

NamePkg Package User Guide

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1 NamePkg Overview

NamePkg provides a basic set and get functionality for string based names. It is used to create names within other packages in OSVVM. It can also be used by itself as a holder of names for a model.

2 NamePType

NamePType is a protected type with the following interface

```
type NamePType is protected
  procedure Set (NameIn : String) ;
  impure function Get (DefaultName : string := "") return string ;
  impure function IsSet return boolean ;
  procedure Clear ;
end protected NamePType ;
```

3 Set

The procedure set sets a name inside of the protected type. If name already exists, first deallocate it.

```
procedure Set (NameIn : String) ;
```

4 Get

The function get returns the name that is held inside of the protected type.

```
impure function Get (DefaultName : string := "") return string ;
```

5 IsSet

The function IsSet returns TRUE if a name is held inside of the protected type.

```
impure function IsSet return boolean ;
```

6 Clear / Deallocate

The procedure Clear (and also Deallocate) deallocates the value set inside of the protected type.

```
procedure Clear ;
```

7 Compiling NamePkg and Friends

See OSVVM_release_notes.pdf for the current compilation directions. Rather than referencing individual packages, we recommend using the context declaration:

```
library OSVVM ;
context osvvm.OsvvmContext ;
```

8 About NamePkg

NamePkg was developed and is maintained by Jim Lewis of SynthWorks VHDL Training. Prior to its release to OSVVM it was used in SynthWorks' VHDL classes.

Please support our effort in supporting the OSVVM library of packages by purchasing your VHDL training from SynthWorks.

NamePkg is released under the Apache open source license. It is free (both to download and use - there are no license fees). You can download it from osvvm.org or from our development area on GitHub (<https://github.com/OSVVM/OSVVM>).

If you add features to the package, please donate them back under the same license as candidates to be added to the standard version of the package. If you need features, be sure to contact us. I blog about the packages at <http://www.synthworks.com/blog>. We also support the OSVVM user community and blogs through <http://www.osvvm.org>.

Find any innovative usage for the package? Let us know, you can blog about it at osvvm.org.

9 Future Work

NamePkg.vhd is a work in progress and will be updated from time to time.

Caution, undocumented items are experimental and may be removed in a future version.

10 About the Author - Jim Lewis

Jim Lewis, the founder of SynthWorks, has thirty plus years of design, teaching, and problem solving experience. In addition to working as a Principal Trainer for SynthWorks, Mr Lewis has done ASIC and FPGA design, custom model development, and consulting.

Mr. Lewis is chair of the IEEE 1076 VHDL Working Group (VASG) and is the primary developer of the Open Source VHDL Verification Methodology (OSVVM.org) packages. Neither of these activities generate revenue. Please support our volunteer efforts by buying your VHDL training from SynthWorks.

If you find bugs these packages or would like to request enhancements, you can reach me at jim@synthworks.com.