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Clone System

What it does

Clones the entire webapp to another server.

Only works on linux.

First setup

1. Generate an SSH key for the tomcat-user on the source server `sudo -u tomcat ssh-keygen`
2. Add the public key to a user on the target server that has sudo-access
3. Connect from the source server, as tomcat, to the target server and accept the certificate
4. Add configurations

How to invoke

Invoke the codeunit, as an admin. eg.

`[SERVER]/main?command=common.CloneSystem`

Options

Control the behavior with the following url-parameters.

Parameter	Desctiption
with-users	Also clones the users and their groups
with-files	Also clones the files uploaded
dont-backup-target	Does not create a copy of the database on the target server with the name `_backupyyyyMMddHHmm`
dont-clean	Does not remove the sql files on both systems

Configuration

Config	Default	Description
CloneSystem.targetServer		IP or domain of target server
CloneSystem.targetUser	ec2-user	Name of the user that is being used on the target server
CloneSystem.targetBasePath	Policy:applicationBasePath	Webapps, folder on target server
CloneSystem.targetApp	Policy:applicationName	Application name on target server
CloneSystem.targetDb	DbLive-name	Name of live server on target server

Developer info

- Type: CodeunitPagecontent
- Security: Requires session
- Classpath: com.tsnocode.codeunit.common.CloneSystem

Copy Structure

What it does

Will copy all fields except files and pictures, but all sub child entities (1 level, non recursive).

How to invoke

The page is called with the command:
dk.tempusserva.codeunit.common.PageCopyStructure

Takes the following parameters

- SagID
- DataID

The user activating the function must have the group specified in "AllowCloneGroup"

Example of usage:

```
main?command=dk.tempusserva.codeunit.common.PageCopyStructure&SagID=10&DataID=100
```

Button for the function can be created using a "Action button: Button: Parameterized URL"

Example of URL pattern

```
main?command=dk.tempusserva.codeunit.common.PageCopyStructure&SagID=10&DataID=[DataID]
```

Configuration

[All possible configurations and where to edit them]

Developer info

- Type: CodeunitPagecontent
- Security: [eg. requires admin or session]
- Classpath: dk.tempusserva.codeunit.common.PageCopyStructure

Clone records

Usage

This function will copy a single record

Configuration guide

Add a button with parameterized URL using:

```
main?command=com.tsnocode.codeunit.common.CloneRecord&SagID=[SagID]&DataID=[DataID]
```

Developer info

- Type: CodeunitPagecontent
- Security: [eg. requires admin or session]
- Classpath: com.tsnocode.codeunit.common.CloneRecord

Static Content

What it does

Displays configurable static HTML code.

How to invoke

Make a http request:

```
main?command=dk.p2e.blanket.codeunit.common.PageStaticContent
```

Configuration

Set up HTML:

Designer > Modules > Static content > **StaticPageContent**

Developer info

- Type: CodeunitPagecontent
- Security: Requires session
- Classpath: dk.p2e.blanket.codeunit.common.PageStaticContent

Users By Group

What it does

Displays list of active users in the system.

Multi mode function

- User normal: No filters
- User exclusive group: Filters users/groups that active user belongs to

You can navigate through the pages

1. Lists exclusive groups + none
2. Lists users in *selected* exclusive group (1)
3. Lists groups for *selected* user (2)

How to invoke

Make a http request:

```
main?command=dk.p2e.blanket.codeunit.common.PageUsersByGroup
```

Configuration

None

Developer info

- Type: CodeunitPagecontent
- Security: Requires UderEditor or Admin
- Classpath: dk.p2e.blanket.codeunit.common.PageUsersByGroup

Users Online

What it does

Displays a list of users with a session on the current server

How to invoke

Make a http request:

```
main?command=common.PageUsersOnline
```

Configuration

None

Developer info

- Type: CodeunitPagecontent
- Security: Requires admin
- Classpath: dk.p2e.blanket.codeunit.common.PageUsersOnline

Website Iframe

What it does

Displays a configurable webpage in an IFrame.

How to invoke

Make a http request:

```
main?command=dk.p2e.blanket.codeunit.common.PageWebsiteIframe
```

Configuration

Set up IFrame options:

Designer > Modules > Static content

- WebsiteIframeURL
- WebsiteIframeWidth
- WebsiteIframeHeight

Developer info

- Type: CodeunitPagecontent
- Security: Requires session
- Classpath: dk.p2e.blanket.codeunit.common.PageWebsiteIframe

Solution Structure View

What it does

Lists the components (fields, status etc.) in the current solution.

How to invoke

Make a http request including a valid SagID:

```
main?SagID=[SagID]&command=common.SolutionStructureView
```

Configuration

None

Developer info

- Type: CodeunitPagecontent
- Security: Requires session
- Classpath: dk.p2e.blanket.codeunit.common.SolutionStructureView

Gantt Diagram

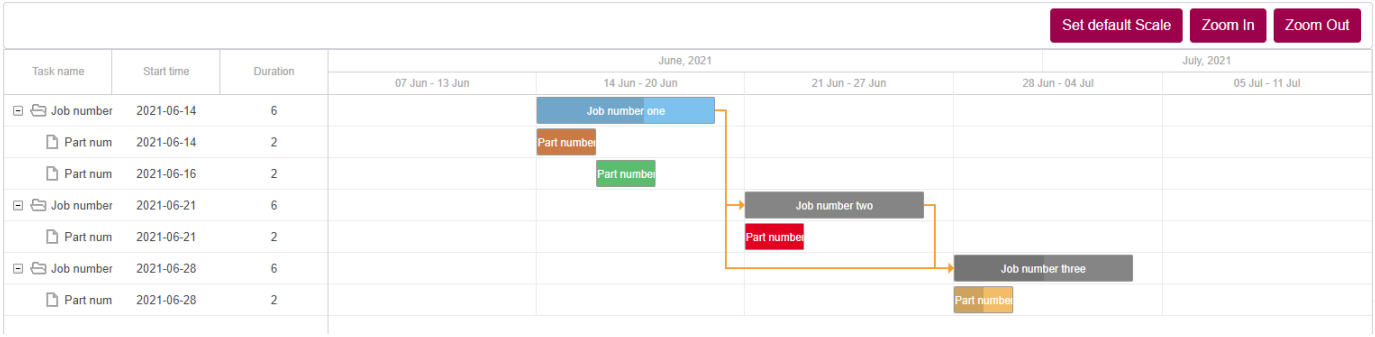
What it does

The platform has a build-in gantt chart generator.
It supports zooming, nesting and relations.

The datastructure has to be a single entity.

If your data isn't contained in a single entity use Gantt Sync CodeUnit.

Sample



How to invoke

To view the gantt chart, access:
main?command=dk.tempusserva.gantt.DhtmlXGanttPage&SagID=[SagID]

Options

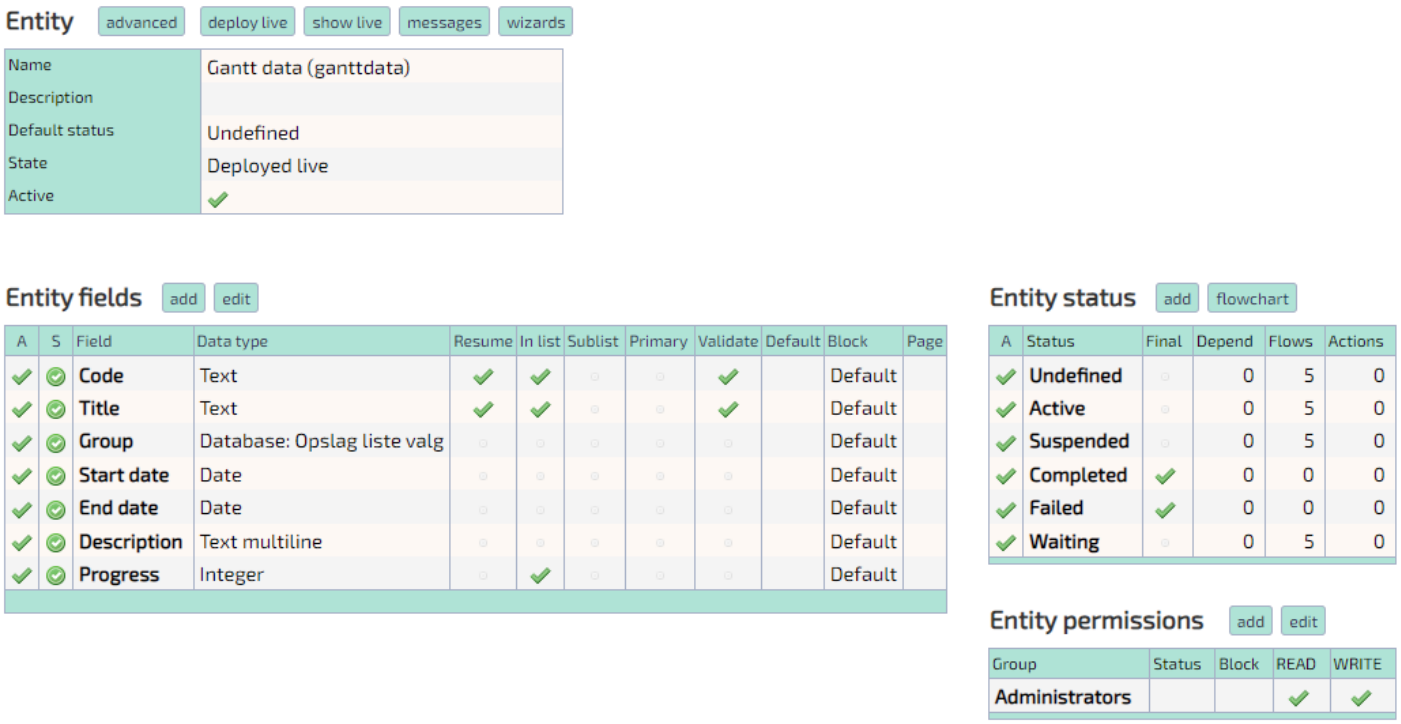
Basic setup

To view a gantt chart, first access the page main?command=dk.tempusserva.gantt.DhtmlXGanttPage to generate the required **static configurations**.
Six fields are required in the table, that the data is being read from:
Code, Title, Group, Start date, End date and Progress.

Code and Title have to be single-line text inputs.
Progress has to be an integer input, it represents how far along the task is, in percent.
Start and End date have to be dates.
Group should store the DataID of the parent-task. Here a database-lookup is used, executing query: SELECT DataID, Resume FROM data_ganttdata and displaying field Resume.

Also at least 5 statuses:
Active, Suspended, Completed, Failed and Waiting.
All other statuses will be marked as Undefined.

Sample



Entity advanced deploy live show live messages wizards

Name	Gantt data (ganttdata)
Description	
Default status	Undefined
State	Deployed live
Active	✓

Entity fields add edit

A	S	Field	Data type	Resume	In list	Sublist	Primary	Validate	Default	Block	Page
✓	✓	**Code**	Text	✓	✓			✓		Default	
✓	✓	**Title**	Text	✓	✓			✓		Default	
✓	✓	**Group**	Database: Opslag liste valg							Default	
✓	✓	**Start date**	Date							Default	
✓	✓	**End date**	Date							Default	
✓	✓	**Description**	Text multiline							Default	
✓	✓	**Progress**	Integer		✓					Default	

Entity status add flowchart

A	Status	Final	Depend	Flows	Actions
✓	**Undefined**		0	5	0
✓	**Active**		0	5	0
✓	**Suspended**		0	5	0
✓	**Completed**	✓	0	0	0
✓	**Failed**	✓	0	0	0
✓	**Waiting**		0	5	0

Entity permissions add edit

Group	Status	Block	READ	WRITE
Administrators			✓	✓

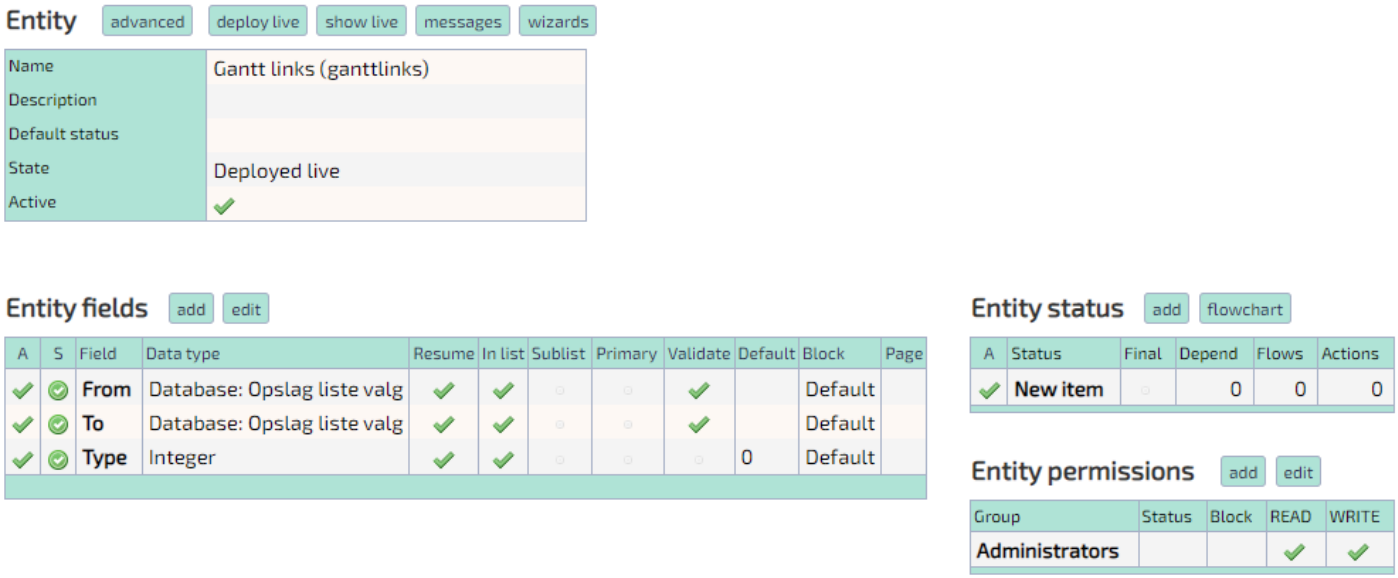
Relations

To view relations between tasks, create another table.
Two fields are required:
From and To.
A third field Type can be added, but isn't required.

From and To have to store the DataID of the tasks that should be linked via a relation. This setup is the same as Group.
Type has to have value of 1 or 0, any other value is overwritten to 0. This defines whether the relation is drawn from the beginning (1) or end (0) of the From-task.

To view the gantt chart, access:
main?command=dk.tempusserva.gantt.DhtmlXGanttPage&SagID=[SagID]&LinkSagID=[RelationSagID]

Sample



Configuration

Static config	Default value	Description
Gantt.Field.Group	GROUP_VALUE	Name of the column that contains the DataID of parent-task
Gantt.Field.StartDate	STARTDATE	Name of the column that contains the task-start date
Gantt.Field.EndDate	ENDDATE	Name of the column that contains the task-end date
Gantt.Field.Code	CODE	Name of the column that contains the task-code
Gantt.Field.Title	TITLE	Name of the column that contains the task-title
Gantt.Field.Progress	PROGRESS	Name of the column that contains the task-progress
Gantt.Filter.Field	TASKTYPE	Name of a column that contains a value that should be filtered to match Gantt.Filter.Value
Gantt.Filter.Value	249	Value that task have to equal in column Gantt.Filter.Field
Gantt.Field.Link.From	FROM	Name of column that contains DataID of source-task in a relation
Gantt.Field.Link.To	TO	Name of column that contains DataID of target-task in a relation

Gantt.Field.Link.Type		Name of column that contains type of relation, not required
Gantt.StatusID.Active	1	ID of status that marks a task as Active
Gantt.StatusID.Waiting	2	ID of status that marks a task as Waiting
Gantt.StatusID.Suspended	3	ID of status that marks a task as Suspended
Gantt.StatusID.Completed	4	ID of status that marks a task as Completed
Gantt.StatusID.Failed	5	ID of status that marks a task as Failed
Gantt.StatusColor.Undefined	#858586	CSS-color of tasks with status Undefined
Gantt.StatusColor.Active	#76C0F1	CSS-color of tasks with status Active
Gantt.StatusColor.Waiting	#F6BF5F	CSS-color of tasks with status Waiting
Gantt.StatusColor.Suspended	#F28F42	CSS-color of tasks with status Suspended
Gantt.StatusColor.Completed	#4DBE6C	CSS-color of tasks with status Completed
Gantt.StatusColor.Failed	#E70015	CSS-color of tasks with status Failed

Advanced usage

It's possible to override the static content.
To do so, add the desired value to the url.
Example:
To override the field used for Title, add *&Gantt.Field.Title=[field-name]* to the url

Exporting

The chart supports exporting to Excel and iCal formats.

It's possible to overwrite the export, be declaring a javascript function named `customExportToExcel` or `customExportToICal`. Either takes one argument: the gantt object.

Heres an example that removes html markup from the gantt titles before export.

```
function customExportToExcel(gantt) {
  var data = gantt.getDatastore("task").getVisibleItems();
  var rtn = [];
  for (var i = 0; i < data.length; i++) {
    var d = new Date(data[i].start_date);
    rtn[i] = {
      color: data[i].color,
      duration: data[i].duration,
      id: data[i].id,
      open: data[i].open,
      parent: (data[i].parent == "0" || data[i].parent == 0 ? "" : data[i].parent),
      progress: data[i].progress,
      start_date: d.getFullYear() + "-" + ("0"+(d.getMonth()+1)).slice(-2) + "-" + ("0" + d.getDate()).slice(-2) + " "
+ ("0" + d.getHours()).slice(-2) + ":" + ("0" + d.getMinutes()).slice(-2),
      text: $(data[i].text).text(),
    };
  }
  console.log(rtn);
  viewGantt({data: rtn, links: []});
  setTimeout(function() {
    gantt.exportToExcel();
  }, 5);
  setTimeout(loadGantt, 100);
}
```

Developer info

- Type: CodeunitPagecontent
- Security: Requires session
- Classpath: dk.tempusserva.gantt.DhtmlXGanttPage

Move a File

What it does

Moves a file from one document-field to another, on the same entity.

Works between document-fields with and without signing.

How to invoke

Add the following snippet to the entity scripts. This enables movement between all document-fields on the entity.

It adds another column to the file-lists, with a "Move" link. When clicked it opens a popup, with a dropdown where the new field can be selected.

```
const moveFile = (id, to) => {
  const params = new URLSearchParams(window.location.search)
  $.ajax({
    url: "main",
    method: "GET",
    data: {
      "command": "dk.tempusserva.codeunit.common.MoveFile",
      "SagID": params.get("SagID"),
      "DataID": params.get("DataID"),
      "FileID": id.split("_")[2],
      "FieldFrom": id.split("_")[1],
      "FieldTo": to,
    },
    success: (data) => {
      if (data == "File moved") {
        $(`#${id}`).find("td").last().html("Moved")
      } else {
        alert(data)
```

```
    }
   },
  })
}

$(() => {
  const moveFileAction = () => {
    console.log("yay")
    moveFile($("#modeFileFrom").val(), $("#moveFileTo").val())
    $("#moveFilePopup").remove()
  }
  $(() => {
    $(".tableFiles").each((i,e) => {
      let t = $(e)
      t.find("thead").find("tr").each((i,e) => { $(e).append("<th></th>") })
      t.find("tbody").find("tr").each((i,e) => { $(e).append(`<td><a href="#"
class="moveFile">Move</a></td>`) })
    })
    $(".moveFile").on("click", (e) => {
      e.preventDefault()
      let t = $(e.currentTarget)
      let id = t.parent().parent().attr("id")
      let r = `<select class="form-control" id="moveFileTo">`
      r += `<option value="">Select a field</option>`;
      $(".uploadFiles").each((i,e) => {
        let p = $(e).parent().attr("id").replace("VB_DATA_", "")
        if (id.split("_")[1] != p) {
          let x = $(e).parent().parent().parent().find(`#NB_DATA_${p}`).html()
          r += `<option value="${p}">${x}</option>`
        }
      })
      r += "</select>"
      $("#TempusServaPage").append(`
        <div id="moveFilePopup" style="display: none;">
          <label>Move file to:</label>
          ${r}
          <input type="hidden" id="modeFileFrom" value="${id}"/>
          <a href="javascript:moveFileAction();" class="moveFileAction">Move</a>
        </div>
```

```
    `)
    createJqueryDialog("moveFilePopup")
  })
 })
})
```

Configuration

None

Developer info

- Type: CodeunitPagecontent (raw)
- Security: Requires session
- Classpath: dk.tempusserva.codeunit.common.MoveFile

Convert database to UTF-8

What it does

Special characters causing errors

The default support for UTF8 is 3 byte.

Using 4 byte UTF content in text areas, can cause errors, that looks like

```
java.sql.SQLException: Incorrect string value: '\xC2\x96 Z. ...' for column 'NOTES' at row 1
```

How to invoke

Update the database to full UTF8 support using the following command

```
main?command=dk.p2e.blanket.codeunit.common.PageConvertDatabaseToUTF8
```

Note an administration profile is needed to complete the operation.

You might also have to update the tomcat server.xml file.
You have to add `useBodyEncodingForURI="true"` to the connectors.

Note that this codeunit has build in protection against being excuted multiple times at once, and should be executed every time a new field or entity has been added to the database.

Issue before version 11315 on MariaDB

Due to a difference in how MySQL and MariaDB stores "DEFALUT NULL", when executing this codeunit on a MariaDB server, all columns with the default value of null would be updated to have a default value of 'NULL' (the string NULL, not the empty value null).

To find the affected columns and generate all the required sql to fix the issue, run the following query.
Remember to reaplce `[LIVE DB]` with the name of the live database of your instance!

```
SELECT a.TABLE_NAME, a.COLUMN_NAME, CONCAT('ALTER TABLE ', a.TABLE_NAME, ' ALTER ', a.COLUMN_NAME,
' SET DEFAULT NULL;') AS upd
FROM information_schema.columns AS a
INNER JOIN INFORMATION_SCHEMA.TABLES b ON
a.TABLE_CATALOG = b.TABLE_CATALOG AND
a.TABLE_SCHEMA = b.TABLE_SCHEMA AND
a.TABLE_NAME = b.TABLE_NAME AND
LOWER(b.table_type) != 'view'
WHERE a.COLUMN_DEFAULT = '\'NULL\'' AND
a.TABLE_SCHEMA = '[LIVE DB]'
```

This should create one row for every column in the database that has a default value of the string 'NULL'.

Take the output of the third column, copy all rows and execute them against the database. Should look something like this:

```
ALTER TABLE form ALTER SagNavnI18N SET DEFAULT NULL;
ALTER TABLE form ALTER EntityIcon SET DEFAULT NULL;
ALTER TABLE form ALTER Description SET DEFAULT NULL;
ALTER TABLE form ALTER DescriptionI18N SET DEFAULT NULL;
ALTER TABLE form ALTER MailDomains SET DEFAULT NULL;
ALTER TABLE form ALTER MailSecurity SET DEFAULT NULL;
ALTER TABLE form ALTER Codeunit SET DEFAULT NULL;
ALTER TABLE form ALTER Instructions SET DEFAULT NULL;
```

Go back and execute the first query, it now should return 0 rows.

Options

None.

Configuration

None.

Developer info

- Type: CodeunitPagecontent
- Security: Requires administrator
- Classpath: dk.p2e.blanket.codeunit.common.PageConvertDatabaseToUTF8

Bulk importing files

What it does

This page describes how to setup the bulk-import codeunit, to import a lot of files at once and generate a separate record in an entity, for each file.

First setup

First, setup an entity with at least two fields: A text-field for the filename and a document field for the document.
Second, create or edit the following 5 "Static content".

1. BulkImport.SagID, the SagID of the entity that is the target of the import
2. BulkImport.UserGroupID, The GroupID of the usergroup that is allowed to access the bulk-import system
3. BulkImport.FileTitleField, The systemname of the field where the name of the file should be stored
4. BulkImport.FileFieldID, The FieldID of the field where the uploaded document should be stored
5. BulkImport.StatusID, The StatusID that uploaded documents should have

Third, edit the url on the site and access
main?command=dk.tempusserva.codeunit.bulkimport.ImportPage
Fourth, upload the files.

Next step could be to index all the files, allowing the content of the files to be searched and queried, maybe through ChatGPT.

How to invoke

[Steps to enable codeunit]

Options

[Optional options, that can be set at runtime, eg. url-parameters]

Configuration

[All possible configurations and where to edit them]

Developer info

- Type: CodeunitPagecontent
- Security: [eg. requires admin or session]
- Classpath: dk.tempusserva.codeunit.bulkimport.ImportPage

Update resume for entire entity

What it does

Updates the resume for all records in a given entity

How to invoke

The page is called with the command:
com.tsnocode.codeunit.backend.UpdateEntityResumes

Requires the following parameter

- SagID

Example of usage:

```
main?command=com.tsnocode.codeunit.backend.UpdateEntityResumes&SagID=10&RecordLimit=10000
```

Options

Takes the following parameters

- RecordLimit (default 1000)
- BatchSize (default 100)

Developer info

- Type: CodeunitPagecontent
- Security: requires admin
- Classpath: com.tsnocode.codeunit.backend.UpdateEntityResumes

Cleanup Inactive Model Parts

What it does

Removes all states in an entity, that have no records and are marked as inaktive.

How to invoke

Call the codeunit, with the SagID to clean.

```
main?command=com.tsnocode.codeunit.backend.CleanupInactiveModelParts&SagID=[SagID]
```

Developer info

- Type: CodeunitPagecontent
- Security: administrator
- Classpath: com.tsnocode.codeunit.backend.CleanupInactiveModelParts

Fix Docx Tags

What it does

Tries to fix templating tags in a docx template.

How to invoke

Call the codeunit, along with a TemplateID

```
main?command=com.tsnocode.codeunit.backend.FixDocxTags&TemplateID=[TemplateID]
```

Developer info

- Type: CodeunitPagecontent
- Security: administrator
- Classpath: com.tsnocode.codeunit.backend.FixDocxTags

Reinvite Users

What it does

Resets passwords and sends out welcome messages, to all of the listed emails.

First setup

Setup the configuration "ReinviteUsersGroupID".

How to invoke

Call the page

```
main?command=com.tsnocode.codeunit.backend.ReinviteUsers
```

Input the emails that should be reset and re-invited, one email pr line, and submit the form.

Configuration

ReinviteUsersGroupID

Developer info

- Type: CodeunitPagecontent
- Security: administrator and specific group
- Classpath: com.tsnocode.codeunit.backend.ReinviteUsers

Generate Video Thumbnails

What it does

Generates missing thumbnails for files in an entity.

First setup

Make sure the application is using filesystem storage (filesystemStorageActive)

How to invoke

Call the page

```
main?command=com.tsnocode.codeunit.common.GenerateVideoThumbnails&SagID=[SagID]
```

Configuration

You can adjust the thumbnail size via the policy uploadPictureSizeThumbnail

Developer info

- Type: CodeunitPagecontent
- Security: administrator
- Classpath: com.tsnocode.codeunit.common.GenerateVideoThumbnails

Export Template To WebDav

What it does

Exports a template, saves it to the record, and opens it via webdav.

First setup

Add an action button with the correct parameters

How to invoke

Call the page, e.g. via an action button

```
main?command=com.tsnocode.codeunit.common.SaveTemplateToWebDav&SagID=[SagID]&DataID=[DataID]&TemplateID=[TemplateID]&Filename=[Filename]&Field=[Field]
```

Options

- SagID
- DataID
- TemplateID
- Filename, Name of the generated file
- Field, Field systemname to save the generated file to

Developer info

- Type: CodeunitPagecontent
- Security: session

- Classpath: com.tsnocode.codeunit.common.SaveTemplateToWebDav

Bulk import files

What it does

Imports files and creates a record for each of them.

First setup

[Optional, if extra config is required to get the codeunit working]

How to invoke

Open the page

```
main?command=com.tsnocode.codeunit.system.bulkimport.ImportPage
```

Options

[Optional options, that can be set at runtime, eg. url-parameters]

Configuration

[All possible configurations and where to edit them]

Developer info

- Type: CodeunitPagecontent

- Security: admin, datahandler, or specific group
- Classpath: com.tsnocode.codeunit.system.bulkimport.ImportPage

Dynamically change users exclusive group

What it does

Gives the user a list of exclusive groups defined in the application. The user can select one and will have their exclusive group set to that value untill they sign out.

Also supports changing the users exclusive group, if the already have one.

Does not support advanced security with multiple exclusive groups.

First setup

Enable the policy securityExclusiveGroupSet.

If the option to change groups is required, enable the policy securityExclusiveGroupChange.

How to invoke

Add a button that links to this codeunit

```
main?command=dk.p2e.blanket.codeunit.common.PageSetExclusiveGroup
```

Options

None

Configuration

None

Developer info

- Type: CodeunitPagecontent
- Security: Session
- Classpath: dk.p2e.blanket.codeunit.common.PageSetExclusiveGroup

Is Date weekend/holiday

What it does

Tests wether a date is a weekend date and/or a holiday (based on those that are input via the designer).

Available from version 11968.

First setup

Just make sure that you maintain the list of holidays (in the designer).

How to invoke

Make an http request to

```
main?command=com.tsnocode.codeunit.frontend.TestDate&Date=[DATE]
```

This will return a json object.

```
{
  "date": "2026-05-14",
  "isHoliday": true,
  "isWeekend": false,
  "error": false,
  "holidayName": "Kristihimmelfart"
}
```

If `error` is true, then a message (`msg`) will also be available.
If `isHoliday` is true, then a `holidayName` should also be returned. (As of version 12007)

Developer info

- Type: [Type+link]
- Security: [eg. requires admin or session]
- Classpath: [full class path]