
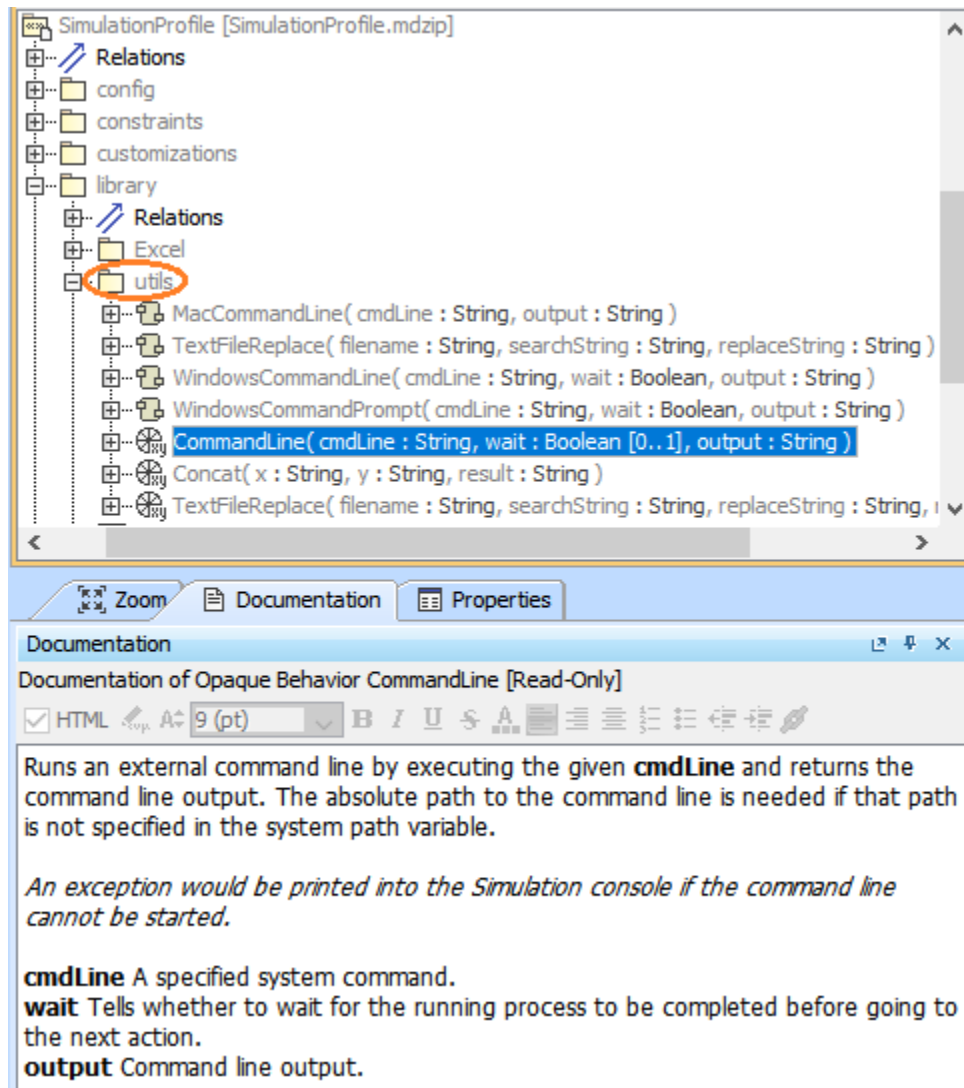


# Using utility functions of Simulation

Simulation provides some utility functions to facilitate common tasks, e.g., running command line and text file replacement. Those utility functions are encapsulated in Opaque Behaviors under **SimulationProfile::library::utils** as shown in the figure below.

## Note

If the **SimulationProfile** package is not visible, click  in the Containment tree pane and select **Show Auxiliary Resources**.



CommandLine, one of the utility functions of Simulation, is used through Opaque Behaviors in SimulationProfile::library::utils (shown in the circled area).

You can use those Opaque Behaviors by dragging them to the Activity diagram and setting parameters as described in the [Opaque Behavior](#) section. Simulation also provides a few samples using the Activity diagram in the **utils** package. As displayed in the figure below, you can use **WindowsCommand Line** to open **Notepad** on Windows.

SimulationProfile [SimulationProfile.mdzip]

- Relations
  - config
  - constraints
  - customizations
  - library
    - Relations
      - Excel
      - utils
        - MacCommandLine( cmdLine : String, output : String )
        - TextFileReplace( filename : String, searchString : String, replaceString : String )
        - WindowsCommandLine( cmdLine : String, wait : Boolean, output : String )
        - WindowsCommandPrompt( cmdLine : String, wait : Boolean, output : String )
        - CommandLine( cmdLine : String, wait : Boolean [0..1], output : String )
        - Concat( x : String, y : String, result : String )
        - TextFileReplace( filename : String, searchString : String, replaceString : String )

Documentation

Documentation of Activity WindowsCommandLine [Read-Only]

HTML

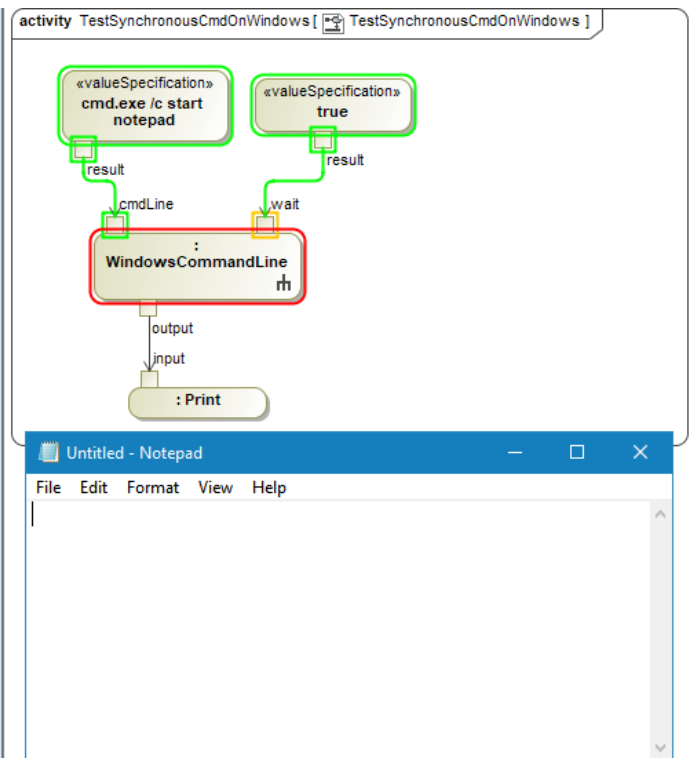
A convenient behavior for running an external Windows command line by executing the given **cmdLine** and returns the command line output. The absolute path to the command line is needed if that path is not specified in the system path variable.

*An exception would be printed into the Simulation console if the command line cannot be started.*

**cmdLine** A specified system command.

**wait** Tells whether to wait for the running process to be completed before going to the next action.

**output** Command line output.



Using WindowsCommandLine to open Notepad on Windows.

From the following figure, you can use **TextFileReplace** to open the **build\_me\_a\_HAB.ses** file and replace **\$press\_tunnel\_len\$** with **2.0**. See also the **UsingCommandLine.mdzip** built-in sample in **Simulation** on the **Welcome** page.

constraints

customizations

library

- Relations
  - Excel
  - utils
    - MacCommandLine( cmdLine : String, output : String )
    - TextFileReplace( filename : String, searchString : String, replaceString : String )
    - WindowsCommandLine( cmdLine : String, wait : Boolean, output : String )
    - WindowsCommandPrompt( cmdLine : String, wait : Boolean, output : String )
    - CommandLine( cmdLine : String, wait : Boolean [0..1], output : String )
    - Concat( x : String, y : String, result : String )
    - TextFileReplace( filename : String, searchString : String, newFile : String )

Documentation

Documentation of Opaque Behavior TextFileReplace [Read-Only]

HTML

Searches for a specific string from the given **searchString** in the given **filename** file and replaces with the given **replaceString**. The result will be saved in the **newFilename** file.

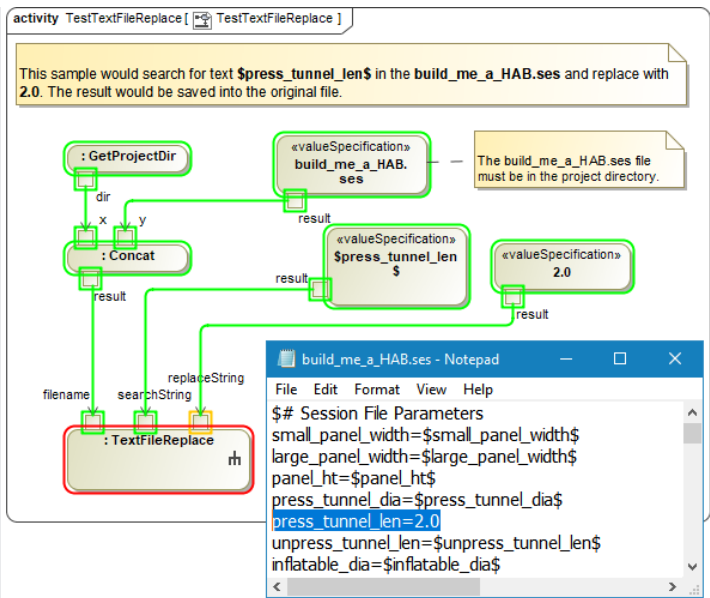
*The base directory for a relative file path is the root directory of the running application, e.g., MagicDraw or other rebranded applications like CSM, CEA, etc.*

**filename** An absolute file path or a relative file path for replacing texts.

**searchString** The string to be matched.

**replaceString** The string to be substituted for each match.

**newFilename** An absolute file path or a relative file path to save the result file.



Using TextFileReplace to open the **build\_me\_a\_HAB.ses** file and replace **\$press\_tunnel\_len\$** with **2.0**.