

# CMS Certified Integrator 10 LTS

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## Backend Administration

### Dashboard Configuration

Knowledge of the dashboard configuration options in the TYPO3 backend.

### Configuring Workspaces

Configuration and setup of a defined custom editorial workflow.

### Workspace Concepts

Knowledge about workspace concepts in TYPO3 context.

### Forms Templating

Adjusting and customizing form templates.

### Forms Customization

Introducing advanced fields.

### Forms Localization

Setting up localization for a given form.

### Reusing Basic Forms

Transferring basic forms from one instance to another installation.

### Using the Drag & Drop Editor for Basic Forms

Building simple forms.

### Forms Vocabulary

Knowing the terminology of the form framework.

### Import/Export

Exporting pages and content to another installation

Importing pages and content from another installation

### RTE Config

Configure the Rich Text Editor.

### Managing Backend Users and Backend User Groups

Configuring backend users and backend groups to ensure correct permissions for the editors.

### Database Mounts

Configuring database mounts.

### Linkvalidator

The Linkvalidator is a system extension that checks your TYPO3 instance for broken internal and external links. It can be executed manually or automatically from the Scheduler and can send reports

in an email.

#### Advanced Site Configuration

Setting up advanced domain and language options for multiple websites on a single installation.

#### TYPO3 URL Redirects (Configuration)

Redirecting URLs in TYPO3, related options and their implications.

#### URL Routing Basics

Understanding the basics of human readable URLs.

#### URL Routing in TYPO3

Handling the routing implementation in TYPO3.

#### Basic Site Configuration

Setting up the basic domain and request related configuration for a website.

#### Managing Backend Pages Access

Configuring access to backend pages and page (sub) trees for backend users and groups.

#### Reports Module

Where to find information about the state of the instance.

#### Scheduler

Scheduler basics and connected recurring tasks.

#### Configure Installation-wide Options

Important settings in the Install Tool.

#### Accessing the Install Tool/Maintenance Modules

Knowledge about security measures taken to protect the Install Tool/maintenance modules.

#### Language Records

Supporting multiple languages.

#### Root Node

Properties and particularities of the root node in TYPO3.

#### Recycler

The Recycler backend module provides the option to clear the garbage collection and to restore data.

#### TYPO3 Info Module

The Info backend module displays a variety of information related to the pages in your web site.

## **TypoScript**

#### PageTitle Handler

As part of the search engine optimization (SEO), the HTML title of pages can be controller by using TypoScript to configure the PageTitle Handler.

#### TypoScript Object Browser / Template Analyzer

About the TypoScript object browser and the template analyzer.

#### Image Generation / Manipulation with TypoScript

Image creation, image manipulation and integration of fonts with TypoScript.

#### User TSconfig

Using TSconfig for backend user settings.

#### TypoScript TLO Config

Using the TypoScript TLO config to define behaviour of the instance in terms of FE output.

#### Page TSconfig

Basics of page-specific TypoScript in the backend.

#### TypoScript Language Menus

Creating a selection menu for different languages on your website using TypoScript.

#### TypoScript Fluid Template Object

TypoScript knowledge for using basic Fluid templates.

#### TypoScript Constants

Setting and using constants in TypoScript.

#### TypoScript Templates

Creating and using TypoScript templates, understanding connections between templates.

#### TypoScript Syntax & Basics

TypoScript basic knowledge and syntax.

#### TLOs Temp and Lib

Difference between TypoScript TLOs temp and lib, what the main difference is.

#### TypoScript OptionSplit

Option split basics, overview of all seven option split rules.

#### TypoScript TLOs and Reserved Names

Top-Level Object (TLO) overview, special TLOs like temp, commonly used configuration directives in regard to TLOs.

#### TypoScript Conditions

Using TypoScript conditions in concrete scenarios.

#### TypoScript Menus

Generation of hierarchical menus with TypoScript, using item states (CUR, SPC, etc.).

#### TypoScript Wraps

Using TypoScript wraps in order to manipulate data.

#### Accessing Data Sources

Using available data sources in TypoScript.

#### Knowing Data Sources

What data sources are available to access in TYPOScript.

## Core Architecture & APIs

### XLIFF

Understanding XLIFF.

### Digital Assets Management (FAL)

Know about transparent inclusion of external file sources into TYPO3.

## Performance

### TYPO3 Caching

Caching basics in TYPO3. Functionality and types of caching as well as an overview over the different caches.

#### Caching Basics

Caching overview and purpose.

#### Page cache

Changed content might not be visible immediately due to optimization.

## TYPO3 Handling

### TYPO3 Console

Using the TYPO3 console core extension.

### Dashboard Basics

Knowledge of the module Dashboard in the TYPO3 backend and the usage of it. Users can create multiple dashboards visible in this module, and switch between those dashboards. Each of the dashboards can have multiple widgets.

### Page Tree

The structure of the web pages managed in TYPO3 is easily accessible via the page tree. It is possible to manage pages that are visible in the frontend as well as associated data, which are then installed at the appropriate place in the frontend. With a click on the page icon the context menu appears with additional options.

### Admin Panel

The “TYPO3 Admin Panel” provides a deeper insight into the internal processes of TYPO3 at run-time. Once it has been activated, backend users can access performance and cache statistics, settings of a specific page, etc. while accessing the frontend of the website.

### Admin panel Basics

The admin panel can be activated for editors by a TYPO3 administrator, and used to simulate a different time or group of users in the frontend. In addition, a button helps to find and open the corresponding page in the backend via a URL.

## Installation

### Upgrade Wizards

Existing Upgrade Wizards and their purpose and usage.

#### Important Actions in the Install Tool

Overview about important actions handled in the install tool.

#### Using the Step Installer

Installing an instance from scratch using the step installer.

## Security

#### About the TYPO3 Security Team

How to deal with security issues, both found and reported.

## Extensions

#### TER

Knowledge about the standard extension hub of TYPO3.

#### Extension Manager Basics

Knowledge about extension management within the TYPO3 backend.

## Templating and Other Outputs

#### CSS Basics

Understanding CSS.

#### ViewHelpers

Getting to know what a ViewHelper is.

#### Outputting Variables

Basic usage of variables inside Fluid templates and knowledge about escaping.

#### Using the Fluid View

Knowing and understanding the different parts of a Fluid template view.

#### What is Fluid?

Definition of Fluid and its possible use with regards to the Model View Controller pattern.

#### Importing ViewHelpers

Using third party ViewHelpers in your Fluid templates.

#### JavaScript Basics

Understanding JavaScript.

#### HTML Basics

Understanding HTML.

#### ViewHelper: Image

Using the Fluid ViewHelper `f:image()`.

#### ViewHelper: Widgets

Learn the most important `f:widget.*` ViewHelpers.

#### ViewHelper: Format

Using Fluid Format ViewHelpers.

#### ViewHelper: Link, Uri

Using the Fluid ViewHelpers `f:link.*` and `f:uri.*`.

#### ViewHelper: Comment

Including comments in Fluid templates.

#### ViewHelper: If/Else

Creating if/else statements within Fluid templates.

#### ViewHelper: For-Loop

Iterating through a list with the `for` ViewHelper.

#### ViewHelper: Debug

Utilising output to access Fluid variables.

#### Templates, Layouts, Partials

Fluid Templates, Layouts, Partials - their interaction and properties.

#### ViewHelper: Render

Using `f:render` to render sections and partials as well as passing arguments.

#### ViewHelper: cObject

Including cObjects in Fluid templates.

#### Data Processors

Data processors can be used to prepare data and transfer them to the Fluid template in order to generate an output by the template engine.

## Software Architecture for Extensions

### What is a Templating Engine?

Introduction to the basic concept of a templating engine/processor.

### What is MVC?

The MVC pattern, what it can be used for, and common implementations.

## Getting Help

### TYPO3 Documentation

I know where to find documentation and support.

## Package management

### Composer

Composer basics and its usage for PHP projects.

## Best development practices

### Git basics

Basics and most important commands for working with the version-control system Git.

## General Extension Architecture

Composer for TYPO3 Extensions

This skill introduces usage of Composer for extensions and their integration into TYPO3 projects.

## CMS Basics

Backend navigation components

The backend is divided into specific navigation components. A distinction is made between top bar, module bar, page tree, context bar, workspace, directory tree and directory contents.

About TYPO3

TYPO3 is a content management system (CMS) which is developed under an open source license GPL. The code is thus freely available. TYPO3 offers a wide range of functions and can be extended by so-called extensions. The system is well documented and help can be found on <https://typo3.org/>.

## Media Management

CSV - Character Separated Values

CSV files are used to exchange data between different computer systems. The editor must know how these files are structured so that they can be exported and additionally how they can be processed by TYPO3 without errors.

## Target Group Optimization

SEO Extension

The goals of the SEO extension are:

- Provide editors with the fields required to set the necessary meta tags.
- Provide the rendering of meta tags in the frontend for SEO related information.

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YAML Basics

Understanding YAML configuration files.

Server-Side Image Manipulation

Overview of TYPO3 supported server-side image manipulation libraries.

IP-Anonymization for Data Records

Anonymizing IP-Adresses in the persistent storage of TYPO3 with the help of the scheduler for increased data protection.

Command Line Basics

Performing elementary tasks on the command line.

Regular Expression Basics

Identifying and matching patterns in strings with the help of regular expressions (PCRE).

HTTP Status Codes

Basic knowledge of HTTP status codes.

Knowing the Cron Daemon

Cron daemon basics on UNIX-based systems and according cronjobs.

TYPO3 File Architecture

TYPO3 architecture – charsets, folder structure, access rights.

Charsets

Definition of charsets, common usage, differences (advantages/disadvantages) of specific charsets.

File Permissions

Understanding UNIX system file permissions.