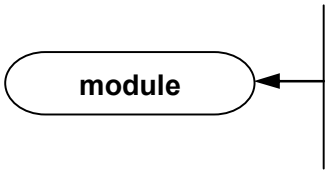
Objectives

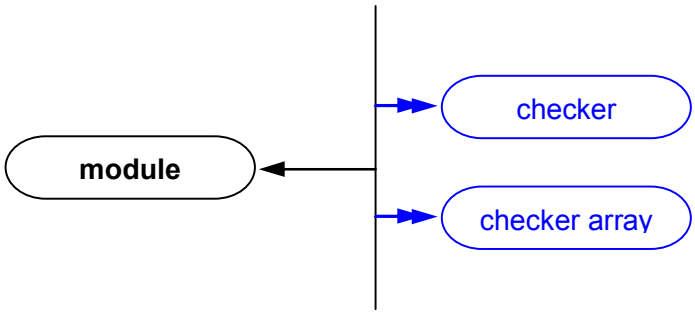
This proposal elaborates VPI diagrams for *checkers*. The basic checker proposal is covered by **Mantis 1900**.

36.4 Module

REPLACE



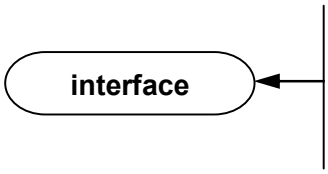
WITH



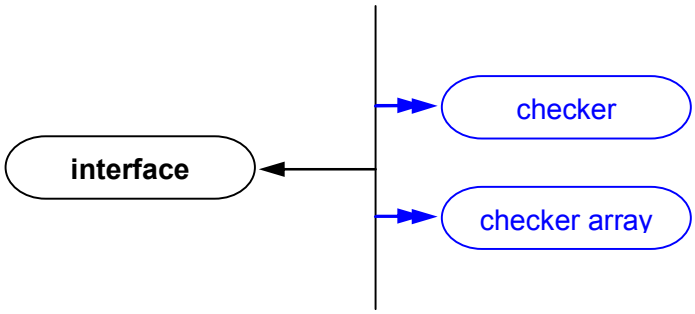
Note to the editor: Only modified part is shown.

36.4 Interface

REPLACE



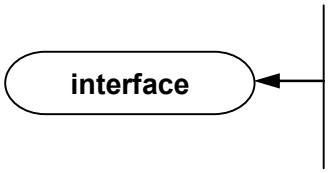
WITH



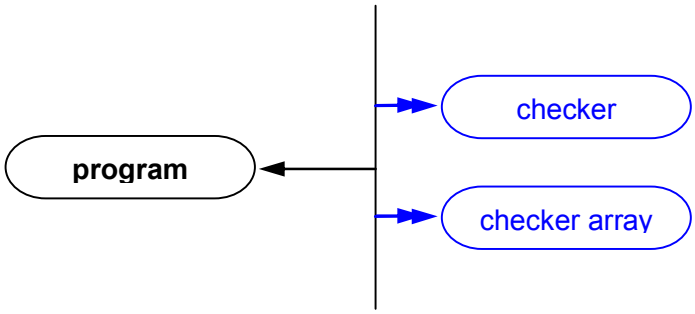
Note to the editor: Only modified part is shown.

36.8 Program

REPLACE



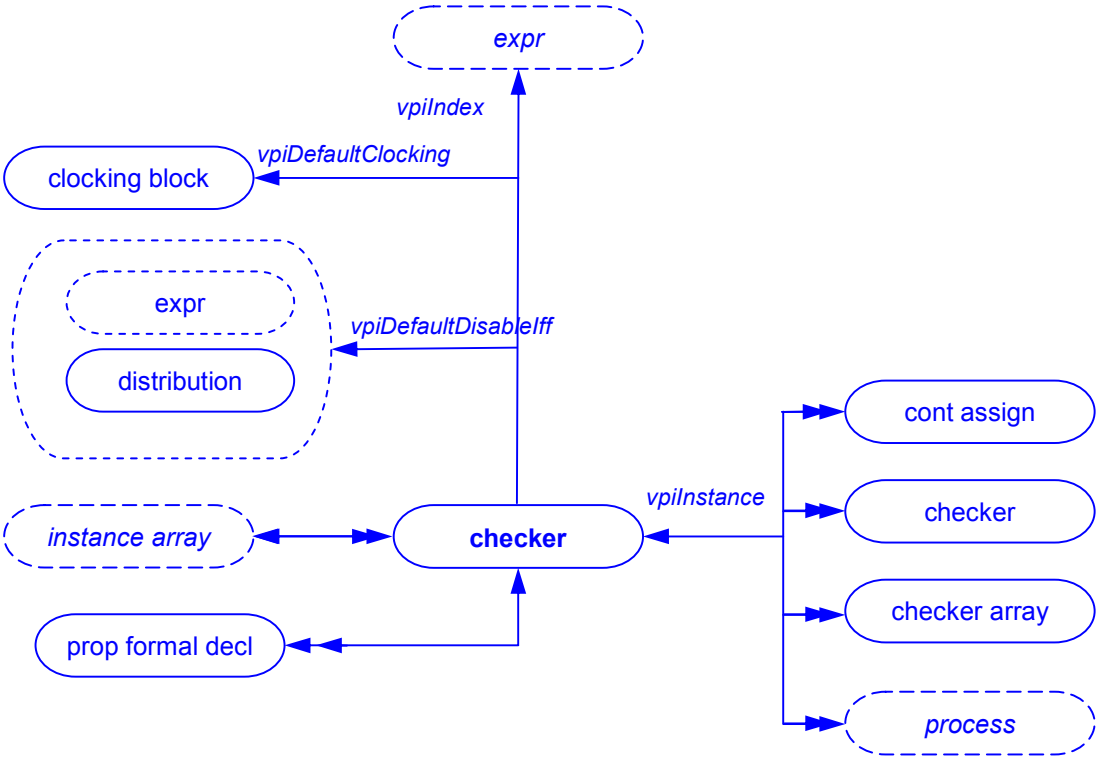
WITH



Note to the editor: Only modified part is shown.

36.9 Checker

Note to the editor: Please, shift the numeration of the subsequent clauses accordingly.

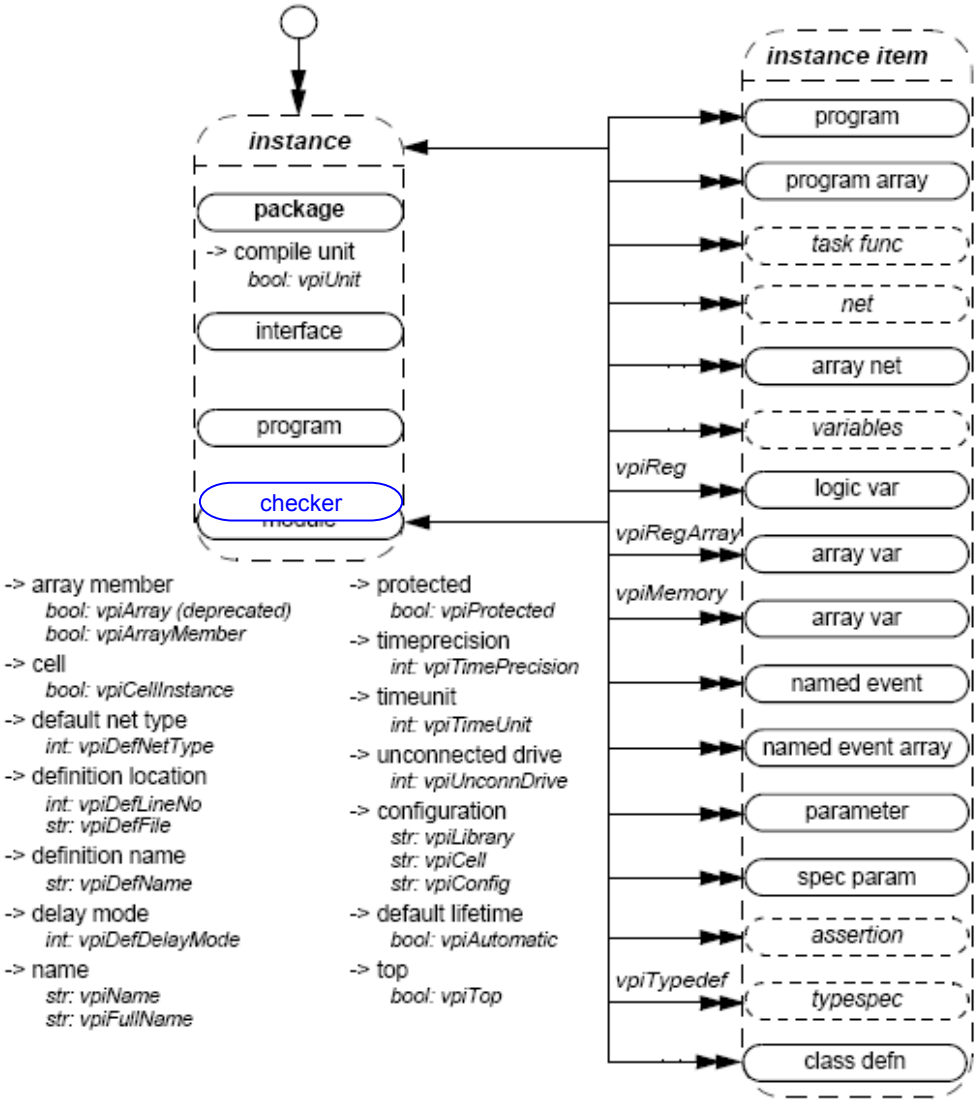


Details:

1) If a checker is an element within an instance array, the **vpiIndex** transition is used to access the index within the array. If a checker is not part of an instance array, this transition shall return `NULL`.

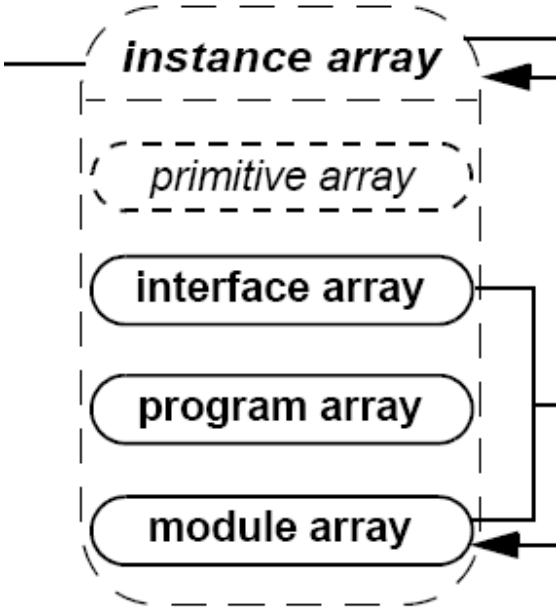
36.9 Instance

CHANGE TO

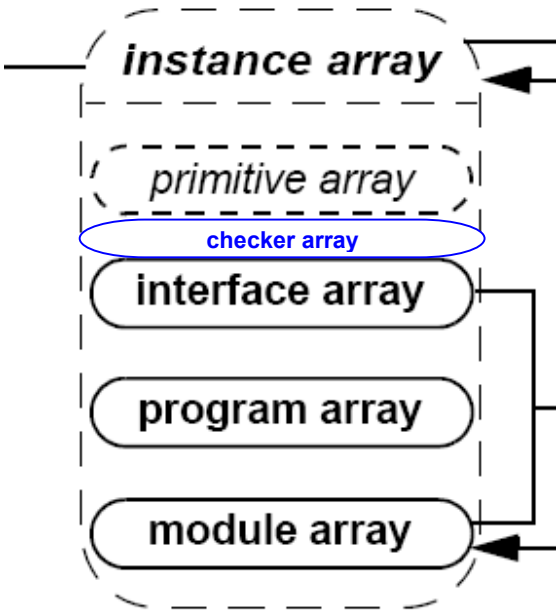


36.10 Instance arrays

REPLACE



WITH



36.16 Variables

ADD to the property list

-> CheckQualifier

int: vpiCheckQualifier

ADD to Details

Insert appropriate number here) A value of **vpiNoCheck** for the property **vpiCheckQualifier** shall indicate that the variable is a regular variable. A value of **vpiCheck** shall indicate that the variable is a regular checker variable. A value of **vpiFreeCheck** shall indicate that the variable is a free checker variable (see 16.18.6).

36.53 Process

REPLACE

-> always type
bool: vpiAlwaysType

WITH

-> always type
~~*bool*~~*int: vpiAlwaysType*
-> initial type
intl: vpiInitialType

REPLACE

Details:

1) **vpiAlwaysType** can be one of **vpiAlways**, **vpiAlwaysComb**, **vpiAlwaysFF**, or **vpiAlwaysLatch**.

WITH

Details:

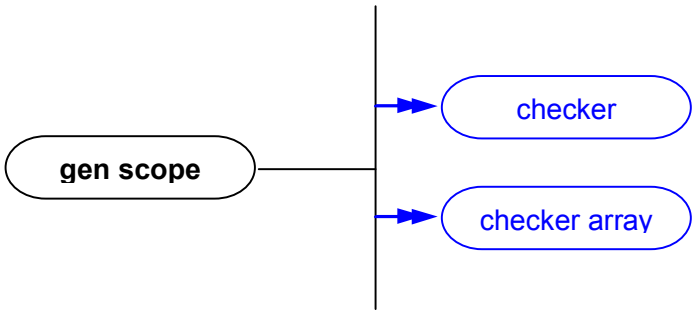
1) **vpiAlwaysType** can be one of **vpiAlways**, **vpiAlwaysComb**, **vpiAlwaysFF**, ~~or~~ **vpiAlwaysLatch**, or **vpiAlwaysCheck**.

2) **vpiInitialType** can be one of **vpiInitial**, **vpiInitialCheck**.

36.75 Generates

REPLACE

WITH



Note to the editor: Only modified part is shown.

M.2 Source code

REPLACE

```
#define vpiProgram 602
```

WITH

```
#define vpiProgram 602
#define vpiChecker  Editor to fill
```

REPLACE

```
#define vpiProgramArray 604
```

WITH

```
#define vpiProgramArray 604
#define vpiCheckerArray  Editor to fill
```

REPLACE

```
#define vpiConstantVariable 612
#define vpiStructUnionMember 615
```

WITH

```
#define vpiConstantVariable 612
#define vpiStructUnionMember 615

#define vpiCheckQualifier  Editor to fill
#define vpiNoCheck 1
#define vpiCheck 2
#define vpiFreeCheck 3
```

REPLACE

```
#define vpiAlwaysType 624
#define vpiAlwaysComb 2
#define vpiAlwaysFF 3
#define vpiAlwaysLatch 4
```

WITH

```
#define vpiAlwaysType 624
#define vpiAlwaysComb 2
#define vpiAlwaysFF 3
#define vpiAlwaysLatch 4
#define vpiAlwaysCheck Editor to fill
#define vpiInitialType Editor to fill
#define vpiInitialCheck Editor to fill
```