## **Errors API Reference**

Integrate Chainlink CCIP into your project

npmyarnfoundrylf you use NPM, install the <a href="mailto:ochainlink/contracts-ccip">ochainlink/contracts-ccip</a> NPM package and set it to the v1.4.0 release:

 $npminstall@chainlink/\underline{[email\ protected]} If\ you\ use \underline{Yarn}\ ,\ install\ the \underline{@chainlink/contracts-ccip\ NPM\ package}\ and\ set\ it\ to\ the\ v1.4.0\ release:$ 

yarnadd@chainlink/[email protected]If you useFoundry, install the v1.4.0 release:

forgeinstallsmartcontractkit/ccip@b06a3c2eecb9892ec6f76a015624413fffa1a122

When invoking theccipSend<u>function</u>, it is possible to encounter various errors. These might be thrown either by the CCIP router or by one of the downstream contracts called by the CCIP router. Below is a compiled list of potential errors you might encounter. Referencing this list will enable you to capture and handle these exceptions gracefully.

#### Router

ErrorParametersDescriptionUnsupportedDestinationChain\* uint64 destChainSelectorThrown when the destination chain is not supported.InsufficientFeeTokenAmount-Thrown when the CCIP fees are paid with native tokens, but not enough is sent with the transaction.InvalidMsgValue-Thrown when the CCIP fees arenotpaid in native tokens, butmsg.valueis non-zero.

### **Onramp**

ErrorParametersDescriptionNotAFeeToken address tokenThrown when an unsupported fee token is used. UnsupportedToken IERC20 tokenThrown when an unsupported transfer token is used. InvalidAddressbytes encodedAddressThrown when the receiver address is invalid. InvalidExtraArgsTag-Thrown when an invalid extra arguments tag is used. RouterMustSetOriginalSender-This error should never be thrown as the router always sets the sender. MustBeCalledByRouter-This error should never be thrown as the router always makes the call. MessageGasLimitTooHigh-Thrown when the gas limit is too high. UnsupportedNumberOfTokens-Thrown when too many tokens are involved in the transfer. SenderNotAllowed address senderThrown when the sender is not allowlisted. MaxFeeBalanceReached-Thrown when the onRamp has reached its maximum fee storage capacity. If it is full, it cannot process new transactions.

## **RateLimiter**

ErrorParametersDescriptionPriceNotFoundForToken address tokenThrown when a price cannot be found for a specific token.BucketOverfilled-This error should never be thrown as it indicates an invalid bucket state.AggregateValueMaxCapacityExceeded uint256 capacity \* uint256 requestedThrown when the user requests to transfer more value than the capacity of the aggregate rate limit bucket.TokenMaxCapacityExceeded uint256 capacity \* uint256 requested \* address tokenAddressThrown when the user requests to transfer more of a token than the capacity of the bucket.AggregateValueRateLimitReached uint256 minWaitInSeconds \* uint256 availableThrown when the user requests to transfer more value than currently available in the bucket. The user might have to wait for at leastminWaitInSeconds \* uint256 available \* address tokenAddressThrown when the user requests to transfer more of a token than currently available in the bucket. The user might have to wait at leastminWaitInSecondsfor enough availability, or transfer the currently available in the bucket. The user might have to wait at leastminWaitInSecondsfor enough availability, or transfer the currentlyavailableamount.

#### ERC20

ErrorDescriptionERC20: burn amount exceeds balanceThrown when the amount to be burned exceeds the pool balance.ERC20: transfer amount exceeds allowanceThrown when the transfer amount exceeds the allowance.

# **PriceRegistry**

ErrorParametersDescriptionChainNotSupported *uint64 chainThrown when a chain is not supported.StaleGasPrice* uint64 destChainSelector \* uint256 threshold \* uint256 timePassedThrown when the gas price is stale.TokenNotSupported *address tokenThrown when a token is not supported.StaleTokenPrice* address token \* uint256 threshold \* uint256 timePassedThrown when the price of a token is stale.