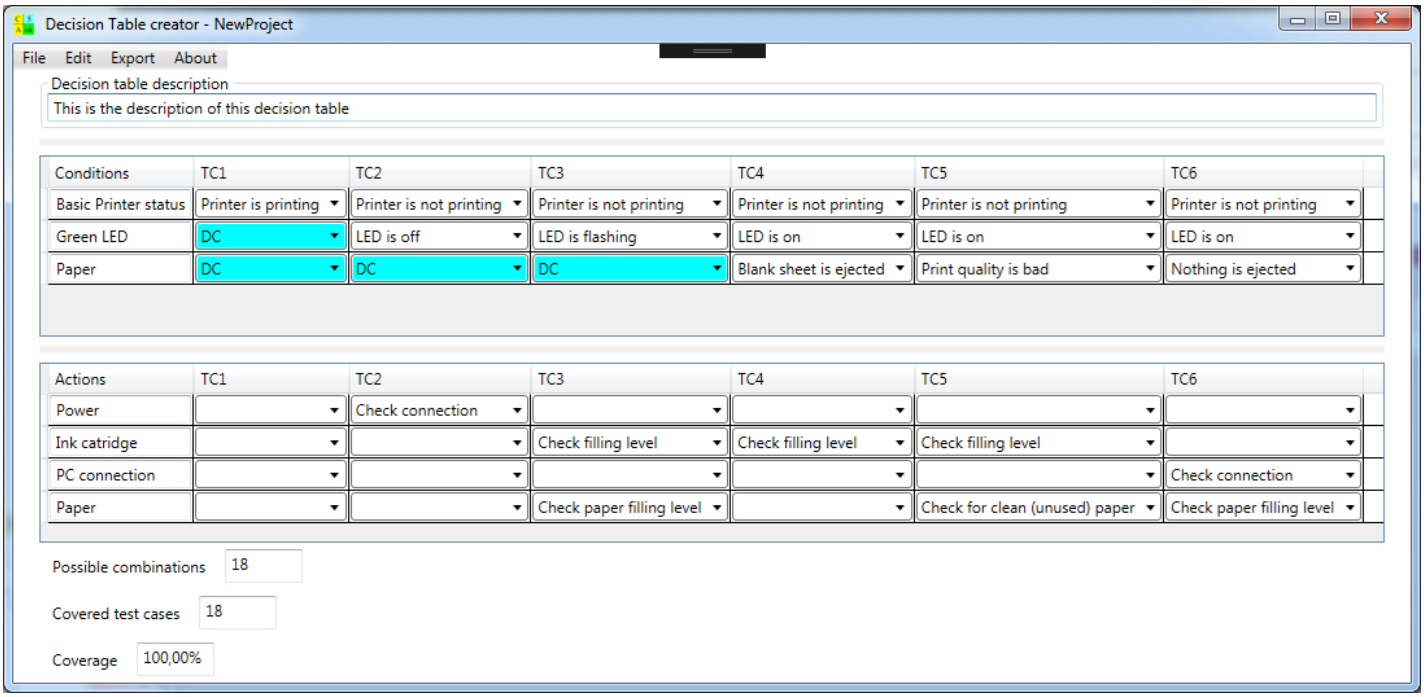
Decision Table Creater

Main features

- Define conditions with more than 2 states
- Define don't care entries in conditions
- Customizable code generator
- Calculation of possible combinations and coverage
- Creation of remaining testcases for 100% coverage



Menu description

File - New

Create a new project

File - Open

Open an existing project

File - Save / Save as

Save the current project

File - Create sample project

Create the printer trubleshooting sample

File - Create missing testcases

Create remaining testcases for 100% coverage

File - Exit

Exit tool

Edit - Append test case / Delete test case

Add and delete test case

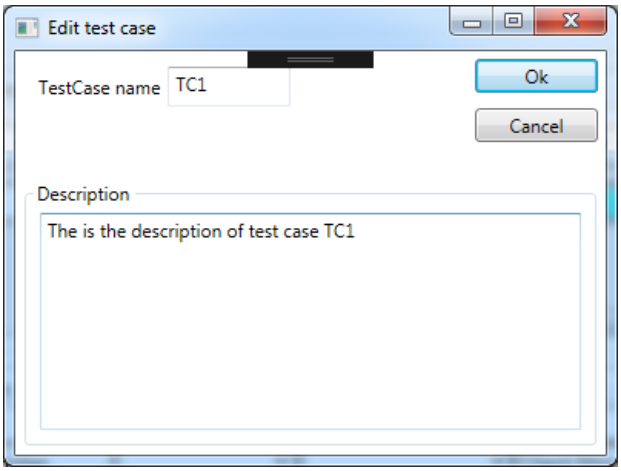
Edit - Delete most right test case

Deletes the most right test case

Edit - Edit test case description

Opens a dialog to edit the test case description

Edit test case dialog



Conditions

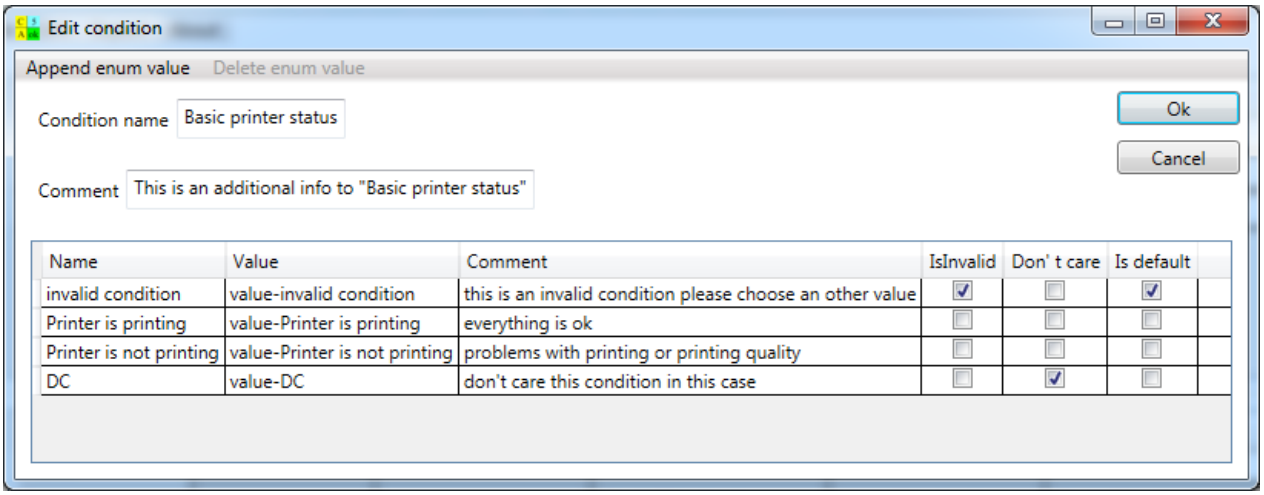
Edit - Edit condition / Edit action (or double click on condition or action name)

edit conditioon or action

Edit - Append condition / Insert condition

Add or insert new condition - the edit condition dialog box appears

Edit condition dialog



Condition name

The name of the condition. This name will be displayed in the main window in the conditions column.

Comment

It is possibel to define a comment for this condition. This comment will be displayed as tooltip and the comment is available for code generation.

Condition enum items

Name

The name of the condition enum item. This name will be displayed in the test case column.

Value

The value of the condition enum item. The value is used for code generation.

Comment

It is possibel to define a comment for this condition enum item. This comment will be displayed as tooltip and the comment is available for code generation.

IsInvalid

This check box mark this enum item as an invalid choice. It will be displayed with a diffrent color. In combination with "Is default" this will be the default enum item. An enum value with IsInvalid is not included in the coverage calculation.

Don't care

This check box mark this enum item as an don't care for this test case. This is included in the coverage calculation and reduces count of needed test cases.

Is default

This check box mark this enum item as the default item. This means that this is the default value when a new text case is added. If more than one enum item have the default flag, the first default enum item becomes the default enum item. If none of the enum items have a default flag, the first enum item becomes the default enum item.

Actions

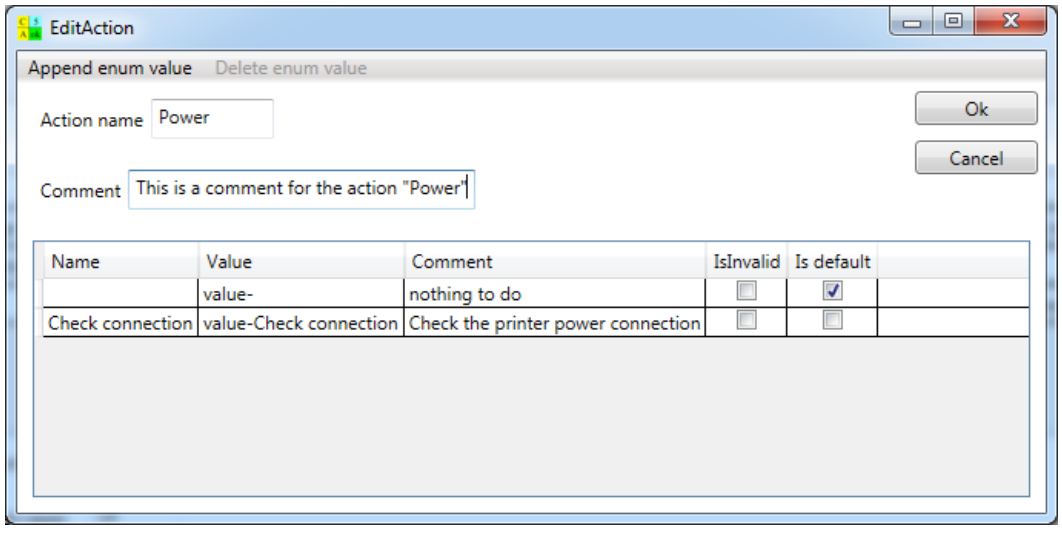
Edit - Delete action / Delete condition

Delete condition or action - the condition or action must be selected

Edit - Move up / Move down

Move condition or action one line up or down - the condition or action you want to move must be selected

Edit action dialog



Action name

The name of the action. This name will be displayed in the main window in the actions column.

Comment

It is possibel to define a comment for this action. This comment will be displayed as tooltip and the comment is available for code generation.

Action enum items

Name

The name of the action enum item. This name will be displayed in the test case column.

Value

The value of the action enum item. The value is used for code generation.

Comment

It is possibel to define a comment for this action enum item. This comment will be displayed as tooltip and the comment is available for code generation.

IsInvalid

This check box mark this enum item as an invalid choice. It will be displayed with a diffrent color. In combination with "Is default" this will be the default enum item.

Is default

This check box mark this enum item as the default item. This means that this is the default value when a new text case is added. If more than one enum item have the default flag, the first default enum item becomes the default enum item. If none of the enum items have a default flag, the first enum item becomes the default enum item.

Export - Export to clipboard

copy the current decision table to clipbord use this to export the table to a word processing or spreadsheet tool

Export - External template - Sample.file.stg

The templates for code generation are located in the directory "MyDocuments"/DecisionTableCreatorTemplates/*.stg The first template "Sample.file.stg" is written to this directory during the first start of the tool. This is the place to store other templates. During the start of the tool a submenu entry is created for every template in this directory. A template must have the extension "stg".

Statistics

Possible combinations

The possibe combinations are calculated based on the defined conditions and enum values. This is the count of test cases you need to get a coverage of 100%.

Covered test cases

The number of test cases that are defined. In this calculation the test cases with "Don't care" are considered. This calculation is suppressed if the possible combinations exceeds 1000.

Coverage

The coverage in percent which are reached with the defined test cases. This calculation is suppressed if the possible combinations exceeds 1000.

Code generation

The code generation is based on StringTemplate https://github.com/antlr/stringtemplate4

Further documentation: StringTemplate cheat sheet

Template

A valid template must be stored in the template directory "MyDocuments"/DecisionTableCreatorTemplates/ and must end with .stg The root entry must be **TestCasesRoot**(**root**) ::= "..."

Object model

The following list of objects (interfaces) are available for code generation. The root object supports the interface ITestCasesRoot

```
public interface ITestCasesRoot
{
    ObservableCollection<ITestCase> TestCases { get; }
    ObservableCollection<IConditionObject> Conditions { get; }
    ObservableCollection<IActionObject> Actions { get; }
}

public interface ITestCase
{
    String Name { get; }
    int DisplayIndex { get; }
    ObservableCollection<ValueObject> Conditions { get; }
    ObservableCollection<ValueObject> Actions { get; }
}

public interface IConditionActionObject
{
    string Name { get; }
    IList<ValueObject> TestValues { get; }
    Background Background { get; }
    ObservableCollection<EnumValue> EnumValues { get; }
    string Comment { get; }
}

public interface IValueObject
{
    ObservableCollection<EnumValue> EnumValues { get; }
    Background Background { get; }
    object Value { get; }
    IConditionAction ConditionOrActionParent { get; }
}

public interface IEnumValue
{
    string Name { get; }
    String Value { get; }
    string Comment { get; }
    bool IsDefault { get; }
    bool IsInvalid { get; }
    bool DontCare { get; }
}

public interface IBackground
{
    BackgroundColor BackgroundColor { get; }
    string HtmlColor { get; }
}
```