Code-Generator

Luan Caduff



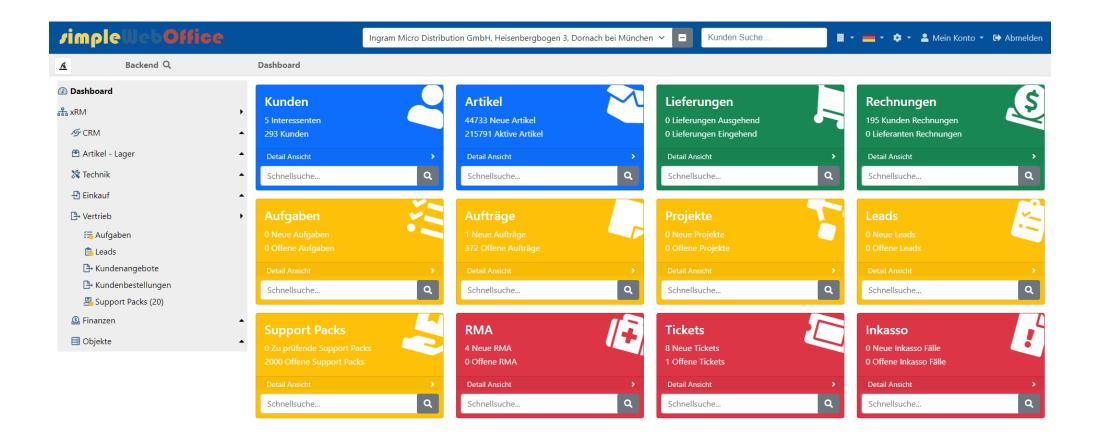
Inhaltsverzeichnis

- Ausgangslage und Aufgabenstellung
 - Legacy SWO
 - Neues SWO
 - Code Generator Anforderungen
- Umsetzung
 - Struktur
 - Frontend
 - Backend
 - Snippet-Generierung
- Reflexion und Fazit
 - Persönliche Einschätzung
 - Alternativen
 - Zukunft

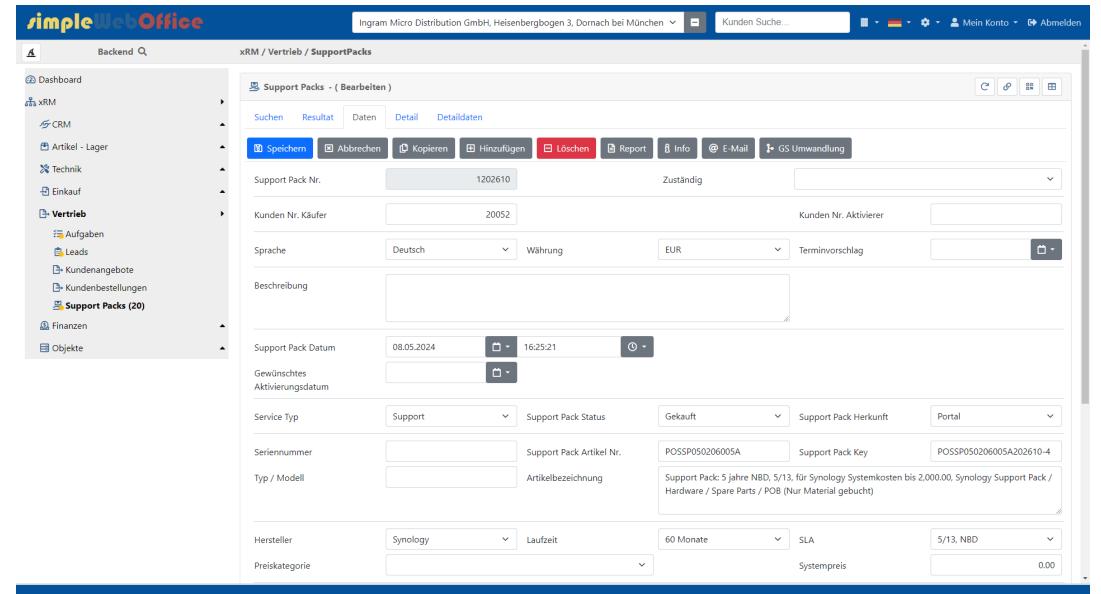


<u>Aufgabenstellung</u>

- Legacy SWO
- Neues SWO
- Code Generator Anforderungen







200+ Dateien! -

```
<?php
     require_once("global.config.inc.php");
     require once("../functions/simpinfo.global.inc.php");
     require once("../functions/simpinfo.browser.inc.php");
     require once("../functions/simpinfo.calendar.inc.php");
12
     require once("../functions/simpinfo.cryption.inc.php");
13
     require once("../functions/simpinfo.data.inc.php");
     require once("../functions/simpinfo.error.inc.php");
     require once("../functions/simpinfo.pdf.inc.php");
     require once("../functions/simpinfo.phpoffice.inc.php");
17
     require once("../functions/simpinfo.file.inc.php");
     require once("../functions/simpinfo.graphic.inc.php");
     require once("../functions/simpinfo.mail.inc.php");
     require once("../functions/simpinfo.ocr.inc.php");
21
     require once("../functions/simpinfo.object.inc.php");
22
     require once("../functions/simpinfo.permission.inc.php");
     require once("../functions/simpinfo.session.inc.php");
24
     require once("../functions/simpinfo.topal.inc.php");
     require once("../functions/simpinfo.variables.inc.php");
```

```
scripts
▶ cora
▶ cronjob
 autostart.articleupdate.php
 m browsererror.php
 controlcenter.openweboffice.action.php
 controlcenter.openweboffice.ajax.php
 controlcenter.openweboffice.function.inc.php
 controlcenter.openweboffice.head.inc.php
  s controlcenter.openweboffice.js
 controlcenter.openweboffice.php
 💎 cron.php
 ndocsearch.php
 erp.article.alternative.cleaner.php
 erp.article.concerto.export.php
 erp.article.concerto.export.technogroup.php
 erp.article.download.config.inc.demosoag.php
 erp.article.download.config.inc.soag.php
 erp.article.download.config.inc.synorepair.php
 erp.article.download.php
 erp.article.download.prepare.php
 erp.article.export.level3.php
 erp.article.it-parts.import.php
 erp.article.manufacturer.cleaner.php
 erp.article.specialprice.import.php
 erp.article.statistics.update.php
 erp.article.structure.update.php
 erp.article.supportpack.cleaner.php
 erp.article.update.php
 erp.article.updater.email.php
 erp.article.updater.php
 Export_Support Pack.xlsx
 🗬 global.action.auth.inc.php
 🗫 global.action.customer.inc.php
 🗬 global.action.doc.inc.php
 🗫 global.action.importexport.inc.php
 nglobal.action.inc.php
  🐃 global.action.meeting.inc.php
```

```
if($ REQUEST["Action"] == "SupportPackDetail" && $ REQUEST["Command"] == "add") {
575
     $SQLQuery =
576
577
     select crm om supportpack.ObjectUUID,
     crm om supportpack.SupportPackNo,
578
     crm om supportpack.SupportPackKey
579
     from crm om supportpack
     where crm om supportpack.StateCd = 1
      and ".fi genSQLField("crm om supportpack", "SupportPackKey", $ REQUEST["FRM SupportPackKey"], "Text", 1, 1)."
582
583
584
     $Result = fi execSQLQuery($SQLQuery, FILE , LINE );
     $row = mysqli fetch row($Result);
     $TBObjectUUID =
                           $row[0];
     $TBSupportPackNo = $row[1];
587
     $TBSupportPackKey = $row[2];
     $SQLQuery = "
     update crm om supportpack set
591
      ".fi genSQLField("crm om supportpack", "SupportPackStatusCd", 5, "Integer", 1, 0)."
      ".fi getSQLInsertUser($GLOBALS["UserName"], "crm om supportpack")."
      where StateCd = 1 and ".fi genSQLField("crm om supportpack", "SupportPackKey", $TBSupportPackKey, "Text", 1, 1)."
594
     $Result = fi execSQLQuery($SQLQuery, FILE , LINE );
596
      $SOLOuery =
     insert into crm om supportpack detail set
      ".fi genSQLField("crm om supportpack detail", "ObjectUUID", $TBObjectUUID, "Text", 1, 0).",
      ".fi genSQLField("crm om supportpack detail", "SupportPackNo", $TBSupportPackNo, "Integer", 1, 0).",
      ".fi_genSQLField("crm_om_supportpack detail", "SupportPackKey", $TBSupportPackKey, "Text", 1, 0)."
      ".fi getSQLInsertUser($GLOBALS["UserName"], "crm om supportpack detail")."
     $Result = fi execSQLQuery($SQLQuery, FILE , LINE );
604
     $SQLQuery = " select max(RecNo) from crm om supportpack detail where StateCd = 1 and ".fi genSQLField("crm om supportpack detail",
606
     $Result = fi execSQLQuery($SQLQuery, FILE , LINE );
     $row = mysqli fetch row($Result);
     $TBnextRecNo = $row[0];
610
     $ REQUEST["Action"] = "SupportPackActivate";
     $_REQUEST["Command"] = "check";
511
     $ REQUEST["checkSupportPackDetailRecNo"] = $TBnextRecNo;
     if($ REQUEST["Action"] == "SupportPackActivate" && $ REQUEST["Command"] == "check") {
```

\$FieldLabelsSupportPack = fi getFieldLabels("crm om supportpack"):

```
if($ REQUEST["Action"] == "SupportPackDetail" && $ REQUEST["Command"] ==
575
576
     $SQLQuery
577
     select crm om supportpack.ObjectUUID,
     crm om supportpack.SupportPackNo,
578
579
     crm om supportpack.SupportPackKey
     from crm om supportpack
     where crm om supportpack.StateCd = 1
      and ".fi genSQLField("crm om supportpack", "SupportPackKey", $ REQUEST["FRM SupportPackKey"], "Text", 1, 1)."
582
583
584
     $Result = fi execSQLQuery($SQLQuery, FILE , LINE );
     $row = mysqli fetch row($Result);
     $TBObjectUUID =
                           $row[0];
     $TBSupportPackNo = $row[1];
587
     $TBSupportPackKey = $row[2];
     $SQLQuery = "
     update crm om supportpack set
591
      ".fi genSQLField("crm om supportpack", "SupportPackStatusCd", 5, "Integer", 1, 0)."
      ".fi getSQLInsertUser($GLOBALS["UserName"], "crm om supportpack")."
      where StateCd = 1 and ".fi genSQLField("crm om supportpack", "SupportPackKey", $TBSupportPackKey, "Text", 1, 1)."
594
     $Result = fi execSQLQuery($SQLQuery, FILE , LINE );
596
      $SOLOuery =
     insert into crm om supportpack detail set
      ".fi genSQLField("crm om supportpack detail", "ObjectUUID", $TBObjectUUID, "Text", 1, 0).",
      ".fi genSQLField("crm om supportpack detail", "SupportPackNo", $TBSupportPackNo, "Integer", 1, 0).",
      ".fi genSQLField("crm om supportpack detail", "SupportPackKey", $TBSupportPackKey, "Text", 1, 0)."
      ".fi getSQLInsertUser($GLOBALS["UserName"], "crm om supportpack detail")."
     $Result = fi execSQLQuery($SQLQuery, FILE , LINE );
604
     $SQLQuery = " select max(RecNo) from crm om supportpack detail where StateCd = 1 and ".fi genSQLField("crm om supportpack detail",
606
     $Result = fi execSQLQuery($SQLQuery, FILE , LINE );
     $row = mysqli fetch row($Result);
     $TBnextRecNo = $row[0];
610
     $ REQUEST["Action"] = "SupportPackActivate";
     $_REQUEST["Command"] = "check";
511
     $ REQUEST["checkSupportPackDetailRecNo"] = $TBnextRecNo;
     if($ REQUEST["Action"] == "SupportPackActivate" && $ REQUEST["Command"] == "check") {
```

\$FieldLabelsSupportPack = fi getFieldLabels("crm om supportpack"):

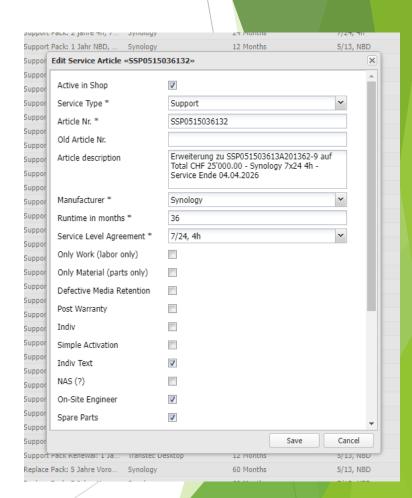
```
if($ REQUEST["Action"] == "SupportPackDetail" && $ REQUEST["Command"] ==
575
576
     $SQLQuery
577
     select crm om supportpack.ObjectUUID,
578
     crm om supportpack.SupportPackNo,
579
     crm om supportpack.SupportPackKey
     from crm om supportpack
     where crm om supportpack.StateCd = 1
      and ".fi genSQLField("crm om supportpack", "SupportPackKey", $ REQUEST["FRM SupportPackKey"], "Text", 1, 1)."
582
583
584
     $Result = fi execSQLQuery($SQLQuery, FILE , LINE );
     $row = mysqli fetch row($Result);
     $TBObjectUUID =
                           $row[0];
     $TBSupportPackNo = $row[1];
587
     $TBSupportPackKey = $row[2];
     $SQLQuery = "
     update crm om supportpack set
591
      ".fi genSQLField("crm om supportpack", "SupportPackStatusCd", 5, "Integer", 1, 0)."
      ".fi getSQLInsertUser($GLOBALS["UserName"], "crm om supportpack")."
      where StateCd = 1 and ".fi genSQLField("crm om supportpack", "SupportPackKey", $TBSupportPackKey, "Text", 1, 1)."
594
     $Result = fi execSQLQuery($SQLQuery, FILE , LINE );
596
      $SOLOuery =
     insert into crm om supportpack detail set
      ".fi genSQLField("crm om supportpack detail", "ObjectUUID", $TBObjectUUID, "Text", 1, 0).",
      ".fi genSQLField("crm om supportpack detail", "SupportPackNo", $TBSupportPackNo, "Integer", 1, 0).",
      ".fi genSQLField("crm om supportpack detail", "SupportPackKey", $TBSupportPackKey, "Text", 1, 0)."
      ".fi getSQLInsertUser($GLOBALS["UserName"], "crm om supportpack detail")."
     $Result = fi execSQLQuery($SQLQuery, FILE , LINE );
604
     $SQLQuery = " select max(RecNo) from crm om supportpack detail where StateCd = 1 and ".fi genSQLField("crm om supportpack detail",
606
     $Result = fi execSQLQuery($SQLQuery, FILE , LINE );
     $row = mysqli fetch row($Result);
     $TBnextRecNo = $row[0];
     $ REQUEST["Action"] = "SupportPackActivate";
610
     $ REQUEST["Command"] = "check";
     $ REQUEST["checkSupportPackDetailRecNo"] = $TBnextRecNo;
```

SERVER OPTIONS

Master Data

Support Packs

Add 🎒 Edit 🚉 1	Info 👸 Delete Filters:	Manufacturer Select	▼ Search Enter search	query	
ctive in shop	Servicy type	Article Nr.	Article description	Manufacturer	Runtime
'es	Support	SSP0515036132	Erweiterung zu SSP051503	Synology	36 Months
'es	Support	PWSSP050751213A	Support Pack: 1 Jahr 4h, 7/		12 Months
'es	Support	PWSSP050752413A	Support Pack: 2 jahre 4h, 7	Synology	24 Months
'es	Support	PWSSP050751205A	Support Pack: 1 Jahr NBD,	Synology	12 Months
'es	Support	PWSSP050752405A	Support Pack: 2 jahre NBD,	Synology	24 Months
'es	Support	PWSSP050751203A	Support Pack: 1 Jahr 4h, 5/	Synology	12 Months
'es	Support	PWSSP050752403A	Support Pack: 2 jahre 4h, 5	Synology	24 Months
'es	Support	PWSSP056501213A	Support Pack: 1 Jahr für Sy	Synology	12 Months
'es	Support	PWSSP056502413A	Support Pack: 2 jahre für S	Synology	24 Months
'es	Support	PWSSP056501205A	Support Pack: 1 Jahr für Sy	Synology	12 Months
'es	Support	PWSSP056502405A	Support Pack: 2 jahre für S	Synology	24 Months
'es	Support	PWSSP056501203A	Support Pack: 1 Jahr für Sy	Synology	12 Months
es	Support	PWSSP056502403A	Support Pack: 2 jahre für S	Synology	24 Months
'es	Support	PWSSP056001213A	Support Pack: 1 Jahr für Sy	Synology	12 Months
'es	Support	PWSSP056002413A	Support Pack: 2 jahre für S	Synology	24 Months
'es	Support	PWSSP056001205A	Support Pack: 1 Jahr für Sy	Synology	12 Months
es	Support	PWSSP056002405A	Support Pack: 2 jahre für S	Synology	24 Months
'es	Support	PWSSP056001203A	Support Pack: 1 Jahr für Sy	Synology	12 Months
'es	Support	PWSSP056002403A	Support Pack: 2 jahre für S	Synology	24 Months
'es	Support	PWSSP055501213A	Support Pack: 1 Jahr für Sy	Synology	12 Months
'es	Support	PWSSP055502413A	Support Pack: 2 jahre für S	Synology	24 Months
es	Support	PWSSP055501205A	Support Pack: 1 Jahr für Sy	Synology	12 Months
es	Support	PWSSP055502405A	Support Pack: 2 jahre für S	Synology	24 Months
'es	Support	PWSSP055501203A	Support Pack: 1 Jahr für Sy	Synology	12 Months
'es	Support	PWSSP055502403A	Support Pack: 2 jahre für S	Synology	24 Months
'es	Support	PWSSP055001213A	Support Pack: 1 Jahr 4h, 7/	Synology	12 Months
es	Support	PWSSP055002413A	Support Pack: 2 jahre 4h, 7	Synology	24 Months
es	Support	PWSSP055001205A	Support Pack: 1 Jahr NBD,	Synology	12 Months
'es	Support	PWSSP055002405A	Support Pack: 2 jahre NBD,	Synology	24 Months
'es	Support	PWSSP055002403A	Support Pack: 2 jahre 4h, 5	Synology	24 Months
'es	Support	PWSSP055001203A	Support Pack: 1 Jahr 4h, 5/	Synology	12 Months
'es	Support	SSP087000613A	Support Pack Renewal: 6 M	HPE	6 Months
es	Support	SSP090186005R1	Support Pack Renewal: 1 Ja	Transtec Desktop	12 Months
'es	Replace	SP0100033R	Replace Pack: 5 Jahre Voro	Synology	60 Months
'es	Replace	SP0100032R	Replace Pack: 5 Jahre Voro	Synology	60 Months
'es	Audit	SSP060010000W	WLAN Ausleuchtung für Ev	Ubiquiti	-
es	Support	SSP043506005A	Support Pack Supermicro S	Supermicro	60 Months
'es	Support	SSP150741213A	Support Pack: 1 Jahr 4h, 7/	Dell	12 Months



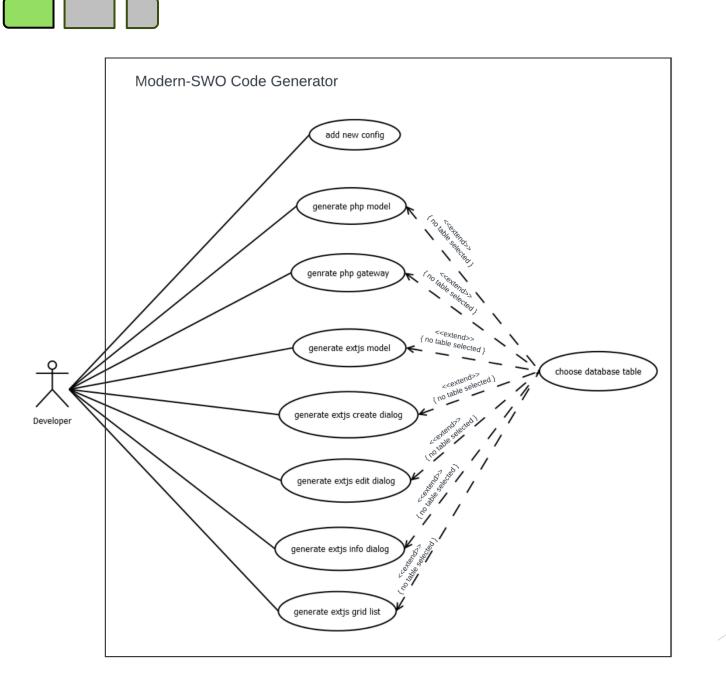
| 4 | Seite | 1 | von 186 | ▶ ▶ | 2 |

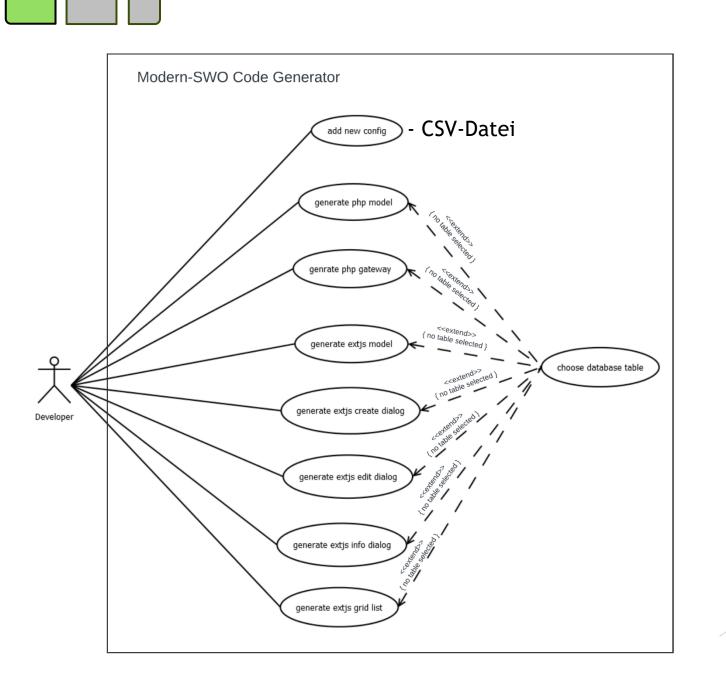
PHP

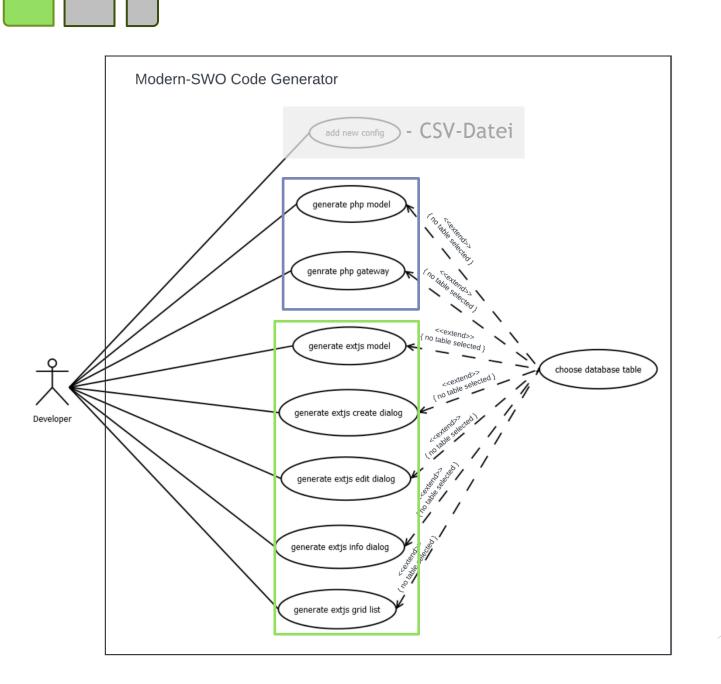
```
class ERParticleService extends BasicModel implements JsonSerializable {
                      $id
                      $stateCd
    private int
                      $shopActiveCd
   private ?int
                      $serviceTypeCd
                                                 = NULL;
   private string
                      $articleNo
                      $articleNoOld
    private string
                      $articleDescription
                                                   '';
   private string
                      $supportPackManufacturerCd = NULL;
    private ?int
                      $supportPackRunTimeCd
   private ?int
                      $slaCd
                                                  = NULL;
                      $laborOnlyCd
    private ?int
                                                   NULL;
                      $partsOnlyCd
   private ?int
   private ?int
                      $dmrCd
                                                   NULL;
   private ?int
                      $postWarrantyCd
                                                  = NULL;
   private ?int
                      $indivCd
                                                  NULL;
    private ?int
                      $simpleActivationCd
   private ?int
                      $indivTextCd
                                                  = NULL;
   private ?int
                      $nasCd
                                                  NULL;
    private ?int
                      $onsiteEngineerCd
                                                   NULL;
   private ?int
                      $sparePartCd
    private ?int
                      $hardwareCd
   private string
                      $snCheck
                      $activationTypeCd
   private ?int
                                                  NULL;
    private ?float
                      $systemPrice
                                                   NULL;
   private ?float
                      $servicePrice
                                                  NULL;
    private string
                      $systemType
                      $articleNoManufacturer
    private string
    private string
                      $remarks
    private ?DateTime $validBegin
                                                  NULL;
    private ?DateTime $validEnd
                                                   NULL:
    private string
                      $competence
    private string
                      $permission
    private string
                      $crtUser
    private ?DateTime $crtDate
                                                  = NULL;
                      $updUser
    private string
    private ?DateTime $updDate
                                                   NULL;
```

ExtJs

```
Ext.define('swo.model.ERParticleService', {
    extend: 'Ext.data.Model',
    fields: [
         name: 'stateCd',
                                              type: 'int' },
          name: 'articleNo',
                                              type: 'string' },
          name: 'articleNoOld',
                                              type: 'string'
          name: 'articleDescription',
                                              type: 'string'
          name: 'supportPackManufacturerCd', type: 'int' },
          name: 'supportPackRunTimeCd',
                                              type: 'int' },
          name: 'slaCd',
                                              type: 'int' },
          name: 'laborOnlyCd',
                                              type: 'int'
          name: 'partsOnlyCd',
                                              type: 'int' },
          name: 'dmrCd',
                                              type: 'int'
          name: 'postWarrantyCd',
                                              type: 'int'
          name: 'indivCd',
                                              type: 'int'
          name: 'simpleActivationCd',
                                              type: 'int' },
          name: 'indivTextCd',
                                              type: 'int'
          name: 'nasCd',
                                              type: 'int'
          name: 'onsiteEngineerCd',
                                              type: 'int'
          name: 'sparePartCd',
                                              type: 'int'
          name: 'hardwareCd',
                                              type: 'int' },
          name: 'snCheck',
                                              type: 'string'
          name: 'activationTypeCd',
                                              type: 'int' },
          name: 'systemPrice',
                                              type: 'float'
          name: 'servicePrice',
                                              type: 'float'
          name: 'systemType',
                                              type: 'string'
          name: 'articleNoManufacturer',
                                              type: 'string'
          name: 'remarks',
                                              type: 'string'
          name: 'validBegin',
                                              type: 'date' }
          name: 'validEnd',
                                              type: 'date'
          name: 'competence',
                                              type: 'string' }
          name: 'permission',
                                              type: 'string'
                'crtUser',
                                              type: 'string'
          name: 'crtDate',
                                              type: 'date' },
         name: 'updUser',
                                              type: 'string' },
         name: 'updDate',
                                              type: 'date' },
```

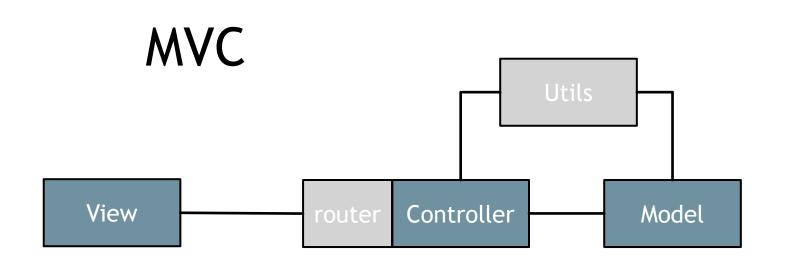


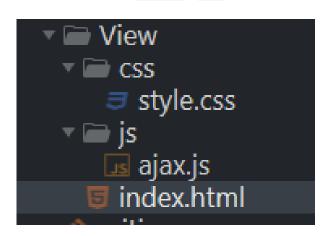




Umsetzung

- Struktur
- Frontend
- Backend
- Snippet-Generierung









```
document ).ready(function() {
         applyClickListeners();
         applyFocusOutListeners();
         applyChangeListeners();
         fillConfigSelectbox();
         function applyClickListeners() { =
         $('#copyButton').on('click', (event) => { ==
             });
240
241
242
         function openConfigForm() { ==
         function closeConfigForm() { =
         function clearConfigForm() { =
         function selectText(containerid) { =
         function clearSelection() { =
         function applyFocusOutListeners() { =
```

router

```
if(isset($_GET['action']) && $_GET['action'] == 'getConfigs') {
    $controller = new ConfigController();
    $controller->getConfigs();
    exit();
}
```

Controller

```
public function getConfigs() {
    $response = new Response();

    $response->setStatus(Response::$STATUS_OK);
    $response->setMessage('');
    $response->setHttpResponseCode(Response::$HTTP_STATUS_OK);
    $response->setData(ConfigManager::getInstance()->getConfigs());

    $response->respond();
}
```

```
if(isset($_GET['action']) && $_GET['action'] == 'getConfigs') {
    $controller = new ConfigController();
    $controller->getConfigs();
    exit();
}
Controller
```

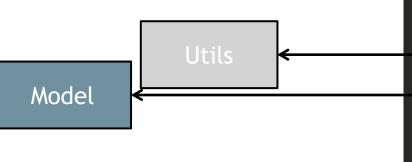
- SnippetControllerExtJs

```
public function generateModel($configId, $databaseId, $tableId) {
   $response = new Response();
   $config = ConfigManager::getInstance()->getConfigById($configId);
   $database = Database::getById($config, $databaseId);
   $table = Table::getById($database, $tableId);
   $fields = $this->prepareFields($table->getFields());
   $className = $this->convertToClassname($table->getName());
   $newLine1 = '<br>';
   $newLine2 = '<br><';</pre>
   $header = $this->generateModelHeader($className);
   $body = $this->generateModelBody($fields);
   $footer = $this->generateFooter();
   $output = $header.
              $newLine2.
              $body.
              $newLine2.
              $footer;
   $response->setStatus(Response::$STATUS OK);
   $response->setMessage('');
   $response->setHttpResponseCode(Response::$HTTP STATUS OK);
   $response->setData($output);
   $response->respond();
```

- SnippetControllerExtJs

```
public function generateModel($configId, $databaseId, $tableId) {
                                                $response = new Response();
                                                $config = ConfigManager::getInstance()->getConfigById($configId);
                                                $database = Database::getById($config, $databaseId);
Model
                                                $table = Table::getById($database, $tableId);
                                                $fields = $this->prepareFields($table->getFields());
                                                $className = $this->convertToClassname($table->getName());
                                                $newLine1 = '<br>';
                                                $newLine2 = '<br><';</pre>
                                                $header = $this->generateModelHeader($className);
                                                $body = $this->generateModelBody($fields);
                                                $footer = $this->generateFooter();
                                                $output = $header.
                                                           $newLine2.
                                                           $body.
                                                           $newLine2.
                                                           $footer;
                                                $response->setStatus(Response::$STATUS OK);
                                                $response->setMessage('');
                                                $response->setHttpResponseCode(Response::$HTTP STATUS OK);
                                                $response->setData($output);
                                                $response->respond();
```

- SnippetControllerExtJs



Member-Methode

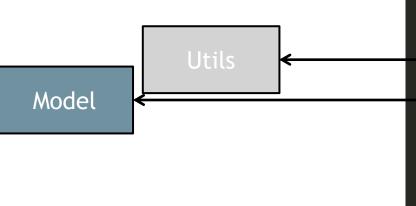
```
private function generateModelBody($fields): string {
    $content = "{$this->indent(1)}fields: [";
    $content .= "<br/>
    $foreach ($fields as $field) {
        $name = $field['COLUMN_NAME'];
        $lname = lcfirst($name);
        $type = $field['DATA_TYPE'];

        $typeSpaces = $field['DATA_TYPE_SPACES'];
        $nameSpaces = $field['COLUMN_NAME_SPACES'];

        $content .= "{$this->indent(2)}{ name: '$lname',$nameSpaces type: '$type' },<br/>
        $content .= "{$this->indent(1)}]";
        return $content;
}
```

```
public function generateModel($confiqId, $databaseId, $tableId) {
   $response = new Response();
   $config = ConfigManager::getInstance()->getConfigById($configId);
   $database = Database::getById($config, $databaseId);
   $table = Table::getById($database, $tableId);
   $fields = $this->prepareFields($table->getFields());
   $className = $this->convertToClassname($table->getName());
   $newLine1 = '<br>';
   $newLine2 = '<br><';</pre>
   $header = $this->generateModelHeader($className);
   $body = $this->generateModelBody($fields);
   $footer = $this->generateFooter();
   $output = $header.
              $newLine2.
              $body.
              $newLine2.
              $footer;
   $response->setStatus(Response::$STATUS OK);
   $response->setMessage('');
   $response->setHttpResponseCode(Response::$HTTP STATUS OK);
   $response->setData($output);
   $response->respond();
```

SnippetControllerExtJs



Member-Methode

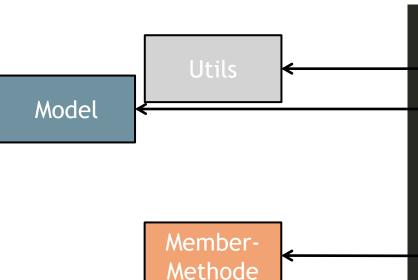
```
private function generateModelBody($fields): string {
    $content = "{$this->indent(1)}fields: [";
    $content .= "<br/>
    $content .= "<br/>
    $foreach ($fields as $field) {
        $name = $field['COLUMN_NAME'];
        $lname = lcfirst($name);
        $type = $field['DATA_TYPE'];

        $typeSpaces = $field['DATA_TYPE_SPACES'];
        $nameSpaces = $field['COLUMN_NAME_SPACES'];

        $content .= "{$this->indent(2)}{ name: '$lname',$nameSpaces type: '$type' },<br/>
} $content = $this->removeLastOccurrence($content, ',');
        $content .= "{$this->indent(1)}]";
        return $content;
}
```

```
public function generateModel($confiqId, $databaseId, $tableId) {
   $response = new Response();
   $config = ConfigManager::getInstance()->getConfigById($configId);
   $database = Database::getById($config, $databaseId);
   $table = Table::getById($database, $tableId);
   $fields = $this->prepareFields($table->getFields());
   $className = $this->convertToClassname($table->getName());
   $newLine1 = '<br>';
   $newLine2 = '<br><';</pre>
   $header = $this->generateModelHeader($className);
   $body = $this->generateModelBody($fields);
   $footer = $this->generateFooter();
   $output =
             $header.
              $newLine2.
              $body.
              $newLine2.
              $footer;
   $response->setStatus(Response::$STATUS OK);
   $response->setMessage('');
   $response->setHttpResponseCode(Response::$HTTP STATUS OK);
   $response->setData($output);
   $response->respond();
```

SnippetControllerExtJs

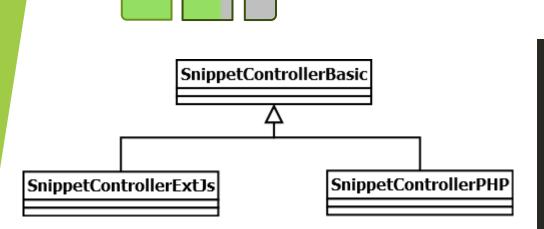


```
private function generateModelBody($fields): string {
    $content = "{$this->indent(1)}fields: [";
    $content .= "<br/>
    $foreach ($fields as $field) {

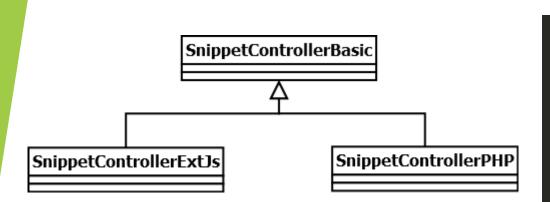
         $name = $field['COLUMN_NAME'];
         $lname = lcfirst($name);
         $type = $field['DATA_TYPE'];

         $typeSpaces = $field['DATA_TYPE_SPACES'];
         $nameSpaces = $field['COLUMN_NAME_SPACES'];
         $content .= "{$this->indent(2)}{ name: '$lname',$nameSpaces type: '$type' },<br/>
         $content .= "{$this->indent(1)}]";
         return $content;
}
```

```
public function generateModel($confiqId, $databaseId, $tableId) {
   $response = new Response();
   $config = ConfigManager::getInstance()->getConfigById($configId);
   $database = Database::getById($config, $databaseId);
   $table = Table::getById($database, $tableId);
   $fields = $this->prepareFields($table->getFields());
   $className = $this->convertToClassname($table->getName());
   $newLine1 = '<br>';
   $newLine2 = '<br><';</pre>
   $header = $this->generateModelHeader($className);
   $body = $this->generateModelBody($fields);
   $footer = $this->generateFooter();
   $output = $header.
              $newLine2.
              $body.
              $newLine2.
              $footer;
   $response->setStatus(Response::$STATUS OK);
   $response->setMessage('');
   $response->setHttpResponseCode(Response::$HTTP STATUS OK);
   $response->setData($output);
   $response->respond();
```



```
public function generateModel($configId, $databaseId, $tableId) {
   $response = new Response();
   $config = ConfigManager::getInstance()->getConfigById($configId);
   $database = Database::getById($config, $databaseId);
   $table = Table::getById($database, $tableId);
   $fields = $this->prepareFields($table->getFields());
                $this->convertToClassname($table->getName());
   $className =
   $newLine2 = '<br><';</pre>
   $header = $this->generateModelHeader($className);
   $body = $this->generateModelBody($fields);
   $footer = $this->generateFooter();
   $output = $header.
             $newLine2.
             $body.
             $newLine2.
             $footer;
   $response->setStatus(Response::$STATUS OK);
   $response->setMessage('');
   $response->setHttpResponseCode(Response::$HTTP STATUS OK);
   $response->setData($output);
   $response->respond();
```



SnippetControllerBasic

SnippetControllerExtJs

```
public function generateModel($confiqId, $databaseId, $tableId) {
    $response = new Response();
    $config = ConfigManager::getInstance()->getConfigById($configId);
    $database = Database::getById($config, $databaseId);
    $table = Table::getById($database, $tableId);
    $fields = $this->prepareFields($table->getFields());
                $this->convertToClassname($table->getName());
    $className =
    $newLine1 = "<br/>;
    $newLine2 = '<br>>';
    $header = $this->generateModelHeader($className);
    $body = $this->generateModelBody($fields);
    $footer = $this->generateFooter();
    $output = $header.
              $newLine2.
              $body.
              $newline2.
              $footer;
    $response->setStatus(Response::$STATUS OK);
    $response->setMessage('');
    $response->setHttpResponseCode(Response::$HTTP STATUS OK);
    $response->setData($output);
    $response->respond();
```

```
private function generateModelBody($fields): string {
    $content = "{$this->indent(1)}fields: [";
    $content .= "<br/>";

    foreach ($fields as $field) {
        $name = $field['COLUMN_NAME'];
        $lname = lcfirst($name);
        $type = $field['DATA_TYPE'];

        $typeSpaces = $field['DATA_TYPE_SPACES'];
        $nameSpaces = $field['COLUMN_NAME_SPACES'];

        $content .= "{$this->indent(2)}{ name: '$lname',$nameSpaces type: '$type' },<br/>";
    }
    $content = $this->removeLastOccurrence($content, ',');
    $content .= "{$this->indent(1)}]";
    return $content;
}
```

SnippetControllerBasic

```
protected function indent(int $level) {
    $indentSize = str_repeat(' ', self::$INDENT_SPACES);
    return str_repeat($indentSize, $level);
}
```

```
private function generateModelBody($fields): string {
    $content = "{$this->indent(1)}fields: [";
    $content .= "<br/>";

    foreach ($fields as $field) {
        $name = $field['COLUMN_NAME'];
        $lname = lcfirst($name);
        $type = $field['DATA_TYPE'];

        $typeSpaces = $field['DATA_TYPE_SPACES'];
        $nameSpaces = $field['COLUMN_NAME_SPACES'];

        $content .= "{$this->indent(2)}{ name: '$lname',$nameSpaces type: '$type' },<br/>
}
$content = $this->removeLastOccurrence($content, ',');
$content .= "{$this->indent(1)}]";
    return $content;
}
```

SnippetControllerBasic

```
protected function indent(int $level) {
    $indentSize = str_repeat(' ', self::$INDENT_SPACES);
    return str_repeat($indentSize, $level);
}

class SnippetControllerBasic {

    // how many spaces is equal to one indent
    protected static int $INDENT_SPACES = 4;
```

```
private function generateModelBody($fields): string {
    $content = "{$this->indent(1)}fields: [";
    $content .= "<br/>";

    foreach ($fields as $field) {
        $name = $field['COLUMN_NAME'];
        $lname = lcfirst($name);
        $type = $field['DATA_TYPE'];

        $typeSpaces = $field['DATA_TYPE'];

        $content .= "{$this->indent(2)}{ name: '$lname',$nameSpaces type: '$type'},br>";
    }
    $content = $this->removeLastOccurrence($content, ',');
    $content .= "{$this->indent(1)}]";
    return $content;
}
```

SnippetControllerBasic

```
protected function indent(int $level) {
    $indentSize = str_repeat(' ', self::$INDENT_SPACES);
    return str_repeat($indentSize, $level);
}

class SnippetControllerBasic {

    // how many spaces is equal to one indent
    protected static int $INDENT_SPACES = 4;
```

```
// remove only the last occurence of a substring in a string
protected function removeLastOccurrence(string $string, string $search) {
    $offset = strrpos($string, $search);
    if ($offset !== false) {
        $length = strlen($search);
        $string = substr_replace($string, '', $offset, $length);
    }
    return $string;
}
```

```
private function generateModelBody($fields): string {
    $content = "{$this->indent(1)}fields: [";
    $content .= "<br/>
    $foreach ($fields as $field) {
        $name = $field['COLUMN_NAME'];
        $lname = lcfirst($name);
        $type = $field['DATA_TYPE'];

        $typeSpaces = $field['DATA_TYPE_SPACES'];
        $nameSpaces = $field['COLUMN_NAME_SPACES'];

        $content .= "{$this->indent(2)}{ name: '$lname',$nameSpaces type: '$type' },<br/>
}

$content = $this->removeLastOccurrence($content, ',');
$content .= "{$this->indent(1)}]";
    return $content;
}
```

Output:

```
Ext.define('swo.model.ERParticleService', {
   extend: 'Ext.data.Model',
   fields: [
       { name: 'id',
                                             type: 'int' },
                                             type: 'int' },
        { name: 'stateCd',
        { name: 'shopActiveCd',
                                             type: 'int' },
        { name: 'serviceTypeCd',
                                             type: 'int' },
        { name: 'articleNo',
                                             type: 'string' },
        { name: 'articleNoOld',
                                             type: 'string' },
        { name: 'articleDescription',
                                             type: 'string' },
        { name: 'supportPackManufacturerCd', type: 'int' },
        { name: 'supportPackRunTimeCd',
                                             type: 'int' },
        { name: 'sLACd',
                                             type: 'int' },
        { name: 'laborOnlyCd',
                                             type: 'int' },
        { name: 'partsOnlyCd',
                                             type: 'int' },
        { name: 'dMRCd',
                                             type: 'int' },
        { name: 'postWarrantyCd',
                                             type: 'int' },
        { name: 'indivCd',
                                             type: 'int' },
        { name: 'simpleActivationCd',
                                             type: 'int' },
        { name: 'indivTextCd',
                                             type: 'int' },
        { name: 'nASCd',
                                             type: 'int' },
        { name: 'onsiteEngineerCd',
                                             type: 'int' },
        { name: 'sparePartCd',
                                             type: 'int' },
        { name: 'hardwareCd',
                                             type: 'int' },
        { name: 'sNCheck',
                                             type: 'string' },
        { name: 'activationTypeCd',
                                             type: 'int' },
        { name: 'systemPrice',
                                             type: 'float' },
        { name: 'servicePrice',
                                             type: 'float' },
        { name: 'systemType',
                                             type: 'string' },
        { name: 'articleNoManufacturer',
                                             type: 'string' },
        { name: 'remarks',
                                             type: 'string' },
        { name: 'validBegin',
                                             type: 'date' },
        { name: 'validEnd',
                                             type: 'date' },
        { name: 'competence',
                                             type: 'string' },
        { name: 'permission',
                                             type: 'string' },
        { name: 'crtUser',
                                             type: 'string' },
        { name: 'crtDate',
                                             type: 'date' },
        { name: 'updUser',
                                             type: 'string' },
        { name: 'updDate',
                                             type: 'date' }
```

```
private function generateModelBody($fields): string {
    $content = "{$this->indent(1)}fields: [";
    $content .= "<br/>
    $content .= "<br/>
    foreach ($fields as $field) {
        $name = $field['COLUMN_NAME'];
        $lname = lcfirst($name);
        $type = $field['DATA_TYPE'];

        $typeSpaces = $field['DATA_TYPE_SPACES'];
        $nameSpaces = $field['COLUMN_NAME_SPACES'];

        $content .= "{$this->indent(2)}{ name: '$lname',$nameSpaces type: '$type' },<br/>
}

$content = $this->removeLastOccurrence($content, ',');
$content .= "{$this->indent(1)}]";
return $content;
}
```

Output:

```
Ext.define('swo.model.ERParticleService', {
   extend: 'Ext.data.Model',
 → fields: [
        { name: 'id',
                                             type: 'int' },
                                             type: 'int' },
        { name: 'stateCd',
        { name: 'shopActiveCd',
                                             type: 'int' },
        { name: 'serviceTypeCd',
                                             type: 'int' },
        { name: 'articleNo',
                                             type: 'string' },
        { name: 'articleNoOld',
                                             type: 'string' },
        { name: 'articleDescription',
                                             type: 'string' },
        { name: 'supportPackManufacturerCd', type: 'int' },
        { name: 'supportPackRunTimeCd',
                                             type: 'int' },
        { name: 'sLACd',
                                             type: 'int' },
        { name: 'laborOnlyCd',
                                             type: 'int' },
        { name: 'partsOnlyCd',
                                             type: 'int' },
        { name: 'dMRCd',
                                             type: 'int' },
        { name: 'postWarrantyCd',
                                             type: 'int' },
        { name: 'indivCd',
                                             type: 'int' },
        { name: 'simpleActivationCd',
                                             type: 'int' },
        { name: 'indivTextCd',
                                             type: 'int' },
        { name: 'nASCd',
                                             type: 'int' },
        { name: 'onsiteEngineerCd',
                                             type: 'int' },
        { name: 'sparePartCd',
                                             type: 'int' },
        { name: 'hardwareCd',
                                             type: 'int' },
        { name: 'sNCheck',
                                             type: 'string' },
        { name: 'activationTypeCd',
                                             type: 'int' },
        { name: 'systemPrice',
                                             type: 'float' },
        { name: 'servicePrice',
                                             type: 'float' },
        { name: 'systemType',
                                             type: 'string' },
        { name: 'articleNoManufacturer',
                                             type: 'string' },
        { name: 'remarks',
                                             type: 'string' },
        { name: 'validBegin',
                                             type: 'date' },
        { name: 'validEnd',
                                             type: 'date' },
        { name: 'competence',
                                             type: 'string' },
        { name: 'permission',
                                             type: 'string' },
        { name: 'crtUser',
                                             type: 'string' },
        { name: 'crtDate',
                                             type: 'date' },
        { name: 'updUser',
                                             type: 'string' },
        { name: 'updDate',
                                             type: 'date' }
```

```
private function generateModelBody($fields): string {
    $content = "{$this->indent(1)}fields: [";
    $content .= "<br/>
    $content .= "<br/>
    $foreach ($fields as $field) {
        $name = $field['COLUMN_NAME'];
        $lname = lcfirst($name);
        $type = $field['DATA_TYPE'];

        $typeSpaces = $field['DATA_TYPE_SPACES'];
        $nameSpaces = $field['COLUMN_NAME_SPACES'];

        $content .= "{$this->indent(2)}{ name: '$lname',$nameSpaces type: '$type' },<br/>
        $content = $this->removeLastOccurrence($content, ',');
        $content .= "{$this->indent(1)}]";
        return $content;
}
```

Output:

```
Ext.define('swo.model.ERParticleService', {
   extend: 'Ext.data.Model',
   fields: [
       { name: 'id',
                                             type: 'int' },
                                             type: 'int' },
        { name: 'stateCd',
        { name: 'shopActiveCd',
                                             type: 'int' },
        { name: 'serviceTypeCd',
                                             type: 'int' },
        { name: 'articleNo',
                                             type: 'string' },
        { name: 'articleNoOld',
                                             type: 'string' },
        { name: 'articleDescription',
                                             type: 'string' },
        { name: 'supportPackManufacturerCd', type: 'int' },
        { name: 'supportPackRunTimeCd',
                                             type: 'int' },
        { name: 'sLACd',
                                             type: 'int' },
        { name: 'laborOnlyCd',
                                             type: 'int' },
        { name: 'partsOnlyCd',
                                             type: 'int' },
        { name: 'dMRCd',
                                             type: 'int' },
        { name: 'postWarrantyCd',
                                             type: 'int' },
        { name: 'indivCd',
                                             type: 'int' },
        { name: 'simpleActivationCd',
                                             type: 'int' },
        { name: 'indivTextCd',
                                             type: 'int' },
        { name: 'nASCd',
                                             type: 'int' },
        { name: 'onsiteEngineerCd',
                                             type: 'int' },
        { name: 'sparePartCd',
                                             type: 'int' },
        { name: 'hardwareCd',
                                             type: 'int' },
        { name: 'sNCheck',
                                             type: 'string' },
        { name: 'activationTypeCd',
                                             type: 'int' },
        { name: 'systemPrice',
                                             type: 'float' },
        { name: 'servicePrice',
                                             type: 'float' },
        { name: 'systemType',
                                             type: 'string' },
        { name: 'articleNoManufacturer',
                                             type: 'string' },
        { name: 'remarks',
                                             type: 'string' },
        { name: 'validBegin',
                                             type: 'date' },
        { name: 'validEnd',
                                             type: 'date' },
        { name: 'competence',
                                             type: 'string' },
        { name: 'permission',
                                             type: 'string' },
        { name: 'crtUser',
                                             type: 'string' },
        { name: 'crtDate',
                                             type: 'date' },
        { name: 'updUser',
                                             type: 'string' },
        { name: 'updDate',
                                             type: 'date }
```

Reflexion und Fazit

- Persönliche Einschätzung
- Alternativen
- Zukunft

Vielen Dank für Ihre Aufmerksamkeit!

Nun zur Demo . . .