

## REQUESTED FEATURES (21 matches)

### Milestone: Unknown (21 matches)

| Ticket     | Summary                                       | Status | Owner | Priority | Component | Reporter |
|------------|---|--------|-------|----------|-----------|----------|
| <b>#22</b> | Worst case task response time with POSIX 1003 | new    |       | major    | binaries  | singhoff |

Reported by **singhoff**, 5 weeks ago.

description At this time, the worst case response time on POSIX 1003 does not take into account the POSIX policy (SCHED\_FIFO, SCHED\_RR, SCHED\_OTHER ...)

Some feasibility tests were proposed N. Navet

|            |   |     |  |       |           |                      |
|------------|---|-----|--|-------|-----------|----------------------|
| <b>#84</b> | Increase flexibility to describe AADL data usage by threads | new |  | major | framework | P. Dissaux (Ellidis) |
|------------|---|-----|--|-------|-----------|----------------------|

Reported by **P. Dissaux (Ellidis)**, 10 days ago.

Increase flexibility to describe AADL data usage by threads. See the text bellow (in french).

1. Dans la version précédente la property Critical\_Section s'appliquait à un Data. Désormais, elle s'applique au Process. Tu aurais pu la garder sur la déclaration des subcomponent Data du Process:

process implementation P.I subcomponents

```
T1 : thread T; T2 : thread T; D0 : data D { Cheddar_Properties::Critical_Section => (
  "T1", "2", "2", "T2", "4", "5" ); };
```

end P.I;

Ou bien considérer que cela fait partie de la déclaration de chaque Thread subcomponent

process implementation P.I subcomponents

```
T1 : thread T { Cheddar_Properties::Critical_Section => ( "D0", "2", "2" ); }; T2 : thread
T { Cheddar_Properties::Critical_Section => ( "D0", "4", "5" ); }; D0 : data D;
```

description end P.I;

Voire à considérer que dans ce cas, cela fait pleinement partie de l'implémentation du thread:

process implementation P.I subcomponents

```
T1 : thread T.I1; T2 : thread T.I2; D0 : data D;
```

end P.I;

thread implementation T.I1 properties

```
Cheddar_Properties::Critical_Section => ( "D0", "2", "2"); };
```

end T.I1;

thread implementation T.I2 properties

```
Cheddar_Properties::Critical_Section => ( "D0", "4", "5"); };
```

end T.I2;

| Ticket | Summary  | Status | Owner | Priority | Component | Reporter                   |
|--------|--|--------|-------|----------|-----------|----------------------------|
|        | <p>Enfin, cela pourrait aussi judicieusement porter sur la data access:</p> <p>process implementation P.I subcomponents</p> <p>T1 : thread T; T2 : thread T; D0 : data D;</p> <p>connections</p> <p>data access D0 -&gt; T1.S {Cheddar_Properties::Critical_Section =&gt; ( "2", "2"); }; data access D0 -&gt; T2.S {Cheddar_Properties::Critical_Section =&gt; ( "4", "5"); };</p> <p>end P.I;</p> <p>thread T features</p> <p>S : requires data access D</p> <p>end T;</p> <p>2. A quoi correspondent exactement les intervalles de temps spécifiés (à partir de quelle origine et avec quel pas ?). La dernière solution ci-dessus permettrait d'utiliser un Time_Range plus explicite</p> <p>Critical_Section: Time_Range applies to ( access connections ); (ou un list of Time_Range si on souhaite accéder plusieurs fois à la même donnée)</p> <p>Voilà pour aujourd'hui, (dis moi si j'ai rien compris)</p> <p>Pierre</p> |        |       |          |           |                            |
| #85    | Common variables between processors  | new    |       | major    | framework | Guillaume Laurens (Airbus) |

Reported by **Guillaume Laurens (Airbus)**, 10 days ago.

I need common variables between processors.

An example :

description

- I made a XML file with 4 processors.
- I want to use a resource that is the same for the 4 processors.
  - I need just one global variable that each processor know.
  - Impossible : variables in .sc files are local to each processor.
  - If I define my variable in .sc file, each processor have a variable : therefore we get 4 variables (one per processor).

I suggest this solution : the user must have the possibility to define a global .sc file. It must be a parameter of the simulation and not a parameter of one processor. And this file must just contain an equivalent of "start\_section". This allow user to define global variables : known for all processor in .sc files.

|     |   |     |  |       |           |                            |
|-----|---|-----|--|-------|-----------|----------------------------|
| #87 | Multiples dimensions array in .sc files | new |  | major | framework | Guillaume Laurens (Airbus) |
|-----|---|-----|--|-------|-----------|----------------------------|

Reported by **Guillaume Laurens (Airbus)**, 10 days ago.

description

In .sc files, we can create arrays with one dimension. It will be useful if we can create arrays with multiples dimensions. (array of array... var[[[]]])

| Ticket | Summary                        | Status | Owner | Priority | Component | Reporter    |
|--------|--------------------------------|--------|-------|----------|-----------|-------------|
| #88    | Unable/Disable task preemption | new    |       | major    | framework | F. Singhoff |

Reported by **F. Singhoff**, 10 days ago.

description Add a property to each task in order to unable/disable the preemption of the task.

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|-----|---|-----|--|-------|-----------|-------|
| #89 | Functions and procedures in the .sc file parser | new |  | major | framework | Hugel |
|-----|---|-----|--|-------|-----------|-------|

Reported by **Hugel**, 10 days ago.

description Add functions and procedures in the .sc file parser.

|     |                       |     |  |       |           |                            |
|-----|-----------------------|-----|--|-------|-----------|----------------------------|
| #92 | Cheddar configuration | new |  | major | framework | Guillaume Laurens (Airbus) |
|-----|-----------------------|-----|--|-------|-----------|----------------------------|

Reported by **Guillaume Laurens (Airbus)**, 10 days ago.

Cheddar use variables in cheddar/config/config.ads to define constant variables. These variables are important for performances... Therefore, there are one cheddar configuration for each user (due to different usage)... and the modification of these parameters imply to recompile and rebuild Cheddar. I think, it must be better. 3 solutions :

description

- Cheddar binary is executed with parameters ...
- Cheddar depend on a configuration text file and read this one when we start execution.
- Cheddar have no limit for these parameters -> dynamic arrays (or equivalent)(possible with ADA?)

|     |                             |     |  |       |           |             |
|-----|-----------------------------|-----|--|-------|-----------|-------------|
| #94 | Message scheduling features | new |  | major | framework | F. Singhoff |
|-----|-----------------------------|-----|--|-------|-----------|-------------|

Reported by **F. Singhoff**, 10 days ago.

description

- Lack of message scheduling connection to the holistic computation.
- Extend message scheduling with parametric message scheduling and with any message send/receive time.

|      |             |     |  |       |           |            |
|------|-------------|-----|--|-------|-----------|------------|
| #109 | Ocarina 1.2 | new |  | major | framework | J. Legrand |
|------|-------------|-----|--|-------|-----------|------------|

Reported by **J. Legrand**, 9 days ago.

description Switch to Ocarina 1.2

|      |               |     |  |       |          |            |
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| #111 | GNAT 2008 GPL | new |  | major | binaries | J. Legrand |
|------|---------------|-----|--|-------|----------|------------|

Reported by **J. Legrand**, 4 days ago.

description Switch to gnat 2008 GPL

|      |            |     |  |       |          |            |
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| #112 | XMLAda 3.1 | new |  | major | binaries | J. Legrand |
|------|------------|-----|--|-------|----------|------------|

| Ticket | Summary | Status | Owner | Priority | Component | Reporter |
|--------|---------|--------|-------|----------|-----------|----------|
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Reported by **J. Legrand**, 4 days ago.

description Switch to xmlada 3.1

|    |                                       |     |        |       |                  |                                     |
|----|---------------------------------------|-----|--------|-------|------------------|-------------------------------------|
| #4 | New Information in simulation diagram | new | Jerome | minor | graphical_editor | C. Valle (Deimos space), J. Legrand |
|----|---------------------------------------|-----|--------|-------|------------------|-------------------------------------|

Reported by **C. Valle (Deimos space), J. Legrand**, 4 months ago.

The following simulation information can be displayed :

- description
- Time unit (1 2 3 4 ... N)
  - Deadline
  - Preemptions
  - Blocking times
  - Wait times
  - ...

|     |                                     |     |  |       |                  |                |
|-----|-------------------------------------|-----|--|-------|------------------|----------------|
| #13 | Cheddar project file backup (crash) | new |  | minor | graphical_editor | Jerome Legrand |
|-----|-------------------------------------|-----|--|-------|------------------|----------------|

Reported by **Jerome Legrand**, 3 months ago.

Cheddar should have project file backup feature :

- description
- Before saving the current project, the old file should be renamed (name of the file + \_backup for example : test\_backup.xml).
  - This backup could also occurs regularly.

|     |                                      |     |  |       |                  |          |
|-----|--------------------------------------|-----|--|-------|------------------|----------|
| #23 | Entry widget for directory/file name | new |  | minor | graphical_editor | singhoff |
|-----|--------------------------------------|-----|--|-------|------------------|----------|

Reported by **singhoff**, 5 weeks ago.

description We must check that in all MMI widget, each time we have to enter a directory/file name, the entry size is large enough

|     |  |     |  |       |                  |          |
|-----|--|-----|--|-------|------------------|----------|
| #24 | Display on the GANNT task release time | new |  | minor | graphical_editor | singhoff |
|-----|--|-----|--|-------|------------------|----------|

Reported by **singhoff**, 5 weeks ago.

description When a task is released several times at the same simulation time, this is not currently displayed this may occur with probabilistic release task rule such as poisson process task (with small average period)

a way to display such event could be to put the number of task releasing under the red line.

|     |                                 |     |  |       |                  |          |
|-----|---------------------------------|-----|--|-------|------------------|----------|
| #31 | Update of the working directory | new |  | minor | graphical_editor | singhoff |
|-----|---------------------------------|-----|--|-------|------------------|----------|

| Ticket | Summary | Status | Owner | Priority | Component | Reporter |
|--------|---------|--------|-------|----------|-----------|----------|
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Reported by **singhoff**, 3 weeks ago.

When a project is opened, the working directory of Cheddar must be updated in order to reflect the directory of the opened project.

description By default, the working directory is the directory from which cheddar is launched.

This feature will avoid the user to filter its working directory each time an AADL/XML is opened ; by the way, it will ease the simulator engine to find .sc files attached to XML project files.

|     |     |     |  |       |           |              |
|-----|-----|-----|--|-------|-----------|--------------|
| #83 | F30 | new |  | minor | framework | M. Prochazka |
|-----|-----|-----|--|-------|-----------|--------------|

Reported by **M. Prochazka**, 10 days ago.

Implement task worst case response time feasibility tests when tasks have offsets (eg. tindell 1994).

description Allow feasibility tests for periodic tasks to be applied on sporadic tasks.

The cheddar machine man interface should be more flexible to be able to display larger scheduling.

|     |                                |     |  |       |                  |             |
|-----|--------------------------------|-----|--|-------|------------------|-------------|
| #86 | Displaying the simulation time | new |  | minor | graphical_editor | F. R. Rocha |
|-----|--------------------------------|-----|--|-------|------------------|-------------|

Reported by **F. R. Rocha**, 10 days ago.

description Add some time lines in the top part of the main cheddar windows in order to displaying the simulation time.

|     |                         |     |  |       |           |                            |
|-----|-------------------------|-----|--|-------|-----------|----------------------------|
| #90 | User defined size array | new |  | minor | framework | Guillaume Laurens (Airbus) |
|-----|-------------------------|-----|--|-------|-----------|----------------------------|

Reported by **Guillaume Laurens (Airbus)**, 10 days ago.

description In .sc files, we can create arrays. But the size is limited to few predefined ranges... It should be useful to create arrays with user defined size...

|     |             |     |  |       |           |                            |
|-----|-------------|-----|--|-------|-----------|----------------------------|
| #91 | "for" range | new |  | minor | framework | Guillaume Laurens (Airbus) |
|-----|-------------|-----|--|-------|-----------|----------------------------|

Reported by **Guillaume Laurens (Airbus)**, 10 days ago.

description "for" can just use predefined range... I can't loop for 5 to 10. (not really important : we can use "while")

|     |                                  |     |  |       |                  |             |
|-----|----------------------------------|-----|--|-------|------------------|-------------|
| #93 | procesor widget "speed up" field | new |  | minor | graphical_editor | F. Singhoff |
|-----|----------------------------------|-----|--|-------|------------------|-------------|

Reported by **F. Singhoff**, 10 days ago.

description Add a "speed up" field in the procesor widget should be initialized at 100 percents.