# Accuracy and Validation

Data scientists spend as much as 80% of their time on data prep. Qudol automates ETL, cleansing, and time-series linking to help asset management teams increase accuracy and efficiency.
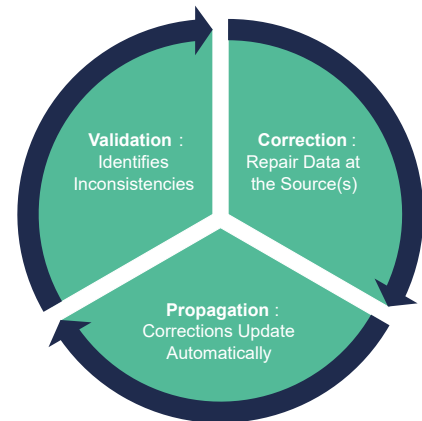
By algorithmically adding a time dimension to every single vendor dataset, Qudol simply and efficiently reduces the quality and accuracy problem to one of timing - instead of mismatched symbol or name.

**Source Hierarchy:** Our algorithm uses configurable waterfall hierarchies as the first arbiter of underlying data inconsistencies.

**Validation:** Qudol's validation process automatically identifies anomalies and alerts your team of specific cases that require expert review.

**Correction:** Data issues are resolved at the source intake, ensuring that knowledge is shared across the organization.

**Propagation:** Corrected data is automatically processed by Qudol, providing your teams with the best version possible.



**Validation :** Identifies Inconsistencies

**Correction :** Repair Data at the Source(s)

**Propagation :** Corrections Update Automatically

Qudol Data Quality Lifecycle

## Example Validation Scenarios

| QUID* | Start | End | AssetCode | Name |
|---|---|---|---|---|
| 134231971 | 1994-04-30 | 2999-12-31 | CAN00CP0 | PENN WEST PETROLEUM LTD |
| 134231971 | 2017-01-06 | 2999-12-31 | USA0BQH0 | PENN WEST PETROLEUM LTD |
| 314253335 | 2019-03-01 | 2019-04-01 | 06128801 | EPSILON ENERGY LTD |
| 314253335 | 2020-06-29 | 2999-12-31 | 09860201 | EPSILON ENERGY LTD |

*\* Identifiers have been obfuscated for compliance. Names and dates are fictitious, but meaningful.*

### ▢ Duplicate Assets from the Same Source

In the sample data above, it appears that this vendor, for whatever reason, introduced a USA version of Penn West Petroleum in 2017 while the CAN version (from 1994) was still active (represented here as 2999-12-31).

Qudol identified this issue during its validation step, and automatically generated an alert for expert review. Once the correct dates have been identified, the data is corrected at the source and propagates across the entire system.

### ▢ Gap in Coverage

There is a gap in coverage for Epsilon Energy from April 2019 to June 2020. Given that these are two different vendor assets, it is impossible to identify such gaps without QUID (which is the same for both assets). Qudol identifies this gap automatically.

Do we need to fill the gap? If so, which one do we stretch?

This is a business question that a researcher needs to answer. Qudol takes care of all of the data wrangling behind the scenes, so you can focus on just these cases that require expert intervention.

**Qudol has over 25 years of successful partnerships with asset management teams. To book a demo and see more ways Security Master can improve accuracy and simplify your data operations, send us a message at info@securitymaster.com.**