Estimating integration work

How to estimate an integration with Exponential - breaking it into flows and work items, the factors that drive effort (surface, volume, data quality, the other system's API, identity, testing, operations), a worksheet...

Source file: `doc/eng-us/help/integrators/estimating-integration-work.md` Last changed 2026-11-04
https://doc.exponential.earth/learninminutes/exphelp/viewer/help/integrators/estimating-integration-work.md

This page is for integrators and account managers who quote integration projects. It gives a way to break the work down and the factors that move the number. It contains no day rates or reference effort: those depend on your team and market. The general guide to estimating Exponential projects is Estimating and scoping with extensions.

Contents

1. Estimate per flow
2. Factors that drive effort
3. Work that is often forgotten
4. An estimate worksheet
5. Fixed price or time and material

Estimate per flow

A **flow** is one kind of data moving in one direction between two systems ("ERP products into Exponential", "form leads to the CRM"). Estimate each flow with the same work items:

Work item	Contains
Analysis and specification	Mapping, keys, removal policy, errors, monitoring; the interface specification
Content model	Classes, attributes, sections, roles (when the flow brings new content)
Client of the other system	Authentication, calls, paging, error handling, a test double
Transformation	Mapping code, rich text conversion, media handling
Exponential side	Import or sender, hooks, cronjob parts, commands, tables
Tests	Unit and contract tests, dry runs, the idempotency test, end-to-end
Operations	Monitoring check, log lines, runbook section, alert setup
Go-live	Initial load, rehearsal, cut-over

Add the shared items once per project: the extension skeleton, environments, service accounts, CI, the security review, handover and hypercare.

Factors that drive effort

Factor	Lower effort	Higher effort

Factor	Lower effort	Higher effort
Surface	A shipped surface fits (RSS export, `xrowextract` schedule, REST reads)	A new surface (a search engine plugin, an SSO handler behind a proxy)
Direction	One way	Both ways, with conflicts to resolve
Timing	Nightly batch	Near real time with an outbox and retries
Volume	Hundreds of records	Hundreds of thousands, with performance work
Data quality	Clean, validated source	Free text, duplicates, missing keys
The other system's API	Documented, with a test instance and a contact	Undocumented, production only, slow answers
Content	Plain fields	Rich text with embedded elements, relations, media, several languages
Identity	None	LDAP with group mapping, SSO, provisioning and de-provisioning
Compliance	No personal data	Personal data, payment, audit requirements
Environments	Development, staging and production exist	They must be built

Rate each factor per flow (low, medium, high) and let the ratings, not intuition, decide the contingency.

Work that is often forgotten

- ☐ The removal policy and its implementation.
- ☐ The safety stop for truncated sources.
- ☐ Re-runs and the idempotency test.
- ☐ Rich text conversion and the report of unconvertible markup.
- ☐ Redirects for migrated content.
- ☐ Monitoring and alerts; the runbook.
- ☐ Key rotation procedure and its first rotation.
- ☐ Waiting for the other system's team (access, answers, fixes).
- ☐ Hypercare after go-live.
- ☐ Handover and operator training.
- ☐ The first upgrade after go-live, if the contract covers maintenance.

An estimate worksheet

```
Project: <customer> integrations                    Version: 1     Date: <date>     Author: <name
>

Flow                        Surface              Dir   Timing    Volume   Quality  API   Content
  Rating
1 ERP products -> site      cronjob + PHP API    in    nightly   20 000   medium   good  plain
  medium
2 Form leads -> CRM         cronjob + CRM API    out   5 min     50/day   good     good  plain
```

```
  low
3 Staff sign-in              LDAP login handler   in    on login  300      -        -     -
  low

Work item (per flow)         Flow 1   Flow 2   Flow 3
Analysis and specification
Content model
Client of the other system
Transformation
Exponential side
Tests
Operations
Go-live
Subtotal

Shared items: extension skeleton, environments, service accounts, CI, security review, handover,
hypercare
Contingency (from ratings):
Total:

Assumptions (each one a line in the statement of work):
- The customer provides test instances of the ERP and the CRM by <date>.
- The ERP export file format is as in the sample of <date>; changes are change requests.
- ...
```

Fixed price or time and material

Fixed price works when	Time and material is fairer when
The flows are specified and the other systems are known	The other system's API is unknown or still changing
Data quality was measured on real data	Data quality is unknown
The customer delivers access and answers on time (written down)	Several third parties are involved

A common split: discovery and specification at time and material, the build at a fixed price based on the specification, hypercare and operations as a service. Whatever the model, write the assumptions into the statement of work (Statements of work for integrations).

Related pages

- Estimating and scoping with extensions
- Integration discovery worksheet
- Integration project playbook
- Pre-sales support for partners
- Free documentation: this page is free to copy, translate and improve under the GNU FDL 1.3.

> **Become an Exponential Partner**
>
> Partners share their information, provide funding, contribute back and develop the products with us, and that is how Exponential grows. A partner website and dashboard are planned for mid-2027: please become a partner today to speed up our growth rate and

> land new features faster.
>
> Partners: start here | How to apply

Exponential Copyright © 1998-2026 Exponential Foundation and 7x
Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.3 or any later version published by the Free Software Foundation; with no Invariant Sections, no Front-Cover Texts, and no Back-Cover Texts. A copy of the license is included in the section entitled "GNU Free Documentation License".
This documentation is free documentation, licensed under the GNU Free Documentation License 1.3 or later:
https://www.gnu.org/licenses/fdl-1.3.html.