

- fix missing inlining of `_Generic` expression
  - fix evaluation error with assignment of qualified arrays
  - delay 'empty character constant' warning to phase 5
  - simplify & fix parsing of array declarators
  - accept whitespace after option `-U`
  - teach dissect about `_Generic`
  - reset locale after `gtk_init()` to workaround problems with `strtold()`
  - fix linearization of shift-assign
  - force to 0 expressions which are erroneously non-constant
  - fix `evaluate_ptr_add()` when `sizeof(offset) != sizeof(pointer)`
  - fix access to defining instruction in `simplify_unop()`
  - fix evaluation of pointer to bool conversions
  - fix usual conversion of integers
  - fix null pointer deref on return expression with invalid type
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- add support for arch specific asm constraints
  - add memory asm constraint for PPC & S390
  - prepend diagnostics with source's path and include chain
  - add support for h8300, microblaze, nds32, openrisc, sh & xtensa
  - add support for '`-march=...`' and use it for riscv
  - add an option to specify the OS: `-os=$OS`
  - add predefines for OS identification
  - add predefines for `__INT_LEAST${N}_TYPE__` & `__INT_FAST${N}_TYPE__`
  - document the sparse's extensions
  - `sindex/semind`: allow indexing outside the project tree
  - rename tool 'sindex' to 'semind'
  - add builtin support for `__sync_{bool,val}_compare_and_swap()`
  - add support for wide strings
  - union-cast: teach sparse about union casts
  - add support for a new instruction: `OP_FMADD`
  - add various warnings for dangerous usage of flexible array members
  - add builtin support for `__builtin_ia32_pause()`
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- cleanup the handling of options flags
  - avoid multiple warnings when inlining undeclared calls
  - small fixes for alpha, arm, nios2, ppc, sparc & x86
  - add missing predefines for endianness on arm, arm64, mips
  - add various missing arch-specific predefines
  - add the predefines '`__cdecl`', ... on cygwin

- warn on empty assignments & initializations
- reorganize the keyword parsing table
- the message in `_Static_assert()` is now optional (C2x)
- small fixes & improvement to the [online] documentation
- allow `[*]` in array declarators
- do not accept comma expressions in array declarator
- simplify parsing of attributes & storage class
- bad-shift: wait dead code elimination to warn about bad shifts
- fix `is_scalar_type()`: fouled types are scalars too
- better support for linearization of builtins
- remove definition of removed `OP_{AND,OR}_BOOL`