

Nuclet: NucletUtils

Language: [Deutsch](#) · [English](#)

Nuclet: NucletUtils

Data sheet and documentation entry point for the NucletUtils Nuclet (utility functions and helpers reusable across Nuclets).

CONCEPT

INTEGRATORS

UPDATED: JUL 2026

APPLIES TO NUCLOS 4.2026.X

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Machine-translated – under review

This page was machine-translated from German as a first draft and is currently under review. The authoritative source remains the **German original** (see the language switch above).

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Releases

Version	Date	Notes	Compatibility
1.0.0	12.03.2021	First published version	ab Nuclos 4.46.1

Overview

This Nuclet is a collection of many frequently needed Java methods, data sources and resources that support Nuclet development and standardise Nuclet behaviour.

Description of the Utils classes

All methods presented here are static.

Some methods use constants, such as the format pattern `'HH:mm:ss'` for formatting the time. Most of these constants are Nuclet parameters and can be adjusted accordingly.

After adjusting the Nuclet parameters, the job *Initialisiere NucletUtils* must be run once, otherwise the changes may only take effect after the next server start.

Class	Description
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NucletBOUtils	This class contains helpful methods around business objects, e.g. • <code>getBusinessObjectByName(Land.class, Konstanten.Land.DEUTSCHLAND)</code> • <code>getOrCreateBusinessObjectByName(Land.class, Konstanten.Land.DEUTSCHLAND, Land.IsoCode, "DE")</code> • <code>setBusinessObjectAttribute(Auftrag.class, Auftrag.Dringend, Boolean.TRUE)</code> • <code>getResource("Word-Vorlage")</code> • <code>saveBusinessObjectWithoutRules(auftrag)</code> • <code>getStateList("Auftrag")</code> • <code>getLink(auftrag) = "http://localhost:80/nuclos/rest/bos/org_nuclet_test_Auftrag/109194126"</code> • <code>areDifferent(auftrag1.getKundeId(), auftrag2.getKundeId())</code>
NucletDateUtils	This class contains helpful date functions, e.g. • <code>getDate(year, month, day)</code> • <code>getYear(date)</code> • <code>getDaysBetweenDates(date1, date2)</code> • <code>addToDate(date, Calendar.MONTH, -1)</code> • <code>isSameDay(date1, date2)</code> • <code>isGeneralHoliday(date)</code> • <code>isWorkday(date)</code> • <code>max(date1, date2)</code>
NucletDialogUtils	This class contains helpful dialog functions, e.g. • <code>dialogYesNo("No shipping costs", "The order has no shipping costs. Continue?", "org.nuclet.firma.Auftrag", String "Action cancelled")</code> • <code>dialogOkCancel(title, message, contextIdentifier, cancelMessage)</code> • <code>dialogGetInput(title, message, contextIdentifier)</code> • <code>dialogGetSelection(title, message, contextIdentifier, options)</code>
NucletExcelUtils	This class contains helpful methods for working with Excel lists, e.g. • <code>getCellName(row, column)</code> • <code>getCellValue(row, column)</code> • <code>writeCellValue(sheet, rownumber, columnnumber, value)</code> • <code>writeCellValue(cell, value)</code> • <code>getWorkbookTemplate(template)</code> • <code>writeCellFormula(row, firstrow, columnnumber, getColumnSum(row, column_start, column_end))</code>
NucletFileUtils	This class contains helpful methods for file handling, e.g. • <code>writeArrayToNuclosFile(filename, content)</code> • <code>writeStringToNuclosFile(filename, string)</code> • <code>writeNuclosFileToFile(nuclosFile)</code>

NucletFormatUtils	This class contains helpful methods for formatting tasks, e.g. • <code>format(date) = "01.03.2021"</code> • <code>format(date, "yy-MM-dd") = "21-03-01"</code> • <code>formatTime(date) = "12:20:44"</code> • <code>formatWeek(date) = "KW 13"</code> • <code>formatDateTime(date) = "01.03.2021 12:20:44"</code> • <code>formatDateForFile(date) = "2021-03-01"</code> • <code>formatCurrency(bdValue) = "2.412,37 €"</code> • <code>formatRoman(2021) = "MMXXI"</code> • <code>formatExcelColumnName(30) = "AD"</code> • <code>isInteger(string)</code> • <code>getInteger(string)</code>
NucletHtmlUtils	This class contains helpful methods for HTML formatting, e.g. • <code>bold(string) = "string"</code>
NucletImageUtils	This class contains helpful methods for images, e.g. • <code>getThumbnail(image, width, height)</code>
NucletLoggingUtils	This class contains helpful methods for logging, e.g. • <code>log(message)</code>
NucletMigrationUtils	This class contains helpful methods for migrations, e.g. • <code>confirmMigrationHasNotBeenExecuted(name)</code> • <code>startMigration(name, context);</code> • <code>finishMigration(protokoll, context);</code>
NucletNumberUtils	This class contains helpful mathematical methods. Many of them do not return an error if a <code>BigDecimal</code> argument == null, but instead return null. • <code>min(BigDecimal a, BigDecimal b)</code> • <code>sum(BigDecimal a, BigDecimal b)</code> • <code>quotient(BigDecimal a, BigDecimal b)</code> • <code>areAlmostEqual(BigDecimal a, BigDecimal b)</code> • <code>getDiscountedAmount(BigDecimal amount, BigDecimal discount)</code> • <code>getOriginalAmount(BigDecimal amount, BigDecimal discount)</code>
NucletParameterUtils	This class contains helpful methods for Nuclet parameters, e.g. • <code>getNucletParameterAsInteger(uid)</code> • <code>getNucletParameterAsPositiveInteger(uid)</code> • <code>getNucletParameterAsBigDecimal(uid)</code> • <code>getNucletParameterAsBoolean(uid)</code>
NucletStringUtils	This class contains helpful methods for strings, e.g. • <code>leftpad("12", 4) = "0012"</code> • <code>shorten("123456789", 7) = "1234..."</code> • <code>createPassword(8) = "F62hpN1c"</code>

NucletUserUtils	This class contains helpful methods for users and user groups, e.g. - confirmUserhasRole(user, role) - getUser(String benutzernuclos)
NucletUtilsInitialisieren	Job rule that activates updated Nuclet parameters for the rules. Otherwise the changed parameters may only take effect after the next server restart.

Description of the Data sources

Data source	Description
EntityRules	Returns all insert, insertFinal, update and updateFinal rules that are executed for a specified BO
Nuclet parameters	Returns the name of a Nuclet parameter for its uid
Resource	Returns the resource (content) for the specified name
StatesForModel	Returns all states that belong to the specified state model (name)
ModelForState	Returns the name of the state model to which a specified state (uid) belongs
Transitions	Returns all incoming and outgoing state transitions for a particular state (model, numeral)
Usage in Datasources	Returns all usages of a given database field in Nuclos data sources and database objects. This is very helpful when you want to rename or delete such a field
Find Table for id	Finds all tables in which the specified intid is used
Find Table for struid	Finds all tables in which the specified struid is used

Description of the Reports

Data source	Description
Usage in Datasources	Returns all usages of a given database field in Nuclos data sources and database objects. This is very helpful when you want to rename or delete such a field
Find Table for id	Finds all tables in which the specified intid is used
Find Table for struid	Finds all tables in which the specified struid is used

Description of the Jobs

Data source	Description
InitialisiereNucletUtils	This job should be run when something in the Nuclet parameters of <i>NucletUtils</i> has been changed.

Description of the BO's

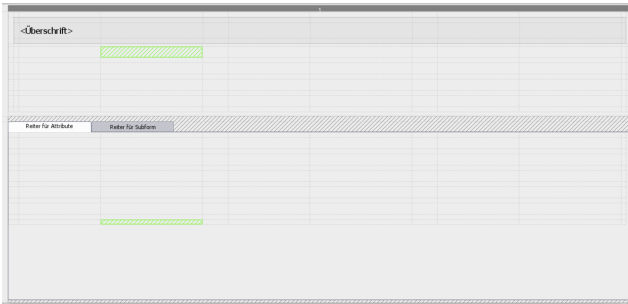
Data source	Description
Migration log	Here Nuclos can remember whether migrations that should not be run multiple times have already taken place (see also the Utils class NucletMigrationUtils)

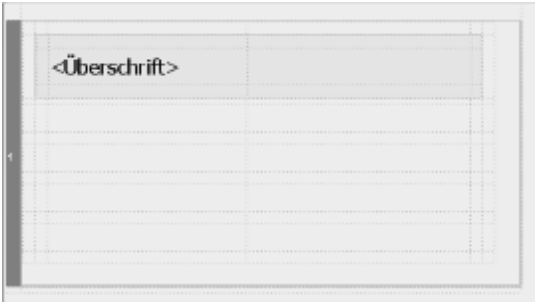
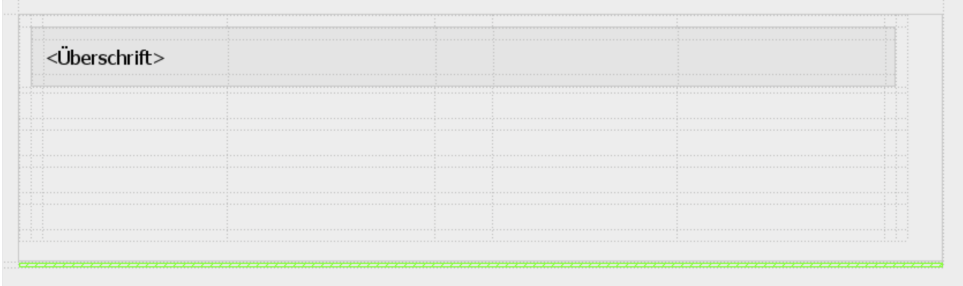
Parameter	Global parameters can be stored here, similar to Nuclet parameters. The advantage here is that they can be grouped into lists, which is clearer when you have very many parameters. The NucletParameterUtils class provides the appropriate methods for determining the parameters.
System /Tabelle/*	These are virtual BOs that make system tables readable. Helps in searching for system objects and in determining properties in rule code.

Description of the Database functions

Database object	Description
LB20_CA_AMPEL	Returns a correspondingly coloured traffic light for the arguments 'G'(reen), 'Y'(ellow) and 'R'(ed), and a grey traffic light for all other values
LB20_FN_GET_PARAMETER	Returns a parameter value for a parameter list and a parameter name, see also BO <i>Parameter</i>

Description of the Resources

Data source	Description	Note
Traffic lights	Here there are traffic lights in various colours, which are used e.g. by the database function <i>LB20_CA_AMPEL</i> are used	
Emojis	Some standard emojis	
Checkbox	Checkbox symbols, e.g. for display in a PDF	
CSS template	CSS template with a collection of frequently used CSS code blocks for use in the system parameter "WEBCLIENT CSS" or as a client extension in the Nuclet. Copy the required CSS passages and configure them with your own colours or parameters.	
Layout for transaction data - three columns + tab panel, line spacing 10 px	Layout for use in transaction data. Contents: • frame with heading (large font) • three columns for attributes • line spacing: 10 px • tab pane with two tabs attributes + subform	

Layout for master data - one column, line spacing 10 px	Layout for use in master data. Contents: • frame with heading (large font) • one column for attributes • line spacing: 10 px	
Layout for master data - two columns, line spacing 10 px	Layout for use in master data. Contents: • frame with heading (large font) • two columns for attributes • line spacing: 10 px	

Related pages

Modules

All modules

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