@git.zone/tspublish

publish multiple, concise and small packages from monorepos

- readme.md for @git.zone/tspublish
- changelog.md for @git.zone/tspublish

readme.md for @git.zone/tspublish

> **Effortlessly publish multiple TypeScript packages from your monorepo**

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What is tspublish?

`@git.zone/tspublish` is a powerful CLI tool and library for managing and publishing multiple TypeScript packages from a monorepo. It automates the tedious parts of package publishing — discovery, dependency resolution, building, version validation, and multi-registry publishing — while giving you full control over the process. Whether you're maintaining a suite of microservices, a component library, or any collection of related packages, tspublish makes your life dramatically easier.

Issue Reporting and Security

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Key Features

- **Automatic Package Discovery** — Scans your monorepo for publishable `ts*` directories
- **Beautiful CLI Output** — Color-coded logging with progress bars and status indicators
- **Version Collision Detection** — Prevents accidental overwrites by checking the registry first

- □□ **Build Integration** — Automatically compiles TypeScript before publishing via `@git.zone/tsbuild`
- □□ **Smart Dependency Management** — Inherits dependency versions from your monorepo's `package.json`
- □□ **Multi-Registry Support** — Publish to npm, GitHub Packages, Gitea, or private registries
- □□ **Base Registry Inheritance** — Use `useBase` / `extendBase` to inherit registries from `.smartconfig.json`
- ⚡ **CLI Binary Support** — Automatically generates `cli.js` wrappers for publishable CLI packages
- □□ **Clean Builds** — Creates isolated `dist_publish_*` directories for each package

□□ Installation

```
# Using pnpm (recommended)
pnpm add -D @git.zone/tspublish

# Global installation for CLI usage
pnpm add -g @git.zone/tspublish
```

□□ Quick Start

1□ Structure Your Monorepo

Organize your packages using directories that start with `ts`:

```
my-awesome-monorepo/
├── package.json            # Main monorepo package.json (version is inherited)
├── tsconfig.json           # Shared TypeScript config
├── .smartconfig.json       # Optional: base registry configuration
├── ts_core/                # Core package
│   ├── index.ts            # Entry point
│   ├── readme.md           # Package-specific documentation
│   └── tspublish.json      # Publishing configuration
├── ts_utils/               # Utilities package
│   ├── index.ts
│   ├── readme.md
```

```
│   └── tspublish.json
└── ts_cli/                # CLI package
    ├── index.ts
    ├── readme.md
    └── tspublish.json
```

2️⃣ Configure Each Package

Create a `tspublish.json` in each publishable directory:

```
{
  "name": "@myorg/core",
  "order": 1,
  "dependencies": [
    "@push.rocks/smartpromise",
    "@push.rocks/smartfile"
  ],
  "registries": [
    "registry.npmjs.org:public"
  ],
  "bin": []
}
```

Configuration Options

Field	Type	Description
`name`	`string`	The published package name (e.g., `@myorg/core`)
`order`	`number`	Build order for interdependent packages (lower builds first)
`dependencies`	`string[]`	Dependencies to include — versions are resolved from the monorepo's `package.json`
`registries`	`string[]`	Target registries with access level (format: `"url:accessLevel"`)
`bin`	`string[]`	CLI executable names (generates a `cli.js` wrapper automatically)

3️⃣ Publish

```
# From your monorepo root
npx tspublish
```

That's it! tspublish will discover all `ts*` directories containing `tspublish.json`, build them in order, validate versions against the registry, and publish.

□□ Advanced Usage

Registry Configuration

TSPublish offers three approaches for configuring target registries:

1. Explicit Registries

Define specific registries directly in `tspublish.json`:

```
{
  "registries": [
    "registry.npmjs.org:public",
    "npm.pkg.github.com:private"
  ]
}
```

The format is `"registryUrl:accessLevel"` where `accessLevel` is `public` or `private`.

2. Use Base Configuration (`useBase`)

Inherit registries from your project's `.smartconfig.json` (managed by `@git.zone/cli`):

```
{
  "registries": ["useBase"]
}
```

This reads from `.smartconfig.json` at the key `@git.zone/cli.release.registries`.

3. Extend Base Configuration (`extendBase`)

Start with base registries and add or remove specific ones:

```
{
  "registries": [
    "extendBase",
    "custom-registry.example.com:public",
    "-https://registry.npmjs.org"
  ]
}
```

The `-` prefix excludes a registry from the base configuration. All other entries (besides `extendBase`) are added.

Empty Registries

If `registries` is an empty array `[]`, the package will be built but **not published** — useful for internal-only packages that other packages depend on.

Build Order Management

When packages depend on each other, use the `order` field to control build sequence:

```
// ts_core/tspublish.json — builds first
{
  "name": "@myorg/core",
  "order": 1,
  "dependencies": [],
  "registries": ["useBase"],
  "bin": []
}

// ts_utils/tspublish.json — builds second, depends on core
{
  "name": "@myorg/utils",
  "order": 2,
  "dependencies": ["@myorg/core"],
  "registries": ["useBase"],
  "bin": []
}
```

CLI Binary Packages

For packages that ship CLI tools, specify the binary names in the `bin` array:

```
{
  "name": "@myorg/cli",
  "order": 3,
  "dependencies": ["commander", "@myorg/core"],
  "registries": ["registry.npmjs.org:public"],
  "bin": ["my-cli", "my-tool"]
}
```

TSPublish will:

1. Fetch the standard `cli.js` template from the `@git.zone/cli` assets repository
2. Adjust the import path to point to the correct `dist_*` folder
3. Configure the `bin` field in the generated `package.json`

Programmatic Usage

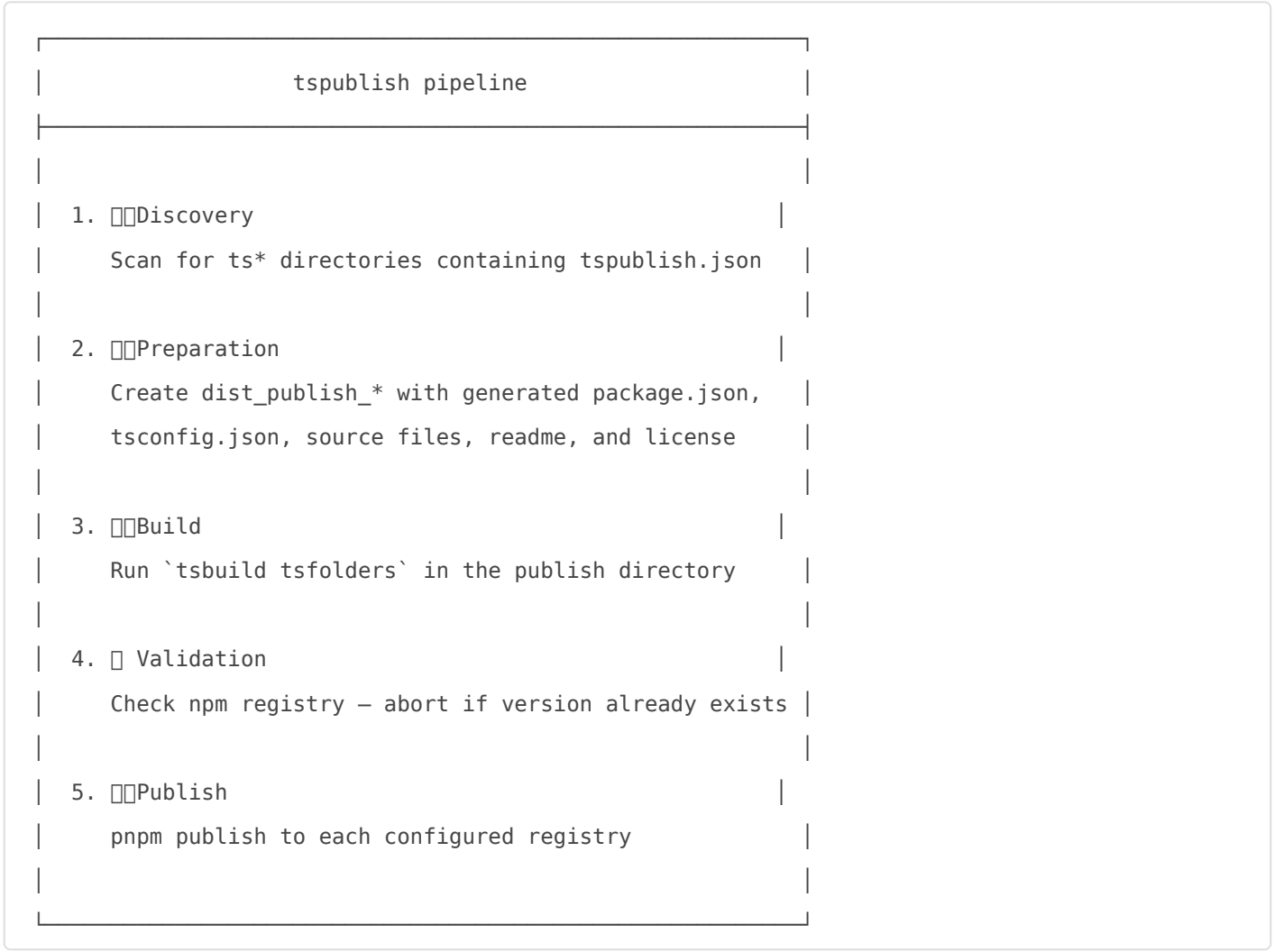
```
import { TsPublish } from '@git.zone/tspublish';

const publisher = new TsPublish();
await publisher.publish(process.cwd());
```

Custom Publishing Pipeline

```
import { TsPublish, PublishModule } from '@git.zone/tspublish';

const publisher = new TsPublish();
const modules = await publisher.getModuleSubDirs('./my-monorepo');

for (const [name, config] of Object.entries(modules)) {
  const mod = new PublishModule(publisher, {
    monoRepoDir: './my-monorepo',
    packageSubFolder: name,
  });

  await mod.init();                    // Resolve deps, validate version
  await mod.createPublishModuleDir(); // Scaffold dist_publish_* directory
  await mod.build();                   // Compile TypeScript
```

```
  await mod.publish();               // Publish to registries
}
```

□□ How It Works



For each discovered module, tspublish:

1. **Discovers** all directories starting with `ts` that contain a `tspublish.json`
2. **Resolves dependencies** from the monorepo's `package.json`, using the monorepo version for packages not found in `dependencies`
3. **Creates an isolated publish directory** (`dist_publish_<folder>`) with a generated `package.json`, `tsconfig.json`, source code copy, readme, and license
4. **Builds** the package using `pnpm run build` (which calls `tsbuild tsfolders`)
5. **Validates** against the target registry — if the name+version already exists, it exits with an error
6. **Publishes** to each configured registry via `pnpm publish`

□□ API Reference

TsPublish

```
class TsPublish {
  /** Publish all discovered modules in a monorepo directory */
  async publish(monorepoDirPath: string): Promise<void>;

  /** Discover and return all publishable modules with their tspublish.json configs */
  async getModuleSubDirs(dirPath: string): Promise<Record<string, ITsPublishJson>>;
}
```

PublishModule

```
class PublishModule {
  /** Initialize: resolve dependencies, validate version against registry */
  async init(): Promise<void>;

  /** Create the dist_publish_* directory with all necessary files */
  async createPublishModuleDir(): Promise<void>;

  /** Build the TypeScript package */
  async build(): Promise<void>;

  /** Publish to all configured registries */
  async publish(): Promise<void>;
}
```

ITsPublishJson

```
interface ITsPublishJson {
  name: string;           // Published package name
  order: number;          // Build sequence (lower = earlier)
  dependencies: string[]; // Dependencies to include from monorepo
  registries: string[];   // Target registries ("url:accessLevel", "useBase", or "extendBase")
```

```
  bin: string[];          // CLI binary names
}
```

GiteaAssets

```
class GiteaAssets {
  constructor(options: { giteaBaseUrl: string; token?: string });

  /** Fetch files from a Gitea repository directory */
  async getFiles(owner: string, repo: string, directory: string, branch?: string):
Promise<IRepoFile[]>;

  /** Get the standard cli.js entry file template */
  async getBinCliEntryFile(): Promise<IRepoFile>;
}
```

□□ Troubleshooting

Problem	Solution
"Package X already exists with version Y"	Bump the version in your monorepo's `package.json`
No publish modules found	Ensure directories start with `ts` and contain a valid `tspublish.json`
Build failures	Check TypeScript errors — tspublish runs `tsbuild tsfolders` in the generated directory
useBase/extendBase error	Ensure `.smartconfig.json` has registries at `@git.zone/cli.release.registries`
Missing dependency versions	Add the dependency to your monorepo's `package.json` `dependencies` field

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changelog.md for @git.zone/tspublish

2026-03-24 - 1.11.4 - fix(config)

rename npmextra configuration to .smartconfig.json and align publish packaging with updated config handling

- replaces packaged config file references from npmextra.json to .smartconfig.json
- updates publish module typings and null checks for tsPublishJson, package info, and file paths
- bumps build and runtime dependencies to newer compatible versions
- simplifies tsconfig.json by removing unused baseUrl and paths settings
- refreshes README content to document current CLI, registry, and package publishing behavior

2026-03-24 - 1.11.3 - fix(config)

replace npmextra with smartconfig for base registry resolution

- Switch the base registry source from npmextra.json to smartconfig.json for publish configuration.
- Update plugin imports and runtime config loading to use @push.rocks/smartconfig.
- Adjust packaged files and error messages to reference smartconfig.json consistently.

2026-03-05 - 1.11.2 - fix(deps)

bump @push.rocks/smartshell dependency to ^3.3.7 and update package version to 1.11.1

- package.json: version 1.11.0 -> 1.11.1
- package.json: @push.rocks/smartshell ^3.3.0 -> ^3.3.7
- ts/00_commitinfo_data.ts: version updated to 1.11.1
- changelog.md: added entry documenting the dependency bump and patch release

2026-03-05 - 1.11.1 - fix(deps)

bump @push.rocks/smartshell dependency to ^3.3.7

- package.json: @push.rocks/smartshell ^3.3.0 -> ^3.3.7
- Only dependency version updated (patch-level)

2025-12-16 - 1.11.0 - feat(publish)

add registry resolution (useBase/extendBase) and migrate filesystem operations to async SmartFs; improve publish flow and docs

- Add resolveRegistries supporting 'useBase' and 'extendBase' and explicit registries; reads base registries from npmextra.json at @git.zone/cli.release
- Migrate sync smartfile APIs to async @push.rocks/smartfs and expose smartfs and npmextra via plugins
- Ensure publish directory is recreated cleanly and use async file copy/read/write for package, tsconfig, readme and license
- Handle empty registries by skipping publish with a warning and throw a clear error if useBase/extendBase is used but no base registries configured
- Publish now normalizes registry URLs and supports accessLevel per-registry when running pnpm publish
- Update README: registry configuration docs, issue reporting/security section and various wording/formatting improvements; bump several dependencies/devDependencies

2025-12-15 - 1.10.4 - fix(.serena)

cleanup: remove .serena assistant memories, cache and project config

- Removed multiple .serena/memories markdown files (code_style_conventions.md, logging_improvements_2025.md, project_overview.md, smartrequest_api_update_2025.md, suggested_commands.md, task_completion_checklist.md) — these were assistant metadata/notes
- Removed .serena/project.yml (project configuration for the assistant)
- Removed .serena/cache/typescript/document_symbols_cache_v23-06-25.pkl (generated symbol cache)

2025-08-18 - 1.10.3 - fix(devDependencies)

Bump development dependencies and add local Claude settings

- Bumped @git.zone/tsbuild from ^2.6.4 to ^2.6.6 in package.json
- Bumped @push.rocks/smartnpm from ^2.0.4 to ^2.0.6 in package.json
- Added .claude/settings.local.json for local Claude permissions/configuration

2025-08-18 - 1.10.2 - fix(dependencies)

Update dependency versions and add local Claude settings

- Bump devDependency @git.zone/tstest from ^2.3.2 to ^2.3.4
- Bump dependency @push.rocks/smartfile from ^11.2.5 to ^11.2.7
- Bump dependency @push.rocks/smartrequest from ^4.2.1 to ^4.2.2
- Bump dependency @push.rocks/smartshell from ^3.2.3 to ^3.3.0
- Add .claude/settings.local.json (local Claude permissions/config)

2025-08-08 - 1.10.1 - fix(core)

Refactor smartrequest usage, update dependency versions, and improve documentation and tests

- Refactored getFiles method in classes.giteaassets to use SmartRequest builder and handle branch query parameters.
- Updated package.json dependency versions for smartfile, smartlog, tsbuild, tsbundle, and tstest.
- Added pnpm-workspace.yaml configuration for onlyBuiltDependencies.
- Enhanced readme with detailed usage instructions, CI/CD integration examples, and advanced feature descriptions.
- Updated test files to import tapbundle from @git.zone/tstest instead of @push.rocks/tapbundle.
- Added .claude/settings.local.json for managing local permissions.

2025-08-08 - 1.10.0 - feat(logging)

Enhance logging and module publishing with color-coded output, progress tracking, and improved CLI startup

- Refactored logging to introduce color-coded symbols and helper functions (logInfo, logWarn, logSuccess, logBuild, logPublish, etc.)
- Added visual components such as headers, separators, and progress indicators for better operational visibility
- Integrated enhanced logging into module publishing and CLI startup, replacing generic console logs
- Updated various configuration and documentation files to reflect new code style conventions and dependency updates

2025-01-02 - 1.9.1 - fix(publishmodule)

Fix incorrect CLI script path during publish module creation

- Updated the `createBinCliSetup` method to correctly adjust the CLI script path.
- Replaced path in base64-decoded CLI file content from './dist_ts/index.js' to './dist_<packageSubFolder>/index.js'.

2025-01-02 - 1.9.0 - feat(core)

Refactor gitea asset handling and module initialization

- Introduced GiteaAssets class to handle gitea asset fetching.
- Updated TsPublish and PublishModule classes to use GiteaAssets.
- Fixed queryParams in getFiles method of GiteaAssets.

2025-01-01 - 1.8.0 - feat(core)

Added GiteaAssets class for managing files in Gitea repositories

- Introduced GiteaAssets class to handle file retrieval from Gitea repositories.
- Added tests for GiteaAssets implementation.
- Updated plugins module to include smartrequest for HTTP requests.

2024-11-05 - 1.7.7 - fix(core)

Fix dependency resolution in package initialization

- Corrected the resolution of dependencies from tspublish.json against monorepo's package.json.
- Ensures unlisted dependencies in monorepo's package.json default to its version.

2024-11-05 - 1.7.6 - fix(tspublish)

Fix the logging of the number of found publish modules

- Corrected the way the number of publish modules is logged by using Object.keys(publishModules).length instead of publishModules.length.

2024-11-05 - 1.7.5 - fix(core)

Fix issue with tspublish.json name validation in TsPublish class

- Resolved incorrect JSON parsing and validation for 'name' property in tspublish.json in the TsPublish.publish method.
- Removed redundant JSON parse from plugin.smartfile.fs.toStringSync in publish method.

2024-11-05 - 1.7.4 - fix(classes.tspublish)

Refactor getModuleSubDirs method to streamline name validation for publish modules

- Moved the check for the presence of the 'name' field in tspublish.json from getModuleSubDirs to the publish method.
- Added log warning and continue flow if 'name' is not found during the publish process.

2024-11-05 - 1.7.3 - fix(TsPublish)

Add validation for tspublish.json name field

- Ensure that the tspublish.json file contains a valid name field before processing.
- Log a warning message if the name is not found in tspublish.json.

2024-11-05 - 1.7.2 - fix(project)

Fixed minor formatting issues and improved code consistency.

- Added missing semicolons for consistency
- Improved indentation in various files for better readability
- Corrected usage of newlines and whitespace across the codebase

2024-11-05 - 1.7.1 - fix(core)

Implement error handling for missing publish module directories

- Improved logging for package publish steps
- Enhanced CLI feedback messages during the publishing process
- Restructured package.json to ensure proper dependencies are published

2024-11-05 - 1.7.0 - feat(core)

Enhanced tspublish with ordered compilation and updated dependencies

- Added 'order' property to ITsPublishJson interface to ensure project compilation order.
- Updated development dependencies: @git.zone/tsbuild, @git.zone/tsbundle, @git.zone/tsrun, and @types/node.

2024-10-28 - 1.6.0 - feat(classes.publishmodule)

Added copying of readme and license files to publish directory

- Enhanced the createPublishModuleDir method in PublishModule class to copy the 'readme.md' and 'license' files to the publish directory.

2024-10-28 - 1.5.5 - fix(core)

Handled non-existent package in publish module to avoid errors

- Added error handling in TsPublish for packages not yet existing in the registry.

2024-10-28 - 1.5.4 - fix(core)

Fix issues with path keys in tsconfig and logger setup in logging.ts.

- Corrected the iteration over paths in the createTsconfigJson method of PublishModule.
- Fixed logger setup by ensuring console is enabled in logging.ts.

2024-10-28 - 1.5.3 - fix(core)

Fix incorrect logging and directory preparation

- Corrected logging to accurately report the number of detected publish modules.
- Ensured the publish directory is emptied before creating package.json.

2024-10-28 - 1.5.2 - fix(core)

Add logging for found publish modules

- Added console logging to display the count and list of discovered publish modules during the publish process.
- Included a startup log message indicating the beginning of the tspublish process.

2024-10-28 - 1.5.1 - fix(core)

Fixes handling of undefined paths in tsconfig generation.

- Added a null check for `paths` in the original tsconfig before modifying it.
- Enhanced testing by adding a test case for creating a TsPublish instance.

2024-10-28 - 1.5.0 - feat(classes.publishmodule)

Add method to create and write tsconfig.json during publish module setup

- Introduced createTsconfigJson method in PublishModule class to generate a tsconfig.json for each publishable module.
- Modified createPublishModuleDir method to include writing of tsconfig.json file.

2024-10-26 - 1.4.0 - feat(core)

Refactor directory reading and module discovery for publishing process

- Renamed 'readDirectory' method to 'getModuleSubDirs' for clarity in describing function purpose.
- Enhanced 'getModuleSubDirs' to return module information including parsed 'tspublish.json' data for each module.
- Introduced new 'interfaces' directory to define TypeScript interfaces like 'ITsPublishJson'.

2024-10-23 - 1.3.3 - fix(core)

Fix logging mechanism on existing package version check

- Changed the error handling mechanism when a package with the same version already exists to use logger and process exit instead of throwing an error.

2024-10-23 - 1.3.2 - fix(core)

Corrected file patterns in dynamically created package.json files.

- Fixed incorrect file pattern from 'ts_web//' ***to*** **'*ts_*//*' in package.json creation process to include all subdirectories starting with 'ts'.

2024-10-23 - 1.3.1 - fix(classes.publishmodule)

Fix template string in createPackageJson method for export path

- Corrected the syntax for template string in the exports path of created package.json

2024-10-21 - 1.3.0 - feat(core)

Add support for multiple registries in the publish process

- Updated the PublishModule class to handle multiple registries for publishing.
- Refactored the handling of tspublish.json by incorporating it into the PublishModule options.
- Implemented logic to parse registry access level and apply it during publication.

2024-10-21 - 1.2.4 - fix(publishmodule)

Fix syntax errors and improve formatting in classes.publishmodule.ts

- Fixed missing semicolons in multiple locations for improved syntax correctness.
- Improved the formatting for better code readability.
- Added --no-git-checks flag to the pnpm publish command.

2024-10-21 - 1.2.3 - fix(logs)

Improve logging mechanism with structured logs for publish process

- Enhanced log messages to provide more clarity during module publishing.

- Ensured logging captures steps of publish and init process in TsPublish and PublishModule classes respectively.

2024-10-21 - 1.2.3 - fix(classes.publishmodule)

Add missing 'type: module' to dynamically generated package.json

- Ensure that the 'type: module' field is included in each dynamically generated package.json file for consistent module handling.

2024-10-21 - 1.2.3 - fix(classes.publishmodule)

Add missing 'type: module' to dynamically generated package.json

- Ensure that the 'type: module' field is included in each dynamically generated package.json file for consistent module handling.

2024-10-21 - 1.2.2 - fix(publishmodule)

Fix bug in package.json creation for publish module

- Fixed an issue where `package.json` was not being written to the publish module directory.

2024-10-21 - 1.2.1 - fix(package.json)

Ensure bin field is properly restructured

- Fixed the structure of the package.json to ensure the bin field is accurately set.

2024-10-21 - 1.2.0 - feat(core)

Enhance package publication workflow with dependency handling and CLI improvements.

- Updated package description and keywords in package.json and npmextra.json.
- Integrated dependency extraction from root package.json into sub-package tspublish.json during initialization.
- Added build and publish script executions for each submodule.
- Improved CLI documentation and usage guidance in readme.md.

2024-10-21 - 1.1.0 - feat(core)

Add runCli function to execute TsPublish process

- Introduced runCli function to start publish workflow using TsPublish class.
- Enhanced the process to read directory and create publish module directories.
- Improved logging for better tracking of found publish modules.

2024-10-21 - 1.0.1 - Initial Release

Initial release of the project.

- First version of the codebase