

Exploring the TCA

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Plan

- What is TCA?
- Extending TCA

What is TCA?

- TCA = Table Configuration Array
- Describes:
 - column properties
 - versioning
 - localization
 - relations between tables (parent/child, MM)

What is TCA? (cont'd)

- Describes:
 - rendering in BE (icons, fields)
 - FE editing properties (field visibility)
 - relations between tables (parent/child, MM)

TCA structure

- TCA is array of arrays

```
$TCA['pages'] = array(  
    'ctrl' => array(  
        ...  
    ),  
    'interface' => array(  
        ...  
    )  
);
```

- TCA consists from several sections
 - ctrl
 - interface
 - feInterface
 - columns
 - types
 - palettes

TCA structure: 'ctrl' section

- 'ctrl' section describes base table characteristics:
 - title (main and alternative)
 - special fields declaration (tstamp, deleted, crdate)
 - special characteristics (admin, root, static)
 - icons
 - versioning

TCA structure: 'interface' section

- 'interface' section describes how table is shown in BE:
 - showRecordFieldList – List module
 - maxDBListItems – List module
 - maxSingleDBListItems – List module
 - always_description – editing form

TCA structure: 'feInterface' section

- 'feInterface' section is optional and deprecated desirable
- 'feinterface' section describes how table is shown in FE

TCA structure: 'columns' section

- 'columns' section describes how database columns are rendered and processed by TYPO3
- each entry is a description of single column
- entry consists from field characteristics (label, exclude, localization, display conditions) and editing form configuration

TCA structure: 'columns' section

- Field characteristics:
 - label
 - exclude
 - l10n_*
 - displayCond
 - defaultExtras

TCA structure: 'columns' section

- Editing form types:
 - input
 - text
 - check
 - radio
 - select
 - group
 - none
 - passthrough
 - user
 - flex

TCA structure: 'types' section

- Form rendering depends on 'types'
- At least one entry required!
- 'type' field selects form rendering
- each entry is array
- showitem is the most popular item, contains:
 - visible fields
 - optional special flags (section 4.4 of "TYPO3 Core API")

TCA structure: 'palettes' section

- Shows additional options at end of the form
- Palettes appear as defined in 'types' section
- Palette visibility can be triggered by various fields

Extending the TCA

- Normally TCA is extended by extensions:

```
$newColumns = array (  
    'tx_myext_newcol' => array (  
        'exclude' => 1,  
        ...  
    );  
t3lib_div::loadTCA('pages');  
t3lib_extMgm::addTCAcolumns(  
    'pages', $newColumns);  
t3lib_extMgm::addToAllTCAtypes(  
    'pages', 'tx_myext_newcol');
```

- All TCA features are available!
- TYPO3 takes care about table updates
- It is possible to change existing columns

Want to know more?

- Read "TYPO3 Core APIs"
- Ask in the mailing list (typo3-dev)
- Experiment!