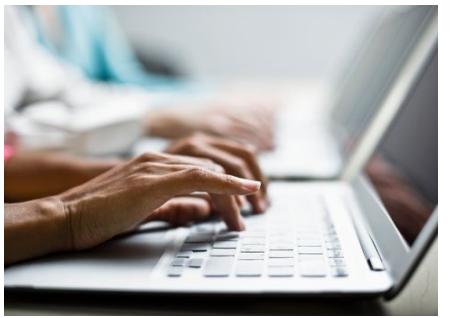
OCR with Google Cloud Vision is not supported in the On-Prem Offering

On-Prem Offering is restricted to sell in Russia and Israel at this time.

- Work is in process to secure approvals on import encryption requirements

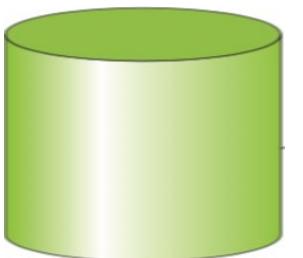
OCR with ABBYY requires customer to bring their own license

Studio provides low code editors to author bots



Studio

- Select from hundreds of prebuilt commands to assemble bot scripts.
- Record user interactions to automatically generate bot scripts to accelerate time to value.
- Test automations using a local Bot Agent.



Repository

- Bots are stored securely in an encrypted repository.

IBM RPA features



IBM Strength

Integrated chatbots

Combine chat and RPA commands to create intelligent virtual agents (IVAs) deployable on multiple channels to provide engaging client interactions.



IBM Strength

Intelligent workload management

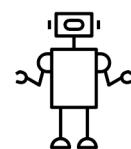
Intelligently distribute work across multiple bots to minimize bot idle time and optimize throughput.



IBM Strength

Cloud software as a service

A full-featured cloud-based RPA software as a service solution enables organizations accelerate time to value. On-premises also available.



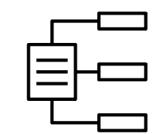
Unattended bots

Use an RPA digital workforce to automate repetitive tasks without human intervention.



Attended bots

Enable your human workforce to augment work using bots to perform repetitive tasks on demand.



IBM Strength

Out-of-the-box capture

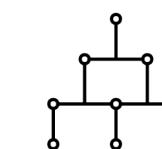
RPA commands for data extraction and classification, with built-in, best-in-class OCR. Expand to advanced use cases with intelligent capture from Cloud Pak for Automation.



IBM Strength

Dashboards

Gain business insights into business operations.



IBM Strength

Concurrent execution

Reduce cost of ownership by running multiple bots on the same virtual host.



IBM Strength

Low-code editor

600+ commands with pre-built integrations to common applications (Outlook, Word, PDF, SAP, etc.) make it faster and easier to build bots.



IBM Strength

End-to-end platform

RPA is included in IBM Cloud Pak for Automation so you can start small and scale, using only the automation capabilities that you need, when you need them.



IBM Strength

Native AI functionality

AI commands, including machine learning, decisioning and fuzzy logic, are available via the drag-and-drop interface so you can build bots that learn, think and reason.

IBM Robotic Process Automation

Carbon-X Styling

IBM RPA Server UI has been re-implemented using Carbon-X to provide IBM customers with a consistent user experience

The screenshot shows the IBM RPA Server UI with a Carbon-X style. The left sidebar has sections for Manage (Dashboard, Scripts, Workflows) and Define (Chatbots, Queues, Machine Learning). The main area is titled 'Scripts' and shows a table of scripts. The table columns are Name, Modified By, Last modified, and Allow scheduling. A context menu is open over the row for 'InvoiceDataExtraction', with options 'Details', 'Create Schedule', and 'Delete'. The 'Details' option is highlighted with a blue border.

Name	Modified By	Last modified	Allow scheduling
ChatBotGMUD20200904	Tarcio Alonso Mota	10 months ago	✗
chattest	Lucas Oliva	11 months ago	✓
computerTest	IBM RPA Owner	about 22 hours ago	✓
EnqueueInvoiceProcess	Angelo Alves	3 months ago	✓
GmudSchedulingTest	William Ramos	4 months ago	✓
InvoiceDataExtraction	Angelo Alves	3 months ago	✗
messagebox	Lucas Oliva	11 months ago	✓
MailToEmailDestination	Angelo Alves	3 months ago	✗

Globalization and Language Support

We're adding new languages with every release to enable RPA customers across the globe.

English	Chinese (Traditional)
Portuguese	French*
Spanish	Japanese*
German	Russian*
Korean	Italian*
Chinese (Simplified)	

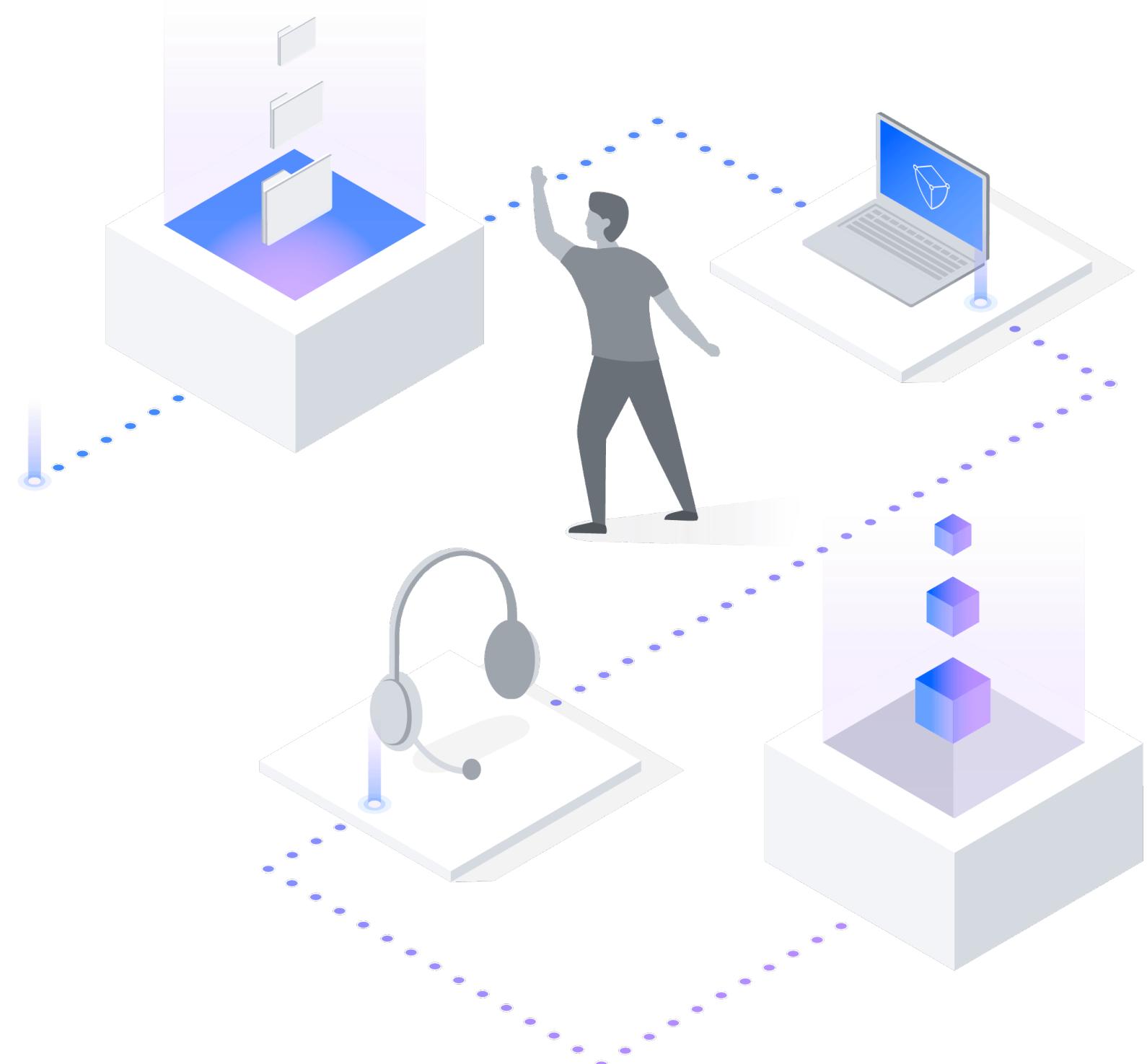
* New languages added in IBM RPA 21.0.0

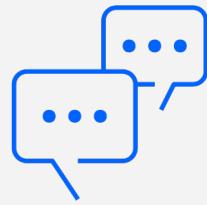


Cloud native SaaS

A full-featured cloud-based RPA software as a service solution enables organizations to build attended and unattended software bots and accelerate time to value.

- Get started quickly with faster time to provision the infrastructure
- Managed cloud operations reduces cost of ownership with savings in both human resources and IT infrastructure
- New capabilities always available with frequent software updates





Integrated chatbots and interactive voice response

Chatbots for intelligent virtual agent (IVA) and interactive voice response (IVR) to provide engaging client interactions

- Built-in RPA chatbot commands
- IVR for voice synthesis and recognition
- Phone calls with E1 and VoIP (SIP)

The screenshot shows the IBM RPA Designer interface. On the left, a script editor displays a sequence of steps:

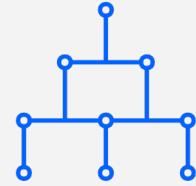
- Step 17: Connect to Chatbot or IVR (Connect Chat, using \${languageEn}, assigning Chat to \${chatInstance})
- Step 18: Bot Says (Says the text Hi! I'm a Customer Service Bot, using the language \${languageEn})
- Step 19: Bot Says (Says the text If you provide me a ZIP code, I'll return you with the city and state it references, using the language \${languageEn})
- Step 20: Run Subroutine (Executes the routine AskAndSearchZipcodeAndAnswerUser)
- Step 21: Disconnect Chatbot or IVR (Disconnect)

Below the script editor is a preview window titled "uspsLookUpBasicChatbotPaulPachjolski.wal - Chat". The preview shows a simulated chat session:

- WDG Automation: Hi! I'm a Customer Service Bot.
- WDG Automation: If you provide me a ZIP code, I'll return you with the city and state it references.
- WDG Automation: Please, enter a ZIP code so I can search for it (numbers only).
- WDG Automation: The city and state for ZIP code "90210" is "BEVERLY HILLS CA".
- WDG Automation: What is your request today?

The preview window also includes a message input field: Type your message... and a send button.

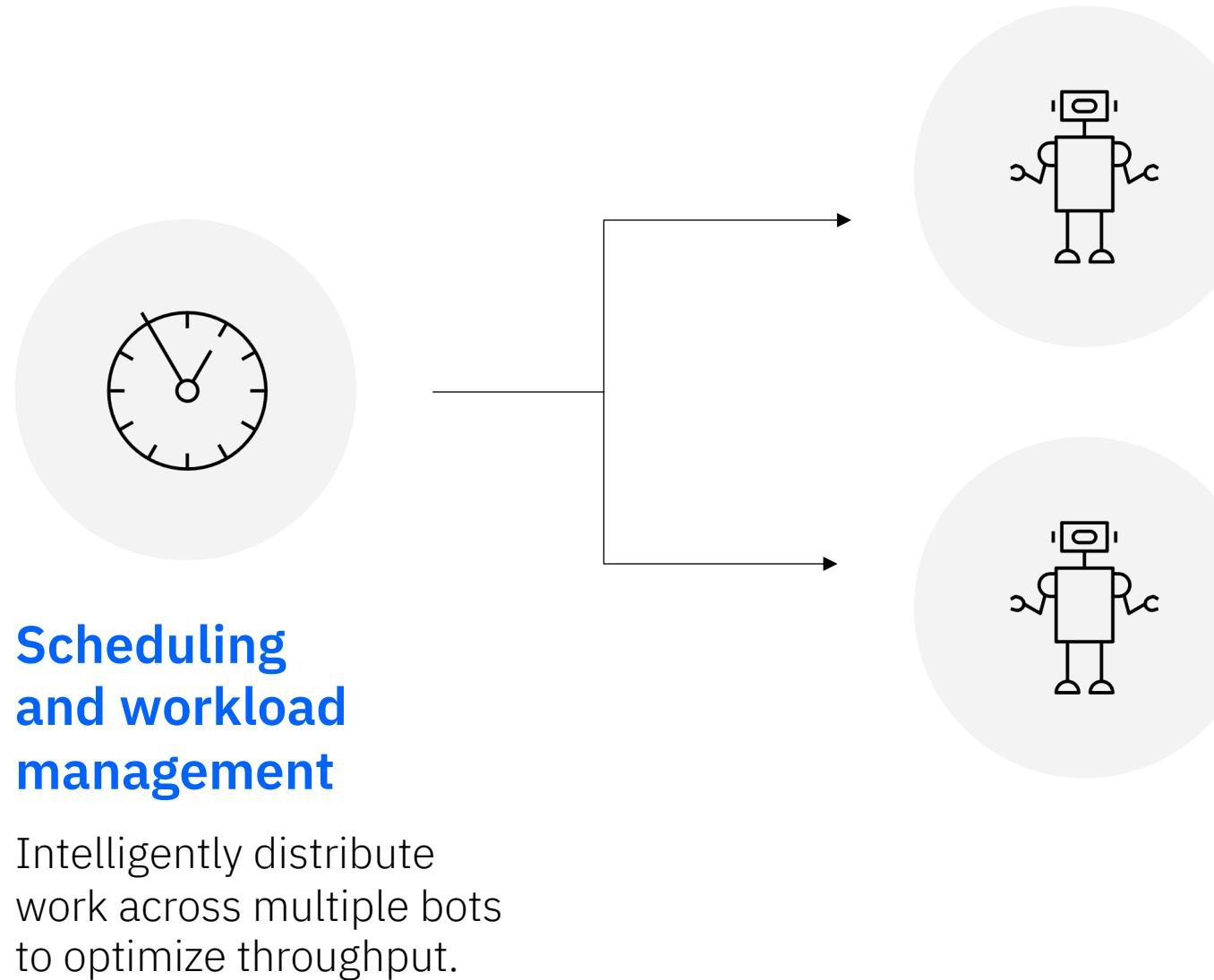
Intelligent virtual agent (IVA) chatbots used to interact with customers and pass inputs directly to bots in order to perform automated interactions



IBM Robotic Process Automation

Concurrent execution

- Scale by either deploying additional agents or by increasing the number of concurrent connections for an individual agent
- Depending on the task, you can run up to 100 concurrent connections per agent
- Having multiple bots executing on the same host can significantly reduce hardware, virtual machine, and operating system costs compared with other leading vendors



Agents

Each agent can be licensed with one or more concurrent connections to enable multiple bots to run concurrently with one bot running on each concurrent connection.



IBM Robotic Process Automation

Intelligent workload management

Scheduler

- The scheduler places a message in a queue, where each bot agent lines up and listens for the next job

Workload management

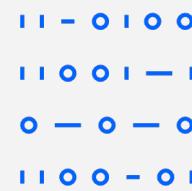
- Queues come on a first-come, first-serve basis to ensure every bot receives work at the earliest opportunity and peaks in demand are handled by all available bots
- Intelligently distribute work across multiple bots to optimize throughput

The screenshot shows a browser window titled 'WDG Automation' with the URL <https://app.wdgautomation.com/#/en-US/scripts?offset=0&limit=10&orderBy=name&asc=true>. The interface has a dark sidebar on the left containing links like 'Dashboard', 'Scripts', 'Workflow', 'Schedules', 'Counters', 'Jobs', 'Chats Mappings', 'IVR', 'Launchers', 'Machine Learning', 'Queues', 'Storage Provider', 'Credentials', and 'Bulk'. The main content area is titled 'Scripts' and shows a table with three entries:

Name	Modified By	Modification Date	Allow scheduling	Action
Alamy	Andrew Macdonald	5 days ago	<input checked="" type="checkbox"/>	<button>Actions</button>
jebajee	Jukka Juselius	5 days ago	<input checked="" type="checkbox"/>	<button>Actions</button>
LaunchBrowser	Joel Milgram	5 days ago	<input type="checkbox"/>	<button>Actions</button>

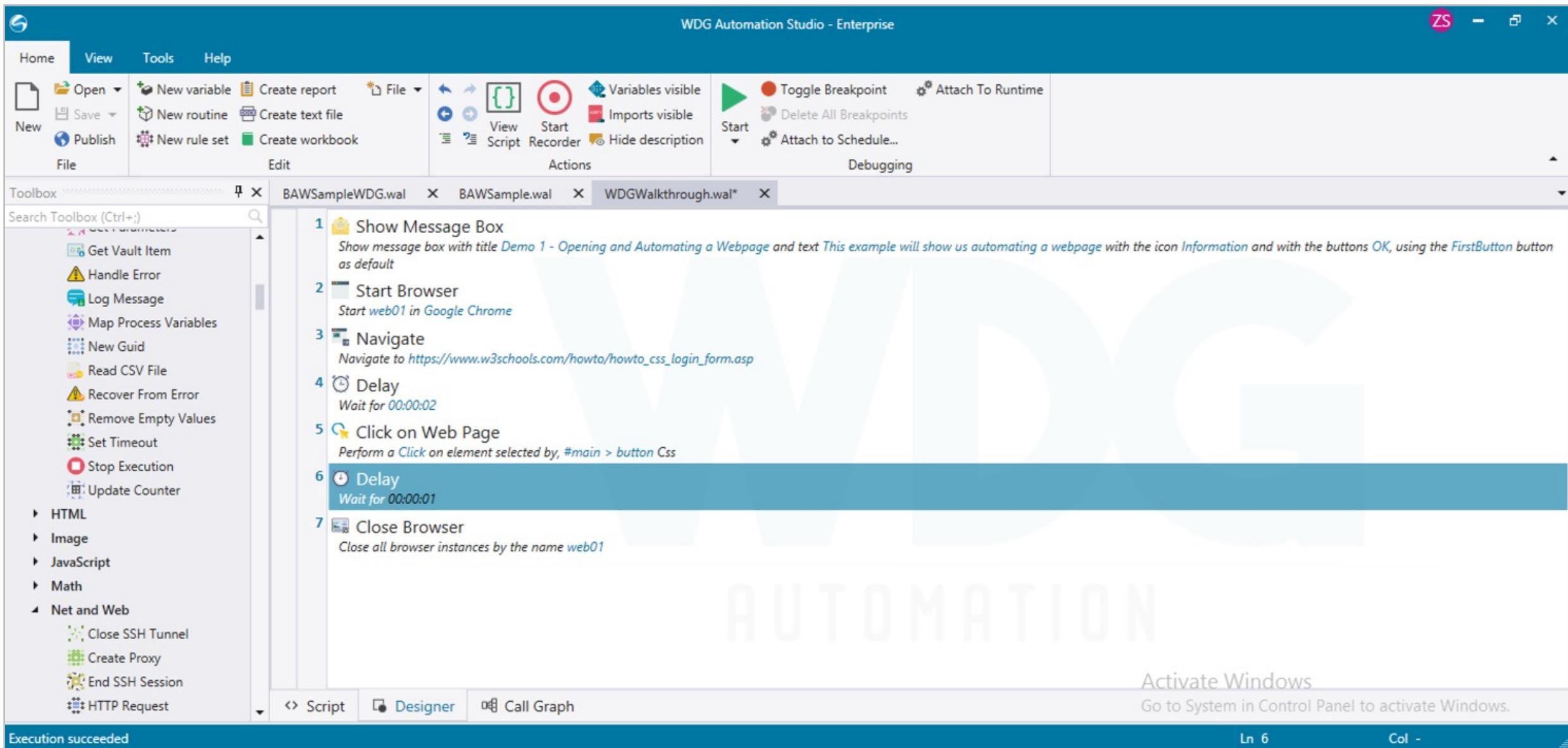
At the bottom of the table, it says 'Showing 1 to 3 of 3 entries'.

Browser-based interface to schedule bot, manage bot repository and access dashboards



Easily build bots with low-code editors

- Record user interactions to automatically generate bot scripts
- Assemble bot scripts from hundreds of prebuilt commands
- Test automations directly from the bot studio



Graphical bot development capabilities include drag-and-drop of pre-built commands and ability to instantly step through and test bots

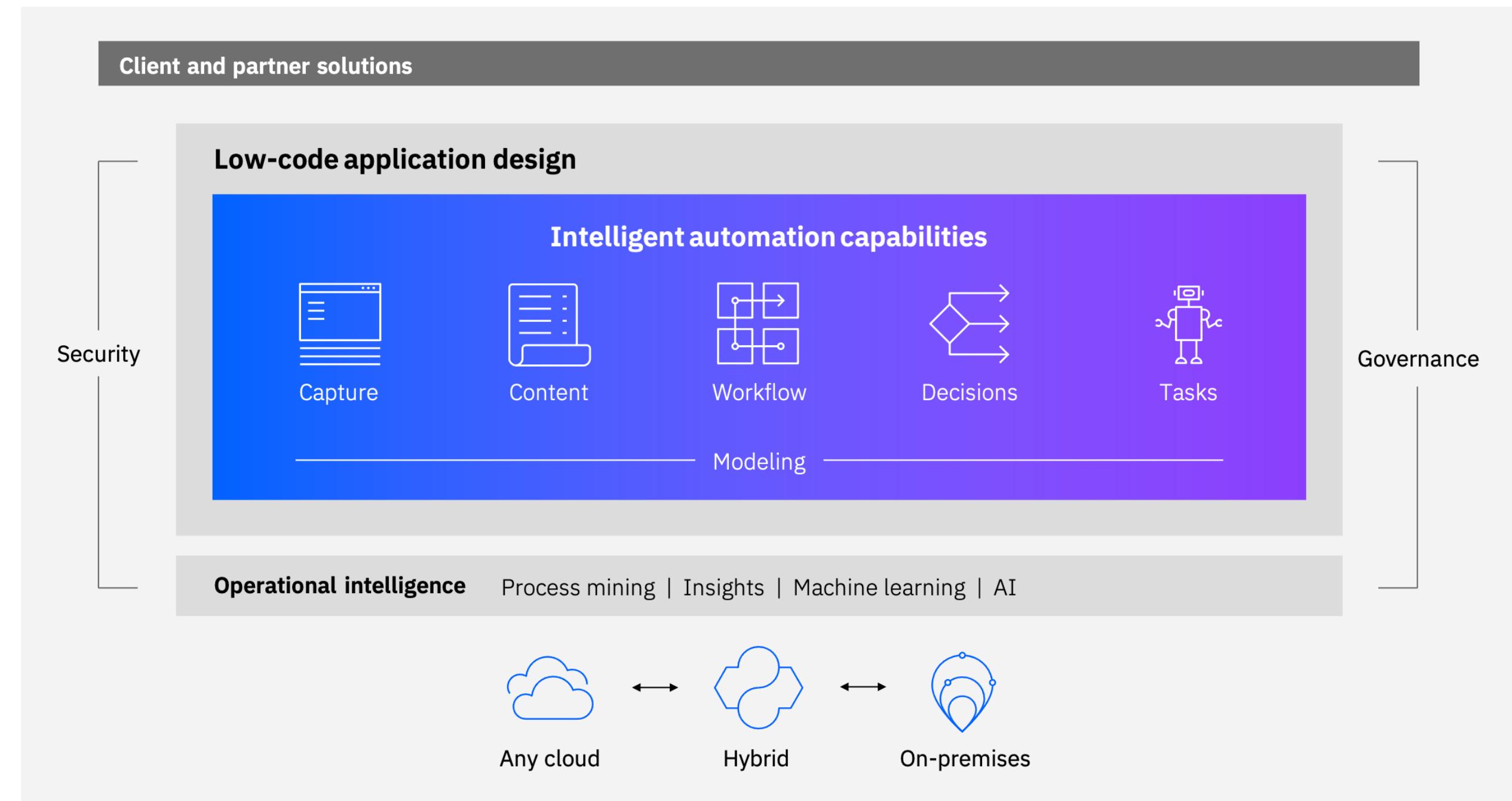


IBM Robotic Process Automation Automation platform

**IBM RPA is a core component
of IBM Cloud Pak for Automation,
a modular automation platform.**

Start small and scale—only use
what you need, when you need it.

IBM Cloud Pak for Automation



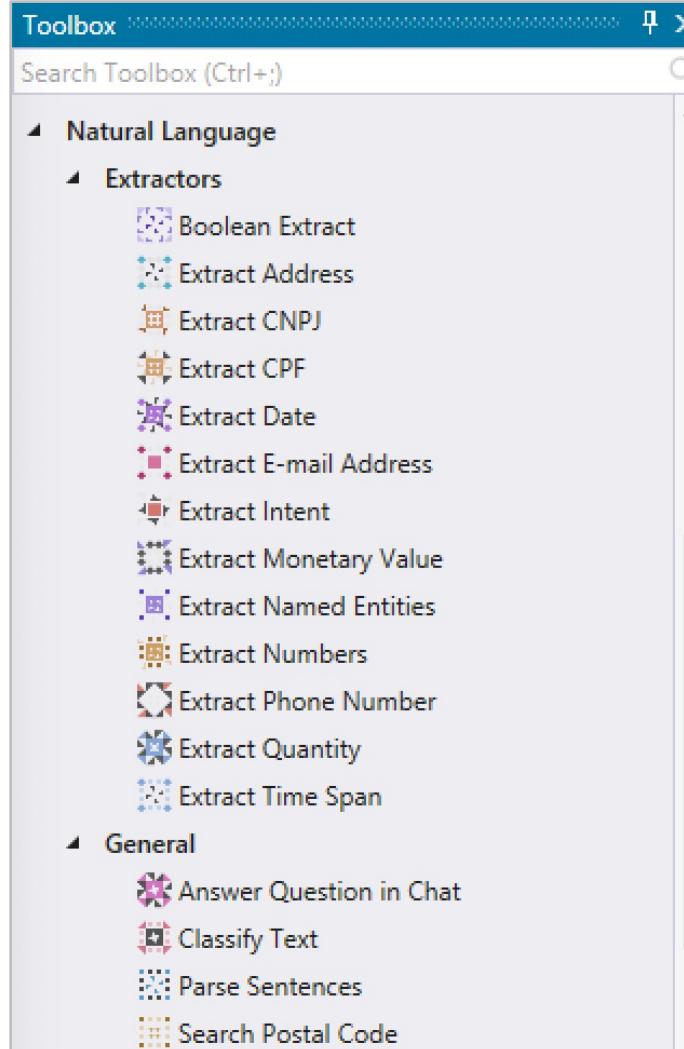


IBM Robotic Process Automation

Native AI functionality

Embedded AI within the application for functional usage within bots

- Embedded Natural Language Processing Extractors
- White-boxed AI Knowledge Base
- Out-of-the Box Machine Learning Algorithms for OCR and Content Processing



Natural Language Extraction Commands, Functional AI Commands, and transparent controllable knowledge bases

	A	B	C	D
1	Question	Answer	Context	Tags
2	Let me know who is requesting followup	Retrieving F	Followup Requested	+Followup
3	Who needs followup	Retrieving F	Followup Requested	+Followup
4	Who should we talk to?	Retrieving F	Followup Requested	+Followup
5	What customers want followup	Retrieving F	Followup Requested	+Followup
6	Who should we reach out to	Retrieving F	Followup Requested	+Followup
7	Who does not wish to be contacted?	Retrieving N	No Followup Requested	+NoFollowup
8	Who does not want to be talked to	Retrieving N	No Followup Requested	+NoFollowup
9	Who is not interested?	Retrieving N	No Followup Requested	+NoFollowup

The screenshot shows a workflow step titled 'For Each' with the condition 'For each \${vEmails} in \${wdgTesterEmailConnect}, do'. Inside the loop, there are four actions: 'Read Email' (Read contents of message \${vEmails}, assigning Subject to \${vSubjectOfEmail} and Email Body to \${vEmailBody}), 'Extract Intent' (Extract from the text \${vSubjectOfEmail} using the culture Default, assigning Intent to \${IntentOutput}), 'Extract Named Entities' (Extract from the text \${vSubjectOfEmail} using the culture English (United States) and Numeric, assigning Values to \${vNumericOutput} and First value to \${ServiceTicketNumber}), and 'Log Message' (Logs Email Found... as Information).

The screenshot shows an email message with the subject 'Service Ticket ID3452832 : Password Expiration for Service Account'. The message is from 'CenterHelpDesk' to 'wdgTester@ibmdba.com'. The body of the email reads:
Hello Administrator,
Please be alerted that the Service Account for AIAutomation@ibm.com is set to expire in 7 days. Please notify IT Support and have them revalidate your login credentials.
Thank you

The screenshot shows the 'Output' log window with the following entries:
9/10/2020 1:35:21 AM - Email Found
Our AI Extracted Intent is - service ticket password expiration service account
Our ITSM Ticket is - ID3452832
Our Relevant Email Address of Expiration is - AIAutomation@ibm.com
9/10/2020 1:35:21 AM - 1 total emails read

IBM RPA has helped organizations improve customer satisfaction and reduce manual work

Create efficiencies

10
hours per day

Number of hours saved from employees manually inputting new client data



Improve customer satisfaction

90%
reduction

Faster time delivering services has improved customer satisfaction



Reduce manual work

3
FTEs

Employees reassigned to more strategic activities instead of processing invoices



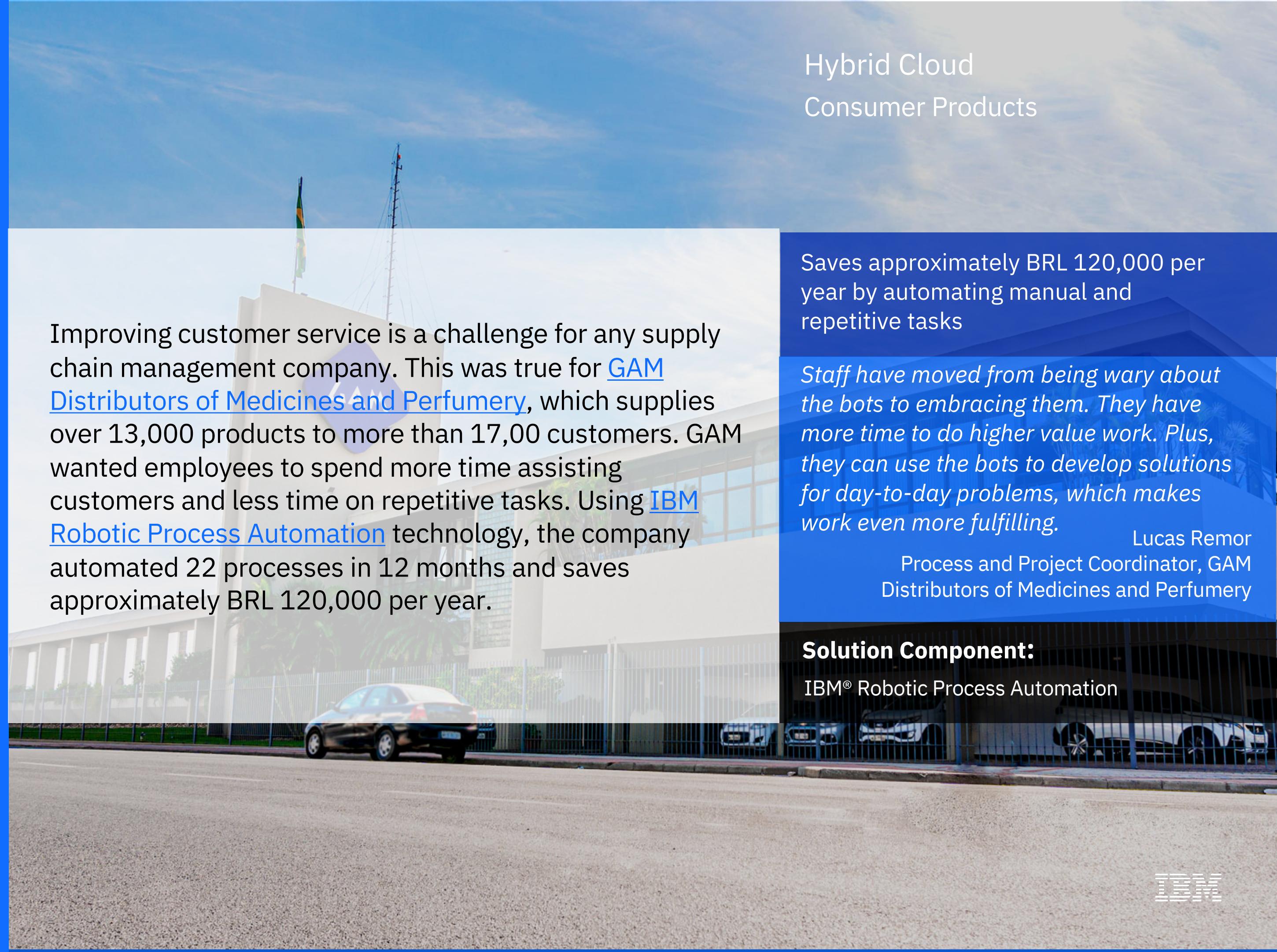




A gente
distribui
confiança

How could GAM reassigned employees to higher-value work while cutting costs?

[Read the full story](#)



Improving customer service is a challenge for any supply chain management company. This was true for [GAM Distributors of Medicines and Perfumery](#), which supplies over 13,000 products to more than 17,000 customers. GAM wanted employees to spend more time assisting customers and less time on repetitive tasks. Using [IBM Robotic Process Automation](#) technology, the company automated 22 processes in 12 months and saves approximately BRL 120,000 per year.

Hybrid Cloud
Consumer Products

Saves approximately BRL 120,000 per year by automating manual and repetitive tasks

Staff have moved from being wary about the bots to embracing them. They have more time to do higher value work. Plus, they can use the bots to develop solutions for day-to-day problems, which makes work even more fulfilling.

Lucas Remor
Process and Project Coordinator, GAM
Distributors of Medicines and Perfumery

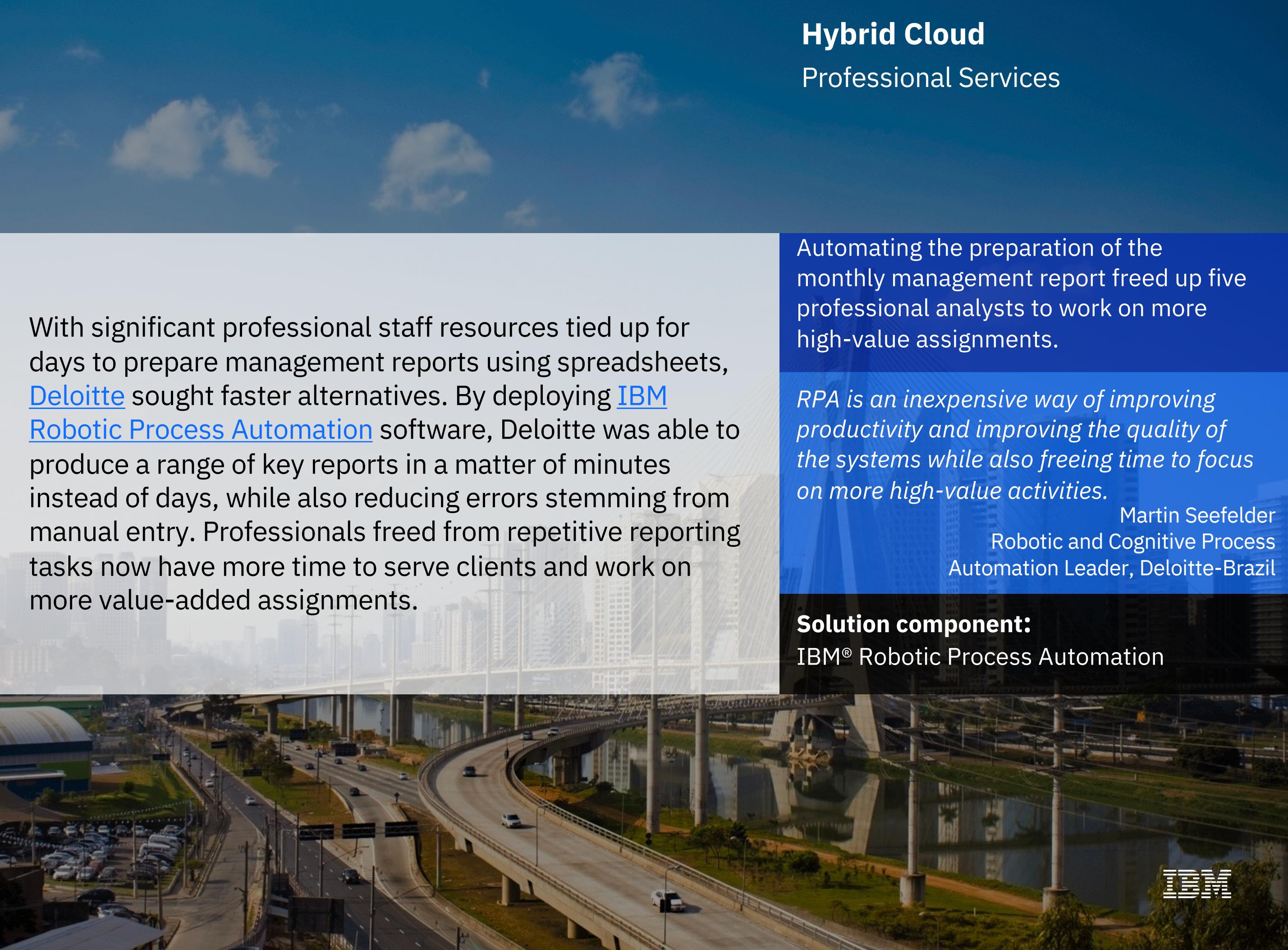
Solution Component:

IBM® Robotic Process Automation

IBM

How can automation accelerate the preparation of key management reports?

[**Read the full story**](#)



Hybrid Cloud Professional Services

With significant professional staff resources tied up for days to prepare management reports using spreadsheets, [Deloitte](#) sought faster alternatives. By deploying [IBM Robotic Process Automation](#) software, Deloitte was able to produce a range of key reports in a matter of minutes instead of days, while also reducing errors stemming from manual entry. Professionals freed from repetitive reporting tasks now have more time to serve clients and work on more value-added assignments.

Automating the preparation of the monthly management report freed up five professional analysts to work on more high-value assignments.

RPA is an inexpensive way of improving productivity and improving the quality of the systems while also freeing time to focus on more high-value activities.

Martin Seefelder
Robotic and Cognitive Process Automation Leader, Deloitte-Brazil

Solution component:
IBM® Robotic Process Automation



Transforming invoice processing with IBM® Robotic Process Automation

[Learn more](#)



Business Challenge:

Being a successful law firm meant that Lobo de Rizzo managed a large client base. It used to run its invoice management process rather inefficiently in that its financial department issued different invoices for each of its processes, resulting in a high volume of invoices issued manually, overloading the staff with repetitive tasks for each of its clients daily. It looked to replace this error-prone process with a more efficient, reliable one.

Solution:

The client chose the IBM Robotic Process Automation solution to automate its invoice management processes. The financial department automated its tasks with the implementation of 2 robots that operate 24 hours a day. These two robots perform manual and repetitive work equivalent to three employees, who have since reallocated to more strategic and non-repetitive activities.

Outcomes:

- Significantly reduced operational costs
- Increased productivity
- Helped reallocate employees to more strategic and non-repetitive tasks
- Scaled robot deployment to meet new demands.

Solution Components:

- IBM® Robotic Process Automation



Customer success story: Claro case study

Regulated Customer Service

Telco customers can open a complaint with the regulatory agency through a government-provided portal. Complaints must be handled according to SLAs per the regulatory agency, and failure to do so results in fines.

CSRs needed to juggle between this portal and Salesforce, since the request was handled internally on Salesforce, but the two systems needed to be kept in sync.

The entire process was automated and today all complaints are managed only through Salesforce.

Tax Recovery

Every time customers ask for a refund, Claro must be refunded on taxes it paid upfront as well. With 40M refund requests to process and deadlines approaching, there was no other way to do it without automation.

This was one of our most successful projects, in which customer payback happened in 15 minutes after bots started to run.

NBA/NBO

It is common to receive calls from telco customers wanting to resolve an issue, change their subscriptions or even to cancel them. The process to help customers over the phone is time consuming as it requires looping through different systems and combing through data and processes to define what the Next Best Action or Next Best Offer to a customer should be.

Upon implementing Salesforce, Claro wanted this process to be automated as well. Claro deployed hundreds of IBM RPA bots to augment CSRs in real-time by providing NBAs/NBOs to customers over the phone.

Backoffice Automation

When customers open service tickets, there are always actions that must take place on many different systems for these requests to be fulfilled.

In one particular back-office cell with over 300 people, Claro deployed tens of bots that were able to understand and process these requests, reducing the back-office headcount to 40, relocating these people to other functions. This increased customer satisfaction while reducing costs.



Seeing is believing.

Demo

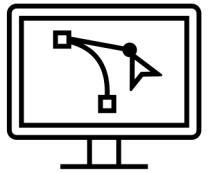
Lead Generation –

Information Updates in
Applications –
Automated.

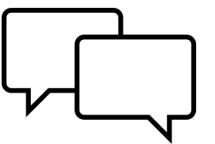
Chatbot –

Using chat for getting
automated credit card
statements, by
entering the credit card
information.

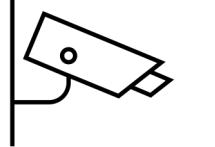
Competitive Differentiators



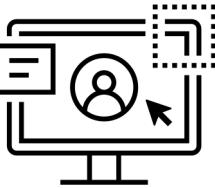
[650+ Drag and Drop Commands](#) with tremendous amount of prebuilt integrations for easy wizard use (Outlook, Word, PDF, SAP, Etc)



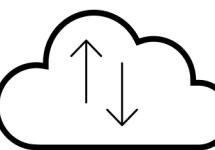
[Native Chatbot and IVR runtime](#) Within the product. When SaaS exposable as Slack Chatbot, Facebook Messenger Chatbot, Etc



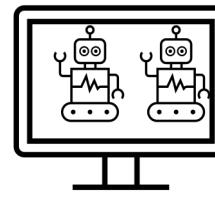
[Recorder Capabilities](#) accelerates Bot development. Specific controlled automation through targeted recorder usage. Also the visual recorder for image identification and usage for selection is extremely easy to use



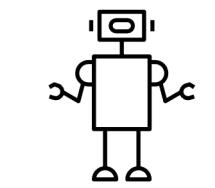
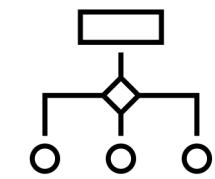
[Powerful Developer tools](#) with Developer Quality of Life features for easy developer interaction (Implicit wait for dynamic latency, Remote debugger, Variable Auto Creation, Ctrl Space Variable Selection)



[Cloud Native](#) for fast provisioning, elastic deployments, 4GL automation with services-first architecture, portable Attended & Unattended automations



[Scalability through Concurrency](#) only RPA product that allows multiple bots to run on same machine at same time



[Complete Hyperautomation offering](#) with CP4BA: Intelligent Process Automation either On-prem or SaaS, ranked as the top leader in both technology and services



[Integrated offering](#) no dependency on Windows WF Foundation or TrustPortal, provides integrated state-of-the-art OCR with ABBYY engine, Chatbots, IVR/AVR, direct xlxs read/write

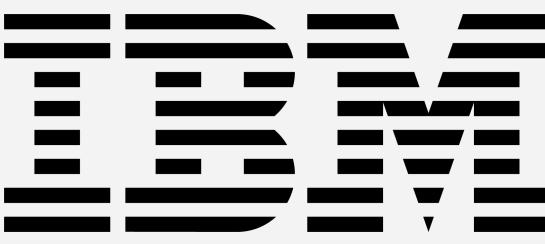
[IBM's Global Presence and Support](#) around the solution ensure success across any and every client suite and local support in native language

Thank you

Mangesh Patankar
Cloud Architect – Hybrid Cloud Build Team

Email (mapatank@in.ibm.com)
Phone (+91-9967672008)
ibm.com

© Copyright IBM Corporation 2020. All rights reserved. The information contained in these materials is provided for informational purposes only, and is provided AS IS without warranty of any kind, express or implied. Any statement of direction represents IBM's current intent, is subject to change or withdrawal, and represent only goals and objectives. IBM, the IBM logo, and ibm.com are trademarks of IBM Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available at [Copyright and trademark information](#).

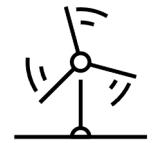


RPA use cases by industry



Banking and insurance

- Onboarding
- Insurance claims tasks
- Loan origination



Energy and utilities

- Data collection and reporting
- Contracts
- Regulations and compliance



IT

- Data entry
- Capture
- Mass email management
- Reporting
- Data synchronization



Travel and transportation

- Invoices
- Payroll
- Vehicle checks and reporting



Healthcare

- Doctor reporting
- Medical bills
- Medical claims tasks



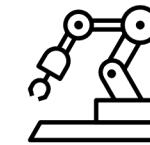
Media and communications

- Order management
- Provisioning
- Crisis management



Government

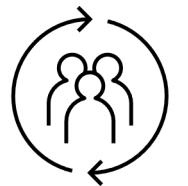
- Benefits processing
- Eligibility
- Self service updates



Cross industry

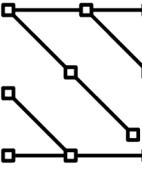
- Customer Support
- HR processes
- Reporting
- Data migrations

To automate more types of work, **beyond the repetitive**, at scale, your bots need...



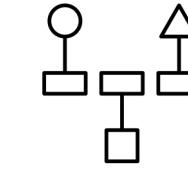
Human-in-the-loop

Coordinate work with humans to start-to-finish process



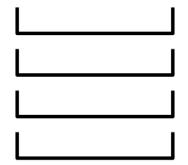
Cognitive Capture

Understand a wider range of unstructured documents to facilitate data-rich scenarios



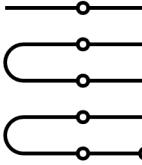
Natural language business rules

Be a bit more agile, leveraging the decision-making skills of an expert



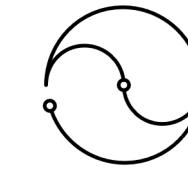
Content management

Organize and store content for easy retrieval



Process mining

Gain detailed information on how processes are performing to determine where to get the highest return



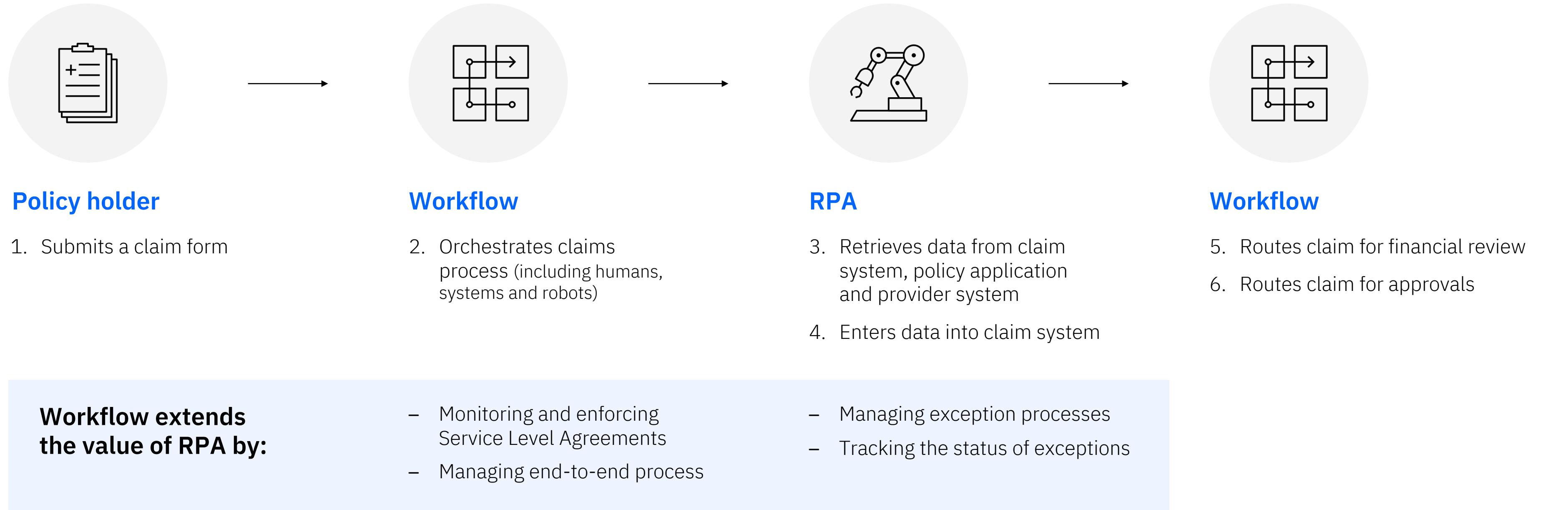
Artificial Intelligence

Enable your bots to learn, think, and reason like a person to reach a desired outcome

Coordinate work with humans in a start-to-finish process

Combining [workflow](#) with RPA

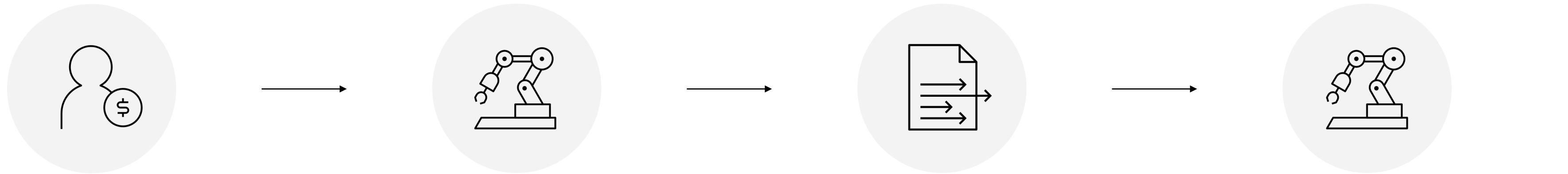
Claims processing use case: Workflow starts a bot



Get your bots to process unstructured data

Combining [capture](#) with RPA

Invoice entry task use case:



Vendor

1. Sends email with invoice attached as PDF document

RPA

2. Opens email
3. Opens PDF attachment

Data capture

4. Interprets invoice
5. Passes relevant fields to RPA

RPA

6. Logs in to invoice system
7. Inputs invoice data
8. Compares invoice data against PO/contract

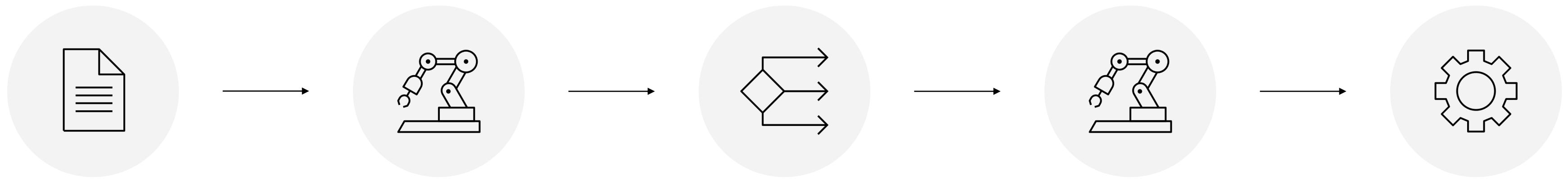
Data capture extends the value of RPA by:

- Analyzing unstructured content to produce clean, structured data as required by RPA
- Eliminating or reducing the manual work required to interpret documents
- Minimizing exceptions
- Learning from corrections

Get your bots to make better decisions faster

Combining **decisions** with RPA

Order entry use case:



Customer

1. Customer places an order

RPA

2. Opens order
3. Retrieves order data
4. Invokes decision to calculate discounts

Decisions

5. Calculates discount amount for each line item

RPA

6. Logs in to ERP system
7. Inputs data into ERP

ERP

8. Validates order
9. Submits order for fulfillment

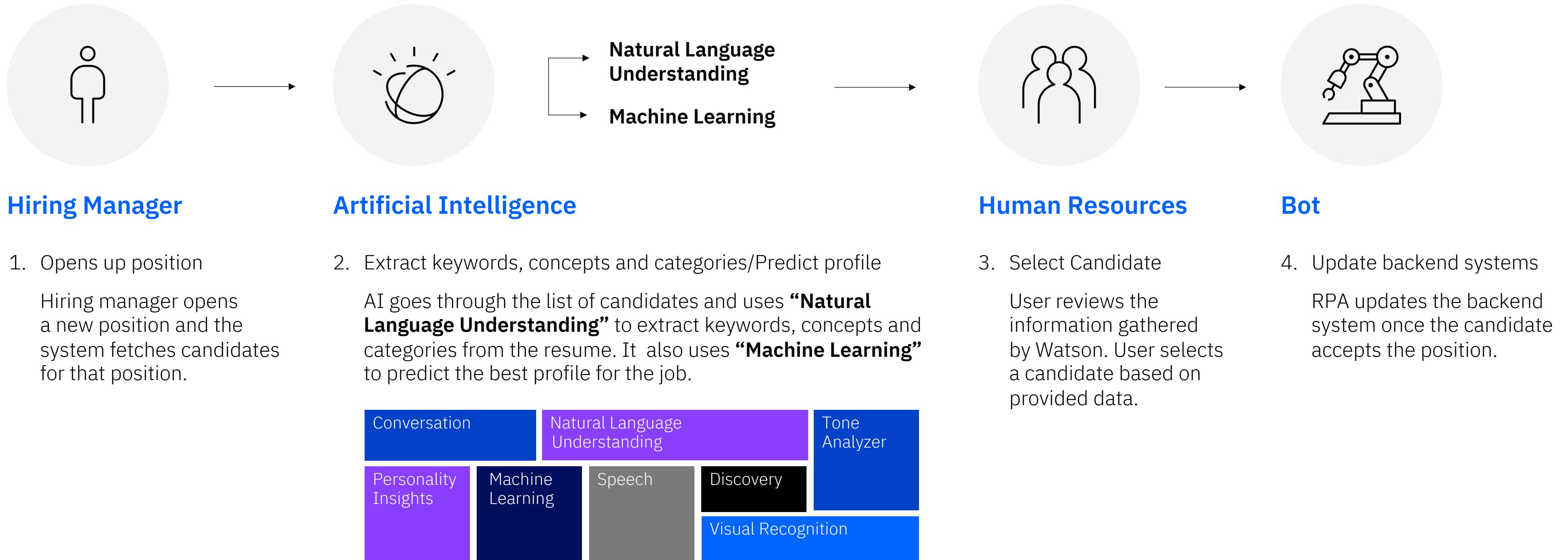
Decision management extends the value of RPA by:

- Managing and governing business decisions outside of RPA
- Enabling non-technical business users to maintain operational decisions
- Enabling business automation to be changed rapidly
- Reusing business decisions across the enterprise

Bots can execute repetitive tasks based on AI-gathered insights

Combining [AI technology such as ML, NLP](#) with RPA

Hiring use case:



Selling Strategies

IT Use Cases



Access Management

Access Request
Bulk
Provisioning
Periodic
Tracking



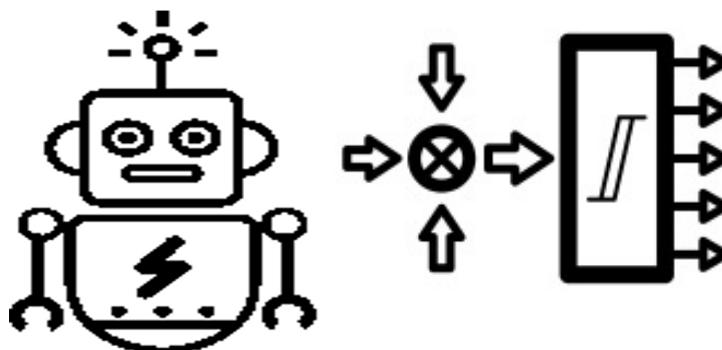
Service Request

Service
Provisioning
Organization
Updates
Compliance
Requests



Service Desk

Call/email Handling
Data Analysis
Stakeholders
Alerting



Event Management

Event Notification
Event Classification
Response &
Remediation



IT Ops

Job Scheduling
Backup & Restore
IT Runbooks
Storage
Management



Application Management

Problem Analysis
Performance &
tuning
Testing