

Task IQ

Library of Industrial Task Types

The **library of industrial task types** — the verb half of EON Universal.

P0. Four products inherit this schema: Toolbox IQ, the Compound IQ container, Robot IQ and EON Delta.

363

equipment classes

EON Universal already holds the nouns, anchored to ISO 14224. **Task IQ binds a verb to each class.**

WHY

Industry knows its nouns. It does not know its verbs.

ISO 14224 gave the industry a shared vocabulary for equipment. Nothing equivalent exists for the work performed on it.

The noun library works

Operators, vendors and insurers all mean the same thing by a centrifugal pump, with the same failure characteristics. Reliability data pools because of it.

The verb library does not exist

Isolating a pump happens thousands of times a day, in substantially the same way. Every operator writes it down separately. None of it is comparable or reusable.

So the knowledge stays put

A procedure proven at one refinery is rebuilt from zero at the next, at full cost and full risk — and the patterns behind incidents are rediscovered independently, often after another event.

One design decision **does three jobs at once**

A task type binds to an equipment CLASS, never an equipment instance.

It transfers

“Isolate a centrifugal pump”
instantiates against any operator’s
equipment of that class.

It discloses nothing

Tags, setpoints, site conditions and
incident history stay in the
customer’s tenant. Nothing
site-specific remains to disclose.

It makes Robot IQ nearly free

A class-bound, step-decomposed,
verification-tagged object is **already**
the shape a machine policy needs.

The **task object**

A step list is not enough. What separates competent execution from unsafe execution is everything around the steps.

Preconditions & authority

Plant state and isolation state that must hold.
What permit is required, and who may authorise. Links to Permit IQ.

Step sequence

Ordered steps. Each carries its own hazard — not a hazard list bolted to the whole task.

Verification points

What must be confirmed, by whom, before the next step. The basis of all assessment.

Failure modes

What goes wrong here and what it becomes.
Seeded from Situation Room's documented cases.

Abort conditions

When the task must be stopped rather than continued. The judgement least often written down and most often decisive.

Provenance

Which sources this came from and whether they qualify. Carried for the life of the record.

How a task type enters the library

Not a design preference — this is what EON’s published Data Rights Standard requires of any Generalized Learning.

Multi-source	Observed at two or more unaffiliated organisations — OR already documented in a recognised industry standard. The second limb is how the library is seeded on day one.
Non-attribution	Nothing from which a participant, site, asset or individual can be identified, directly or by inference.
Exclusion	No volumes, costs, yields, formulations, subsurface data, turnaround schedules, capital plans or vendor terms. Absolutely, in all circumstances.
Temporal	Observations aged at least three months. The pipeline has a structural 90-day lag — design for it.
Review	Notified to the originating customer, who has 30 days to withhold it. The library needs a review queue, not just a database.

Two states: candidate and qualified. A pattern seen at only one customer is a Derived Insight — their property, never promoted.

Twelve task families

Ten derived by inverting Situation Room’s genres. Families 11 and 12 close gaps Situation Room does not currently represent.

1 Isolation & stored energy	2 Confined space entry	3 Hot work	4 Breaking containment
5 Start-up & shutdown	6 Overpressure & relief	7 Rotating equipment	8 Loss of containment response
9 Utilities & support	10 Inspection & sampling	11 Lifting & work at height	12 Organisational & mindset

Families 11 and 12 are new. 12 is delivered through EON Tacit Table and Permit IQ, not Genesis — organisational failures are role-interaction failures. Transport sits here too: fatigue and alertness, not vehicle handling. EON does not build driving simulators.

Scope is limited to tasks where serious injury or loss of containment is possible. Not a catalogue of all industrial work.

Chosen by evidence, not by convenience

Situation Room holds 120 real oil and gas situations, 68 with cited frequency. Every situation is the failure of a task. Invert the frequency table.

Arc flash on de-energization	→ Electrical isolation and stored-energy release
Hot work ignition of trapped vapour	→ Gas test and hot work authorisation
Flange / gasket weep	→ Early detection and isolation
Corroded pipe rupture	→ Inspection round and condition reporting
Stored-pressure release (LOTO)	→ Isolation and stored-energy release
Confined-space prep	→ Confined space entry preparation
Isolation sits underneath three of the top six. It is task type number one.	

Three decisions

Expert review gate?

Does authoring a candidate require expert sign-off before it enters the review queue, or does structural completeness suffice?

Version succession

When a qualified task type is superseded, do instantiated simulations follow automatically, or on customer election?

Counsel on purpose

Does “safeguard personnel, equipment reliability, workforce competency” extend to teaching a machine? Robot IQ rests on the answer.

The Data Rights Schedule carries a counsel-review warning. Task IQ may be specified against it. Nothing may be executed against it until that review completes.