

**SECTION A: ERROR DETAILS**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                       |                    |                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------------|----------------------|
| Bugzilla Error Number                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>BUG4716</b>        |                    |                      |
| Description of Error:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                       |                    |                      |
| Un-initialized variable for minimum transient time step.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                       |                    |                      |
| Comments:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                       |                    |                      |
| <p>During the implementation of the automatic time step control, a check against the smallest allowable time step was implemented. This check was applied even when the adaptive time step feature was not used, and the time step was adjusted to the minimum time-step size when the threshold is exceeded. The minimum time step was not initialized when the adaptive time-step control is not used. This leads to sporadic errors during transient simulation when the minimum time-step was randomly set to a non-trivially small value during program start-up.</p> |                       |                    |                      |
| First Incorrect Version:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 2019 Release (8.10.0) | Corrected Version: | 2025 Release (9.0.0) |

**SECTION B: WORKAROUND**

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| Workaround Description:                                                                                                                                                                                                                                                                                                                             |
| <p>Even though there is no known workaround, the probability that the uninitialized variable will have exactly the same non-trivial value during two consecutive runs is diminishingly small. Thus, if running the same transient twice results in the same results, it is highly unlikely that this error had an impact on that transient run.</p> |

**SECTION C: SIGNOFF**

|                                       |                                                                                      |             |
|---------------------------------------|--------------------------------------------------------------------------------------|-------------|
| <b>Person Responsible for Fix:</b>    |                                                                                      |             |
| Eugene van Heerden                    |  | 2025/02/19  |
| <b>Name</b>                           | <b>Signature</b>                                                                     | <b>Date</b> |
| <b>Person Responsible for Review:</b> |                                                                                      |             |
| Tiaan Dercksen                        |   | 2025/02/19  |
| <b>Name</b>                           | <b>Signature</b>                                                                     | <b>Date</b> |