

# Chainlink Automation Release Notes

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## [2024-03-07 - Automation StreamsLookup error handler](#)

The [Automation StreamsLookup error handler](#) is available to help you handle potential errors with StreamsLookup upkeeps. When you add the new [checkErrorHandler](#) function, you can define custom logic to handle some errors offchain and handle other errors onchain in `performUpkeep`.

## [2024-02-27 - Automation on Optimism Sepolia](#)

Chainlink Automation is live on [Optimism Sepolia](#).

## [2024-02-27 - Automation debugging script](#)

The Chainlink [Automation debugging script](#) is available to help you debug and diagnose possible issues with registered upkeeps in Automation 2.1 registries. The script can debug custom logic upkeeps, log trigger upkeeps, and upkeeps that use StreamsLookup.

## [2023-12-07 - Automation on Base](#)

Chainlink Automation is live on [Base](#).

## [2023-10-02 - v2.0 release](#)

Automation 2.0 is now live on Ethereum, Binance Smart Chain, Polygon, Avalanche, Arbitrum, and Optimism. Automation 2.0 features include:

- Verifiable compute: The Automation DON now leverages a consensus mechanism, via Chainlink OCR3, to give you cryptographically verified compute. Save up to 90% of onchain gas costs by off-loading compute intensive tasks to the Automation DON.
- Log triggers: Natively use log data in your smart contracts with [log triggers](#). Unlock new connection possibilities.
- StreamsLookup: Seamlessly access and use Chainlink's Low Latency Data in upkeeps via [StreamsLookup](#). Build like the best Derivative protocols.
- Forwarder: A unique `msg.Sender` for your `performUpkeep` function so you can lock down sensitive upkeeps. Read more about the [forwarder](#).

## [2023-05-15 - Automation on Optimism](#)

Chainlink Automation is live on [Optimism](#).

## [Chainlink Keepers is now Chainlink Automation](#)

Chainlink Keepers has been renamed to Chainlink Automation. The table below describes what terms under the former Keepers naming system translate to under the current Automation naming system:

Keepers Term	Automation Term
Chainlink Keepers Network	Chainlink Automation Network
Keeper/Keeper Node	Automation/Automation Node
Keepers Job	Automation Job
Keepers Registry/Registrar	Automation Registry/Registrar
KeeperCompatible.sol	AutomationCompatible.sol
KeeperBase.sol	AutomationBase.sol
KeeperCompatibleInterface.sol	AutomationCompatibleInterface.sol

## [2022-09-23 - v1.3 Release](#)

Keepers Registry v1.3 [launched on Arbitrum Mainnet](#).

## [2022-08-04 - v1.2 Release](#)

Keepers Registry v1.2 launched on Ethereum, Binance Smart Chain, Polygon, Avalanche, and Fantom

- Automatic upkeep registration approval: All upkeeps on mainnet are now automatically approved.
- Programmatic control: With automatic approval, you can now dynamically create, manage, and fund upkeeps from within your dApps and even have an upkeep fund itself. Learn more [here](#).
- Advanced turn-taking algorithm: Our turn taking algorithm now supports upkeeps that require high-frequency execution.
- Durable ID and user-triggered migration: All upkeeps created in versions v1.2 and later will have durable IDs. v1.2 also supports user-triggered migration to future registry versions to make it easier to migrate to a new Keepers Registry and benefit from new features. Future migrations can still retain the existing ID. The ID is now a hash in format of a 77 digit integer.
- Configurable upkeeps: You can now edit the gas limit of your upkeep to easily customize your upkeep to fit your needs without having to create a new upkeep.
- Offchain compute improvements: The offchain compute sequence is improved for higher-fidelity representation of the gas and logic before transactions are submitted onchain. This helps to reduce reverts and reduce fees.
- Minimum spend requirement: As part of the mission to continuously enhance the security of the Chainlink Network for all participants, each registered upkeep will have a minimum spend requirement of 0.1 LINK, in aggregate across all transactions for the upkeep, to discourage network spam. Note that an upkeep is the automation job itself. It is not a transaction. Each upkeep can have thousands of transactions. If an upkeep has not spent more than 0.1 LINK across all transactions at the time of cancellation, then 0.1 LINK will be retained for the network. If more than 0.1 LINK has been spent by an upkeep, the full remaining balance of the upkeep will be withdrawable when the upkeep is canceled.

## [Manually migrating upkeeps from v1.1 to v1.2](#)

If your upkeep ID has 77 digits, it is already migrated to v1.2 and no further action is required. If your upkeep ID has less than 4 digits, your upkeep is on the v1.1 registry. To migrate your upkeep from Keepers v1.1 to Keepers v1.2, you can cancel it in the Keepers App, and register an exact copy of the upkeep in the Keepers App. While you can see upkeeps from both v1.1 and v1.2 in the [Keepers App](#), all new upkeeps in the Keepers App will be automatically created on Keepers v1.2.

## **[2022-07-21 - Underfunded upkeep notifications](#)**

You will now receive notifications to the email address you register in your upkeep when your upkeep is underfunded. We are limiting notifications on the same upkeep to once per week.

## **[2022-06-29 - Keepers on Fantom](#)**

Chainlink Keepers is live on the Fantom Network [Mainnet](#) and [Testnet](#).

## **[2022-06-09 - Keepers on Avalanche](#)**

Chainlink Keepers is live on the Avalanche Network [Mainnet](#) and [Testnet](#).

## **[2022-03-01 - Keepers on Ethereum Rinkeby](#)**

Chainlink Keepers is live on Ethereum Rinkeby.

## **[2021-11-18 - Keepers on Binance Smart Chain and Polygon](#)**

Chainlink Keepers is live on the both Binance Smart Chain [Mainnet](#) and [Testnet](#), and Polygon [Mainnet](#) and [Testnet](#).

## **[2021-08-05 - Keepers v1.1 launch on Ethereum](#)**

Chainlink Keepers officially launched on [Ethereum Mainnet](#).

## **[Questions](#)**

Ask questions in the [#automation channel](#) in our [Discord server](#).