

# KRYON™

BE YOUR FUTURE

## Release Notes

Kryon Process Discovery v19.4

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# Process Discovery 19.4

**Release Date:** September 22, 2019

In release 19.4 of **Kryon Process Discovery**, you can now install Discovery Robots on RDP workstations connected to terminal servers and AWS WorkSpaces.

We've added some helpful features to the Process Discovery Console. Filtering user recordings and sorting them is even easier and more intuitive.

## Discovery Robots

- 1. Added support for terminal server clients**

Allowing installation of Discovery Robots on remote client machines of terminal servers

- 2. Added support for Amazon WorkSpaces**

Allowing installation of Discovery Robots on cloud desktops running Amazon WorkSpaces client application

## Discovery Console

- 1. Rename Process**

Added ability to rename a process directly from the Process page

- 2. User recordings**

Enhancements in filtering and sorting of user recordings

- 3. Variant information**

Enhancements in renaming variants and editing their descriptions

## Discovery Orchestrator

- 1. Redesign of the Applications page**

The UI of the Applications page has been redesigned. Now you can make a list of applications to include in the discovery process; or a list of applications to exclude

## Administration

- 1. System startup**

Enhanced logic of system startup, creation of database schemas and tables, and creation of queues

Miscellaneous bug fixes, performance improvements, and security upgrades

# Process Discovery 19.3.5

**Release Date:** August 11, 2019

With numerous improvements, both on the outside and behind the scenes, the most recent version of **Kryon Process Discovery** brings you unprecedented ability to easily analyze discovered processes and define their parameters. Smoother installation and improved network performance bring the value of Process Discovery to your organization more quickly and efficiently than ever before. Read on!

## Discovery Console

### 1. Variant naming

Added the ability to provide variant names/descriptions, allowing for easier identification and process analysis

### 2. Delete process versions

Added the option to delete individual process versions or entire processes directly from within Console

## Server-side processing

### 1. Train the robots

Enhanced **Train the robots** feature, removing the requirement that user-identified start/end points must fall within the algorithm's definition of a process

### 2. Image compression

Introduced more advanced image compression, resulting in 25% smaller images, reduced storage requirements, and significantly improved network performance

## Installation

### 1. Enhanced Discovery Server installation

- Automatic upgrade to PowerShell 5.1 on machines running Windows Server 2012 R2
- Automatic installation of Seq (centralized logging component)

Miscellaneous bug fixes, performance improvements, and security upgrades

# Process Discovery 19.3.1

Release Date: July 21, 2019

## Now you can train the robots!

Our powerful new **Train the robots** feature allows you to quickly adjust the start and/or end points of a discovered process.

You'll identify these points while viewing the recording of an individual occurrence, but your training affects much more. The next time the Process Discovery algorithm is run, the robots will use your instructions to define the process every time it occurs. Pretty cool!

### Train the robots

Want to adjust the start or end points?

1. **Identify the correct start/end points**

To make this easier, we've added some actions before and after the robot-defined start/end.

2. **Mark them**

This is how you train the robots for the next time they identify this process.

3. **See the robots learn**

You won't see the results immediately, but the next time the algorithm runs, the robots will use your instructions to define the process.



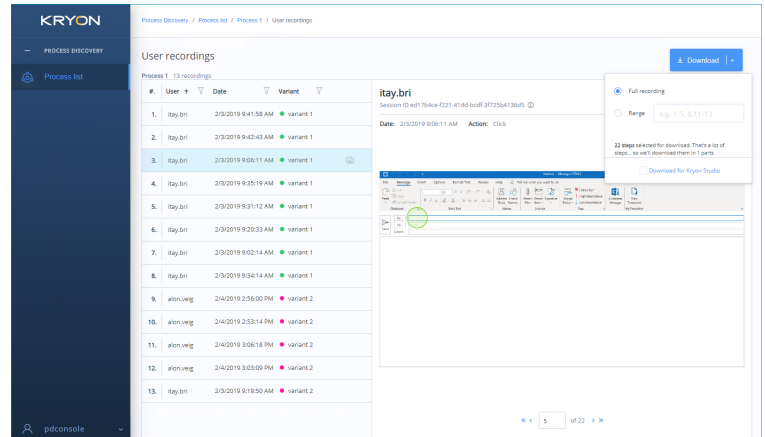
OK, got it

Miscellaneous bug fixes, performance improvements, and security upgrades

# Process Discovery 19.3

**Release Date:** June 30, 2019

The latest release of Kryon Process Discovery introduces some exciting features to Discovery Console. The new **User recordings** feature gives Business Process Analysts the option to dig more deeply into the details underlying the process map. Download individual process occurrences – or even selected steps – for import to Kryon Studio; or use the PD algorithm's sophisticated analysis to stay focused on the big picture. Now the choice is yours.



**Version history** offers the ability to view and work with each version of a process – from the current results, all the way back to the time it was first discovered.

We've also made some major under-the-hood improvements, designed to speed up processing, enable more efficient server management, and ensure system stability. Keep reading... you don't want to miss a thing!

## Discovery Console

### 1. Version history

- Added a **History** tab to the **Process details** page, allowing users to trace the history of a discovered process as additional data is collected
  - Review evolving process statistics (volume, average time, variants, etc.) in a single table summarizing each version
  - Select any version to view its **Process details** page and download its variants for import to Kryon Studio

### 2. User recordings

- Added a **User recordings** page, displaying a list of each process occurrence – by user, date, and variant
  - Select any occurrence to access the recorded image of each user action
  - Easily navigate through the images to view all or part of the recording step-by-step
  - Download the entire recording or selected steps for import to Kryon Studio

## Infrastructure

### 1. Consolidation of system services

- Consolidated two system services (previously, PipeRunner and Orchestrator) into a single new service named **Process Discovery Service**
  - Incorporates monitoring/auto restart of server components for improved reliability and stability
  - More efficient server management and configuration (using a single, consolidated configuration file)

## Algorithm

### 1. Algorithm performance improvements

- Parallelization of image tagging translates to significantly improved processing time and reduced time to value (TTV)

### 2. Selective algorithm execution

- Added the ability to select user recordings on which to run the PD algorithm

## Installation

### 1. Enhanced Discovery Server installation

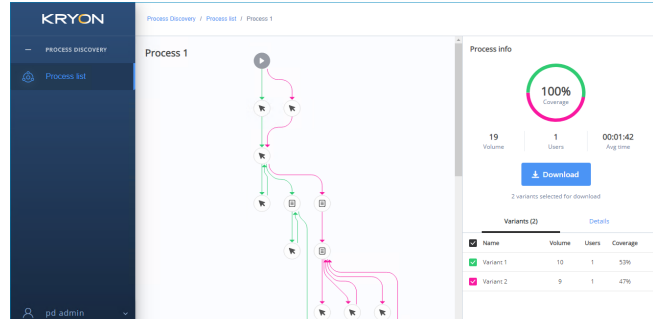
- Option to automatically install/configure local instance of MariaDB as part of Discovery Server installation

Miscellaneous bug fixes, performance improvements, and security upgrades

# Process Discovery 19.2

**Release Date:** May 23, 2019

We're pleased to introduce **multi-tenancy** to our latest release of Process Discovery. With the added ability for multiple organizational units to share a single Process Discovery deployment, now it's more cost effective than ever for all business segments and departments experience the benefits of Kryon Process Discovery.



Also, we've launched a new and improved Discovery Console for enhanced performance and more intuitive navigation. Be sure to check out all the improvements!

## Infrastructure

### 1. Multi-tenancy

Added the ability to configure multiple tenants on a single Process Discovery deployment

- Independently manage robots, whitelists/blacklists, algorithm settings, and data by tenant
- Assign Discovery Console users to one or more tenants
- Filter Discovery Console data displayed by tenant

### 2. Aerobase authentication platform

- Integrated the Aerobase authentication platform for Discovery Console user management, allowing for increased security and flexibility

### 3. NGNIX implementation

- NGNIX has replaced IIS as the Discovery Console web server



## Installation

### 1. Enhanced Discovery Server installation

- More available installation parameters means one-step Discovery Server installation in a wider variety of environments
- Option to automatically install/configure local instance of Microsoft SQL Server (Express edition) as part of Discovery Server installation

## Algorithm

### 1. UI-based algorithm configuration

- Algorithm configuration can now be managed from inside Orchestrator, providing a more convenient interface for fine-tuning algorithm settings and refining Process Discovery results

### 2. Algorithm performance improvements

- Significantly faster algorithm processing in version 19.2 translates to reduced time to value (TTV)

## Discovery Console

### 1. Process List (results table)

- Added **ANNUAL COST** column and **Cost calculator** feature, giving users the ability to estimate the potential cost savings of automation
  - For additional information on how to enable this feature, see the **Kryon Process Discovery User Guide (Annual Cost Calculator)**
- Added **TENANT** column and the ability to filter by tenant

### 2. Process Details

- Upgraded user interface for more intuitive navigation, easier data analysis, and more streamlined display

## Discovery Robots

### 1. User privacy option

- Added the option to hash (i.e., encrypt) the user name in all data recorded/transmitted by a **Discovery Robot**
- This option is used primarily for compliance with privacy regulations (such as the GDPR) and/or company-issued privacy and security policies
  - User name hashing is configurable on a per-robot basis. For additional information on how to enable this option, see the **Kryon Process Discovery Installation & Administration Guide** (*Configuring Discovery Robot Options*)

Miscellaneous bug fixes, performance improvements, and security upgrades

# Process Discovery 19.1

**Release Date:** February 3, 2019

Kryon Process Discovery just keeps getting better and better. This release is full of new features and enhancements that improve accuracy, performance, flexibility, and usability. Read on!

## Algorithm

### 1. Incremental process discovery

Newly discovered variants and actions are now added to existing processes each time the algorithm is run (i.e., rather than resetting/overwriting them)

### 2. Streamlined data for optimized display

Repeating/equivalent "fill in form" actions have been consolidated to improve process map readability and usability

### 3. Enhanced performance and accuracy

- Parallel processing during data tagging → faster performance
- Upgraded algorithm for user action matching → higher accuracy

### 4. Customized algorithm configuration

Added the ability to manage thresholds for process identification (e.g., minimum/maximum process time, minimum process volume, minimum variant similarity, etc.), enabling users to refine results as required

## Infrastructure

### 1. Improved communication between Discovery Robots and the Discovery Server

## Discovery Robots

### 1. Upgraded Discovery Robot action recorder

Featuring new recording logic, faster image capturing, reduced memory consumption, and better encryption

### 2. Added support for 32-bit clients

Allowing installation on a wider variety of employee machines

### 3. Added support for multiple monitors/DPIs on a single client

## Discovery Console

### 1. Discovered Processes (results table)

- *Added filtering*  
Filter discovered processes by user, application, and date range
- *Additional information displayed for each discovered process*  
Users, applications, and number of subprocesses

### 2. Process map

- *Single start and end points*  
Consolidated start/end points for all variants, and visually differentiated them from other actions, allowing for easier process map interpretation and analysis
- *Upgraded user interface*  
Subtler colors, improved mouse interactions (selection/hover), new informational tooltips (displaying action type and volume)

### 3. Process details & variants

- *Improved variant ordering*  
Variants now ordered by the following two factors, ensuring that the most significant variants appear first:
  - i. coverage (i.e., the percentage of total process volume covered by the variant); and
  - ii. common denominator (i.e., the percentage of screens shared with other variants)
- *Enhanced control over variant visibility*
  - Process Details page loads with only one variant visible by default – with the ability to enable/disable visibility of all other variants individually or in aggregate, allowing for easier analysis and readability
  - Added ability to toggle **off** the visibility of Variant #1 (also enables selective export of the process to Kryon Studio without this variant, if desired)

Miscellaneous bug fixes, performance improvements, and security upgrades

# Process Discovery 1.5

**Release Date:** November 7, 2018

## Installation

- **Installation kits** – introduced installation kits for the Discovery Server (silent mode) and Discovery Robots (silent mode and UI mode)

## Automation Export/Import

- **Selective export** – added the ability to select specific variants for export to Kryon Studio

## Infrastructure & Security

- Enhanced security for data in transit and data at rest
  - **TLS support** – added support for TLS 1.2, allowing customers the option ability to secure all communications between Discovery Robots and the Discovery Server
    - Customer-provided certificate required
  - **Database encryption** – added database encryption for improved data security
- Significant performance enhancements for quicker and more efficient processing

## Administration

- **Data management** – added ability to purge all or part of the collected data from the database
- **Robot management** – added ability to turn Discovery Robots off/on from the server
- **Enhanced logging features** – added additional logs to provide a more complete picture of how the Discovery Server and Discovery Robots are operating

## For partners

- **License generator** – added Process Discovery to the License Generator, enabling the ability to quickly and easily provide Process Discovery licenses to customers

Miscellaneous bug fixes, performance improvements, and security upgrades

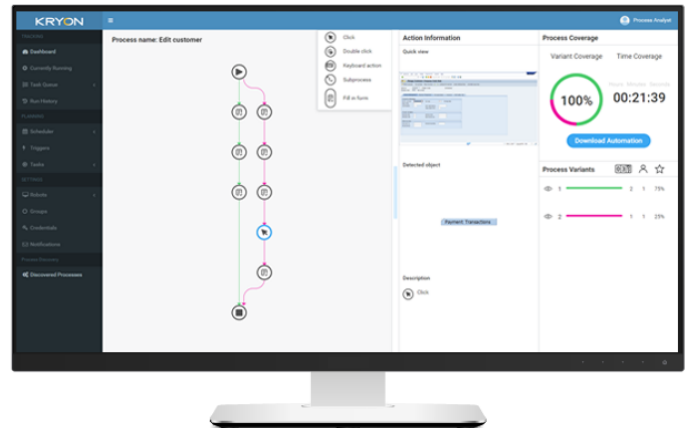
# Process Discovery 1.0 (Initial Release)

**Release Date:** June 14, 2018

## Welcome to the era of true discovery.

Kryon is pleased to introduce **Process Discovery** – enabling any enterprise to be fully automated in unprecedented time and with unparalleled cost-effectiveness, expanding the benefits of RPA for maximum ROI.

A powerful, proprietary, AI-based platform designed to identify an organization's business processes, correlate variants, and make recommendations for enhanced efficiency via automation, **Kryon Process Discovery** is poised to revolutionize digital transformation in enterprises across every industry.



## Key Features

### Discovery Robots

Running silently on your employees' computers, Kryon Discovery Robots collect data without impairing employee performance or consuming their valuable time. Discovery Robots are configurable to your specifications, and all the collected data remains securely within your organization.

### Application whitelisting/blacklisting

Elect to keep certain data private by configuring the Discovery Robots to look at actions only on specific applications.

### Advanced algorithm – getting smarter all the time

The Process Discovery Server executes a complex algorithmic process, incorporating computer vision, data extraction, action tagging, process identification, mapping, and more. And machine learning and artificial intelligence means it's getting smarter all the time.

### Visual process mapping

See a full display of the data collected by the Discovery Robots – including actions, applications, workflows and variants. Easy to read and understand, our process maps provide you complete information to empower intelligent decisions.

## Actionable analytics

Easily analyze all the data you need, right alongside the process maps. Review high-level summaries or drill down to the details: action type, variant frequency, time taken and more.

## Intelligent automation recommendations

In addition to providing you with detailed statistics, Process Discovery makes intelligent automation recommendations of its own – calculating priorities based on ROI-related metrics such as process frequency and time that could be saved.

## Easy Automation

Turn your decisions into automation reality by exporting discovered processes to automation workflows with just a few clicks. Choose precisely which variants and subprocesses to automate. It doesn't have to be all or nothing, and the decisions are completely yours.

