Data Path: Alerts

Project TFS path: $/Firmware-SVI II AP FF/FD-SW

Project changeset version: 50828

Starting point: TravelAlertsData

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Containing file | | FD-SW/target/appl/fdev/src/appl\_alerts.c | Review Date | Reviewer |
|  | | | | |
| Function or data | | TravelAlertsData; TB:: travel\_accumulation\_trend | 15-05-12 | AK |
|  | | | | |
| TFS wit |  | Spurious cast:  if ((bool\_t)TravelAlertsData[alertIndx].Initialized) | | |
| Impact | | Style/maybe efficiency | | |
| Resolution | |  | | |
| TFS wit |  | Implicit demotion 366:  travel = p\_PTB->travel\_accumulation\_trend.currently\_collected - TravelAlertsData[alertIndx].LastPos; | | |
| Impact | | Loss of precision? Efficiency? | | |
| Resolution | |  | | |
| TFS wit |  | Redundant 371 vz. 374:  TravelAlertsData[alertIndx].LastPos = p\_PTB -> travel\_accumulation\_trend.currently\_collected; | | |
| Impact | | Confusing | | |
| Resolution | |  | | |
| TFS wit |  | 379: pAlert->alert = pAlert->historic\_alert = (BOOL)true;  1. Cast to BOOL doesn’t produce Softing’s TRUE.  2. Composite assignment | | |
| Impact | | 1. Unknown 2. Misleading/coding standard | | |
| Resolution | |  | | |
| Additional | |  | | |
| Comment | |  | | |
|  | | | | |
| Function or data | | AlertHandle\_SPTimeout | 15-05-12 | AK |
|  | | | | |
| TFS wit |  | If alert is disabled for more than 50 days (to let the timer counter roll over the base value) and then enabled, the alert will be on. | | |
| Impact | | Style/maybe efficiency | | |
| Resolution | |  | | |
| TFS wit |  | Cast to BOOL doesn’t produce Softing’s TRUE. | | |
| Impact | | Unknown but not good | | |
| Resolution | |  | | |
|  | | | | |
| Function or data | | AlertHandle\_IPCurrent | 15-05-12 | AK |
|  | | | | |
| TFS wit |  | Line 779 of C50828 means just “else”? | | |
| Impact | | Confusing | | |
| Resolution | |  | | |
| TFS wit |  | Cast to BOOL doesn’t produce Softing’s TRUE. | | |
| Impact | | Unknown but not good | | |
| Resolution | |  | | |
|  | |  | | |

Data Path: Alerts scaling

Project TFS path: $/Firmware-SVI II AP FF/FD-SW

Project changeset version: 34964

Starting point: PSI\_PRESSURE\_DEADBAND\_MAX

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Containing file | | FD-SW/target/appl/fdev/inc/mn\_supply\_pressure\_alert.h | Review Date | Reviewer |
|  | | | | |
| Function or data | | PSI\_PRESSURE\_DEADBAND\_MAX | 15-05-15 | AK |
|  | | | | |
| TFS wit |  | Magic number without any comment/reference | | |
| Impact | | Style/traceability | | |
| Resolution | |  | | |
| TFS wit |  | Checked in against a wrong WIT | | |
| Impact | | Impedes review/traceability | | |
| Resolution | |  | | |

Data Path: Cycle Counter Alert­; Travel Accumulation Alert

Project TFS path: $/Firmware-SVI II AP FF/FD-SW

Project changeset version: 50828

Starting point: Write and Effect on static revision number

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Containing file | | FD-SW/target/appl/fdev/src/ mn\_cycle\_counter\_alert.c  FD-SW/target/appl/fdev/src/mn\_travel\_accumulation.c | | Review Date | Reviewer |
| Function or data | | SyncCycleDeadBand  SyncTravelDeadBand | | 15-05-21 | AK |
|  | | | | | |
| TFS wit |  | Lots of code duplication and the bugs are duplicated, too (cf. below).  Must be factored in a common function | | | |
| Impact | | Quality, maintainability | | | |
| Resolution | |  | | | |
|  | | | | | |
| TFS wit |  | The pattern   * \_CYCLE\_COUNTER\_ALERT\* pAlert = (void\*)p\_write->source; etc.   Is unsafe because of alignment. Should be replaced with e.g. PullFloat()  Applies to previous versions (Release1), too | | | |
| Impact | | May work now and break later when no-one expects. | | | |
| Resolution | |  | | | |
|  | | | | | |
| TFS wit |  | | IncrementStaticRevision is called unconditionally whether there was a valid write or not | | |
| Impact | | | Function error | | |
| Resolution | | |  | | |
|  | | | | | |
| TFS wit |  | Name violates coding standard | | | |
| Impact | | coding standard; Invites names collision | | | |
| Resolution | |  | | | |
|  | | | | | |
| TFS wit |  | Look at  if(REL\_IDX\_PTB\_CYCLE\_COUNTER\_A\_ALERT == p\_write->rel\_idx)  {  write\_loc.rel\_idx = REL\_IDX\_PTB\_CYCLE\_COUNTER\_B\_ALERT;  } …  Are alerts A and B mixed? ? Same with if(REL\_IDX\_PTB\_TRAVEL\_ACCUMULATION\_A\_ALERT … | | | |
| Impact | | Mix-up? Bug? | | | |
| Resolution | |  | | | |
|  | | | | | |
| Additional | | Corresponding changes reviewed in:  FD-SW/target/appl/fbif/script/ ptb\_custom1.gw C47457 | | | |