## Contentstack Migration Tool & ETL API Process: FAQ

### 1. General Overview

* Q: What is the Contentstack Migration Tool?

A: The Contentstack Migration Tool is a software utility designed to facilitate the migration of content, assets, and configurations from legacy CMS platforms (e.g., Sitecore, WordPress, Contentful) or other sources into Contentstack. It supports both UI-driven and CLI-based workflows and leverages APIs for data extraction, transformation, and loading (ETL) into Contentstack

[1](https://docs.google.com/document/d/1hRgDNm2j17bWgxYn5MJ9ksAN7ie2By95ePtPG50c3ro/edit?usp=drivesdk)[2](https://contentstack.slack.com/files/U02D4G0DMQD/F07DMT9M525/cms_example_implementation_overview.pptx)[3](https://contentstack.slack.com/files/U02D4G0DMQD/F07JZ3T5750/cms_example_implementation_overview.pdf).

* Q: What is ETL in the context of content migration?

A: ETL stands for Extract, Transform, Load. In content migration:

* Extract: Data is pulled from the source system (via APIs, database exports, or files).
* Transform: Data is mapped, cleaned, and converted to match the target schema.
* Load: Transformed data is imported into the destination system (Contentstack) using APIs or import tools [1](https://docs.google.com/document/d/1hRgDNm2j17bWgxYn5MJ9ksAN7ie2By95ePtPG50c3ro/edit?usp=drivesdk)[4](https://contentstack.slack.com/files/U02D4G0DMQD/F095T3XUFCN/de_cheat_sheet.pdf)[2](https://contentstack.slack.com/files/U02D4G0DMQD/F07DMT9M525/cms_example_implementation_overview.pptx).

### 2. Supported Sources & Integrations

* Q: Which source systems are supported?

A: The tool supports direct migrations from Sitecore (v8+), Contentful, WordPress, and other popular CMSs. For unsupported systems, you can use custom exports (JSON/CSV/XML) as long as they meet the required schema

[1](https://docs.google.com/document/d/1hRgDNm2j17bWgxYn5MJ9ksAN7ie2By95ePtPG50c3ro/edit?usp=drivesdk)[5](https://contentstack.slack.com/archives/C09E55JRQG7/p1758126611191209?thread_ts=1758126611.191209)[6](https://contentstack.slack.com/archives/C04J40S2BTM/p1754431240506539?thread_ts=1754431240.506539).

* Q: Can I migrate from a database directly?

A: While possible, direct database extraction is not recommended unless you have deep knowledge of the source schema. API- or package-based exports are safer and preserve relationships better

[5](https://contentstack.slack.com/archives/C09E55JRQG7/p1758126611191209?thread_ts=1758126611.191209)[1](https://docs.google.com/document/d/1hRgDNm2j17bWgxYn5MJ9ksAN7ie2By95ePtPG50c3ro/edit?usp=drivesdk).

* Q: Does the tool support Contentstack-to-Contentstack migrations?

A: Yes. There are checklists and best practices for migrating between Contentstack stacks, including content types, entries, assets, automations, and extensions

[1](https://docs.google.com/document/d/1hRgDNm2j17bWgxYn5MJ9ksAN7ie2By95ePtPG50c3ro/edit?usp=drivesdk)[2](https://contentstack.slack.com/files/U02D4G0DMQD/F07DMT9M525/cms_example_implementation_overview.pptx).

### 3. Capabilities

* Q: What types of data can be migrated?

A: The tool can migrate:

* Content types/schemas
* Entries/content items
* Assets/media files
* Taxonomies/categories
* Global fields
* Workflows
* Webhooks
* Extensions and automations [1](https://docs.google.com/document/d/1hRgDNm2j17bWgxYn5MJ9ksAN7ie2By95ePtPG50c3ro/edit?usp=drivesdk)[2](https://contentstack.slack.com/files/U02D4G0DMQD/F07DMT9M525/cms_example_implementation_overview.pptx)[7](https://contentstack.slack.com/files/U02D4G0DMQD/F09BAJWT9S8/get-all-content-types-schema-api-request-response.txt).
* Q: Does it support bulk operations?

A: Yes. Bulk import/export of content types, entries, and assets is supported. However, API rate limits may apply

[1](https://docs.google.com/document/d/1hRgDNm2j17bWgxYn5MJ9ksAN7ie2By95ePtPG50c3ro/edit?usp=drivesdk)[4](https://contentstack.slack.com/files/U02D4G0DMQD/F095T3XUFCN/de_cheat_sheet.pdf).

* Q: Can I map fields between source and target systems?

A: Yes. The tool provides mapping interfaces to align source fields with target fields in Contentstack

[1](https://docs.google.com/document/d/1hRgDNm2j17bWgxYn5MJ9ksAN7ie2By95ePtPG50c3ro/edit?usp=drivesdk)[2](https://contentstack.slack.com/files/U02D4G0DMQD/F07DMT9M525/cms_example_implementation_overview.pptx).

* Q: Does it handle relationships and references?

A: Yes. The tool preserves references (e.g., linked entries, media) when using structured exports or APIs that expose relationships

[5](https://contentstack.slack.com/archives/C09E55JRQG7/p1758126611191209?thread_ts=1758126611.191209)[1](https://docs.google.com/document/d/1hRgDNm2j17bWgxYn5MJ9ksAN7ie2By95ePtPG50c3ro/edit?usp=drivesdk).

### 4. Installation & Setup

* Q: What are the prerequisites for using the migration tool?

A:

* Docker and Docker Compose installed
* Bash or compatible shell (macOS/Linux/WSL for Windows)
* Exported data from your source system in a supported format (JSON/ZIP)
* Access to your Contentstack stack with appropriate API keys [1](https://docs.google.com/document/d/1hRgDNm2j17bWgxYn5MJ9ksAN7ie2By95ePtPG50c3ro/edit?usp=drivesdk)[2](https://contentstack.slack.com/files/U02D4G0DMQD/F07DMT9M525/cms_example_implementation_overview.pptx).
* Q: How do I install and launch the tool?

A:

1. Clone the migration tool repository.
2. Run the setup script (setup-docker.sh).
3. Access the UI at [http://localhost:3000](http://localhost:3000/) [1](https://docs.google.com/document/d/1hRgDNm2j17bWgxYn5MJ9ksAN7ie2By95ePtPG50c3ro/edit?usp=drivesdk)[2](https://contentstack.slack.com/files/U02D4G0DMQD/F07DMT9M525/cms_example_implementation_overview.pptx).

### 5. ETL Process & Best Practices

* Q: What are the main steps in a migration ETL process?

A:

1. Extract: Export data from the source system using APIs or export tools.
2. Transform: Map and clean data to match Contentstack’s schema; handle field conversions and relationships.
3. Load: Import data into Contentstack using the migration tool’s UI or CLI [1](https://docs.google.com/document/d/1hRgDNm2j17bWgxYn5MJ9ksAN7ie2By95ePtPG50c3ro/edit?usp=drivesdk)[4](https://contentstack.slack.com/files/U02D4G0DMQD/F095T3XUFCN/de_cheat_sheet.pdf)[2](https://contentstack.slack.com/files/U02D4G0DMQD/F07DMT9M525/cms_example_implementation_overview.pptx).

* Q: How do I validate a successful migration?

A:

* Compare counts of content types, entries, and assets.
* Check that all relationships and references are intact.
* Perform sample QA on migrated content.
* Review audit logs for errors or omissions [1](https://docs.google.com/document/d/1hRgDNm2j17bWgxYn5MJ9ksAN7ie2By95ePtPG50c3ro/edit?usp=drivesdk)[2](https://contentstack.slack.com/files/U02D4G0DMQD/F07DMT9M525/cms_example_implementation_overview.pptx).

### 6. API Usage & Limitations

* Q: What APIs does the tool use?

A: The tool uses Contentstack’s Management APIs for creating content types, entries, assets, etc., and may use source system APIs for extraction

[8](https://docs.google.com/spreadsheets/d/1zcbY9N4BzlNr4O8txcp-vRm1Xn3JipXo/edit?usp=drivesdk&ouid=116109206278629311472&rtpof=true&sd=true).

* Q: Are there API rate limits?

A: Yes. For example, Contentstack’s Management API typically allows 10 writes/second per stack. Large migrations should be batched to avoid throttling

[4](https://contentstack.slack.com/files/U02D4G0DMQD/F095T3XUFCN/de_cheat_sheet.pdf)[1](https://docs.google.com/document/d/1hRgDNm2j17bWgxYn5MJ9ksAN7ie2By95ePtPG50c3ro/edit?usp=drivesdk).

* Q: Can I use custom scripts or CLI for advanced scenarios?

A: Yes. For complex transformations or unsupported formats, you can use custom scripts or CLI utilities to preprocess data before loading into Contentstack

[1](https://docs.google.com/document/d/1hRgDNm2j17bWgxYn5MJ9ksAN7ie2By95ePtPG50c3ro/edit?usp=drivesdk)[4](https://contentstack.slack.com/files/U02D4G0DMQD/F095T3XUFCN/de_cheat_sheet.pdf).

### 7. Known Limitations

Q: What are the main limitations of the migration tool?

* API Rate Limits: Large migrations may be throttled; batch operations as needed.
* Export Format Requirements: Data must be exported in compatible formats; otherwise manual preprocessing is required.
* Complex Mappings: Highly customized legacy schemas may require manual mapping or scripting.
* No Dynamic Asset Transformation: Features like dynamic image resizing/colorization are not supported during migration.
* Manual QA Required: Post-migration validation is necessary to ensure completeness and accuracy.
* No Out-of-the-box CSV Export: Direct CSV export is not available in the UI; use CLI if needed [5](https://contentstack.slack.com/archives/C09E55JRQG7/p1758126611191209?thread_ts=1758126611.191209)[4](https://contentstack.slack.com/files/U02D4G0DMQD/F095T3XUFCN/de_cheat_sheet.pdf)[1](https://docs.google.com/document/d/1hRgDNm2j17bWgxYn5MJ9ksAN7ie2By95ePtPG50c3ro/edit?usp=drivesdk).

### 8. Security & Compliance

* Q: Is my data secure during migration?

A: Yes. All data transfers use secure protocols (HTTPS). Use secure API keys and follow your organization’s security best practices

[1](https://docs.google.com/document/d/1hRgDNm2j17bWgxYn5MJ9ksAN7ie2By95ePtPG50c3ro/edit?usp=drivesdk)[8](https://docs.google.com/spreadsheets/d/1zcbY9N4BzlNr4O8txcp-vRm1Xn3JipXo/edit?usp=drivesdk&ouid=116109206278629311472&rtpof=true&sd=true).

### 9. Troubleshooting & Support

* Q: Where can I get help if I encounter issues?

A:

* Join internal Slack channels (e.g., #tso-migration).
* Refer to official documentation and GitHub issues.
* Contact tso-migration@contentstack.com for support [1](https://docs.google.com/document/d/1hRgDNm2j17bWgxYn5MJ9ksAN7ie2By95ePtPG50c3ro/edit?usp=drivesdk)[2](https://contentstack.slack.com/files/U02D4G0DMQD/F07DMT9M525/cms_example_implementation_overview.pptx).
* Q: What should I do if I hit API rate limits?

A: Break up your migration into smaller batches or schedule imports during off-peak hours. Consult with TSO for very large migrations

[4](https://contentstack.slack.com/files/U02D4G0DMQD/F095T3XUFCN/de_cheat_sheet.pdf)[5](https://contentstack.slack.com/archives/C09E55JRQG7/p1758126611191209?thread_ts=1758126611.191209).

### 10. Post-Migration Steps

* Q: What should I do after migration completes?

A:

1. Perform thorough QA on migrated content.
2. Remove any temporary credentials used during migration.
3. Handover access to QA teams or end users for review.
4. Document any issues or exceptions for future reference [1](https://docs.google.com/document/d/1hRgDNm2j17bWgxYn5MJ9ksAN7ie2By95ePtPG50c3ro/edit?usp=drivesdk)[2](https://contentstack.slack.com/files/U02D4G0DMQD/F07DMT9M525/cms_example_implementation_overview.pptx).

### 11. Additional Resources

* [Contentstack Migration Tool Guide](https://www.contentstack.com/docs/developers/content-migration)
* [GitHub Repository](https://github.com/contentstack/migration-v2)
* Email: tso-migration@contentstack.com
* Slack Channel: #tso-migration