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Status:Verified (*Closed*)**Components:**[Blink](#)>[JavaScript](#)>[Compiler](#)>[Turbofan](#)**Modified:**

Jul 29, 2022

Backlog-Rank:

Editors:

EstimatedDays:

NextAction:

OS:[Linux](#), [Android](#), [Windows](#), [Chrome](#), [Mac](#)**Pri:**

1

Type:[Bug-Security](#)[Hotlist-Merge-Review](#)[M-100](#)[Security_Severity-Medium](#)[Hotlist-Merge-Approved](#)[allpublic](#)[reward-inprocess](#)[ClusterFuzz-Verified](#)[CVE_description-submitted](#)[reward-8500](#)[external_security_report](#)[Target-100](#)[FoundIn-98](#)[FoundIn-99](#)[FoundIn-100](#)[FoundIn-101](#)[Security_Impact-Extended](#)[merge-merged-9.6](#)

**Issue 1304658: Security: Debug check failed: type.representation() ==****MachineRepresentation::kFloat64 || type.representation() == MachineRepresentation::kTagged.**Reported by p4nda...@gmail.com on Wed, Mar 9, 2022, 6:59 AM EST

Code

This template is **ONLY** for reporting security bugs. If you are reporting a Download Protection Bypass bug, please use the "Security - Download Protection" template. For all other reports, please use a different template.

Please **READ THIS FAQ** before filing a bug: <https://chromium.googlesource.com/chromium/src/+HEAD/docs/security/faq.md>

Please see the following link for instructions on filing security bugs:
<https://www.chromium.org/Home/chromium-security/reporting-security-bugs>

Reports may be eligible for reward payments under the Chrome VRP:
<http://g.co/ChromeBugRewards>

NOTE: Security bugs are normally made public once a fix has been widely deployed.

VULNERABILITY DETAILS

Please provide a brief explanation of the security issue.

When generating InstructionOperand at OperandForDeopt [1], if the input is NumberConstant , it will call UseImmediate.

```
```c++
```

```
InstructionOperand OperandForDeopt(Isolate* isolate, OperandGenerator* g,
 Node* input, FrameStateInputKind kind,
 MachineRepresentation rep) {
 if (rep == MachineRepresentation::kNone) {
 return g->TemplImmediate(FrameStateDescriptor::kImpossibleValue);
 }
```

```
switch (input->opcode()) {
 case IrOpcode::kInt32Constant:
 case IrOpcode::kInt64Constant:
 case IrOpcode::kNumberConstant:
 case IrOpcode::kFloat32Constant:
 case IrOpcode::kFloat64Constant:
 case IrOpcode::kDelayedStringConstant:
[1] return g->UseImmediate(input);
 case IrOpcode::kCompressedHeapConstant:
 case IrOpcode::kHeapConstant: {
 if (!CanBeTaggedOrCompressedPointer(rep)) {
 // If we have inconsistent static and dynamic types, e.g. if we
 // smi-check a string, we can get here with a heap object that
 // says it is a smi. In that case, we return an invalid instruction
```

```

// operand, which will be interpreted as an optimized-out value.

// TODO(jarin) Ideally, we should turn the current instruction
// into an abort (we should never execute it).
return InstructionOperand();
}

Handle<HeapObject> constant = HeapConstantOf(input->op());
RootIndex root_index;
if (isolate->roots_table().IsRootHandle(constant, &root_index) &&
 root_index == RootIndex::kOptimizedOut) {
 // For an optimized-out object we return an invalid instruction
 // operand, so that we take the fast path for optimized-out values.
 return InstructionOperand();
}

return g->UseImmediate(input);
}
case IrOpcode::kArgumentsElementsState:
case IrOpcode::kArgumentsLengthState:
case IrOpcode::kObjectState:
case IrOpcode::kTypedObjectState:
 UNREACHABLE();
default:
 switch (kind) {
 case FrameStateInputKind::kStackSlot:
 return g->UseUniqueSlot(input);
 case FrameStateInputKind::kAny:
 // Currently deopts "wrap" other operations, so the deopt's inputs
 // are potentially needed until the end of the deoptimising code.
 return g->UseAnyAtEnd(input);
 }
}
UNREACHABLE();
}
} // namespace

```

...

In `ToConstant`[2], it will use the `node->op()` to generate a `DeoptimizationLiteralKind::kNumber` value. The `NumberConstant` store a tagged value, but the `node->op()` use its real value.

```c++

```

static Constant ToConstant(const Node* node) {
  switch (node->opcode()) {
    case IrOpcode::kInt32Constant:
      return Constant(OpParameter<int32_t>(node->op()));
    case IrOpcode::kInt64Constant:
      return Constant(OpParameter<int64_t>(node->op()));
    case IrOpcode::kTaggedIndexConstant: {
      // Unencoded index value.
      intptr_t value =
        static_cast<intptr_t>(OpParameter<int32_t>(node->op()));
      DCHECK(TaggedIndex::IsValid(value));
    }
  }
}

```

```

// Generate it as 32/64-bit constant in a tagged form.
Address tagged_index = TaggedIndex::FromIntPtr(value).ptr();
if (kSystemPointerSize == kInt32Size) {
    return Constant(static_cast<int32_t>(tagged_index));
} else {
    return Constant(static_cast<int64_t>(tagged_index));
}
}
case IrOpcode::kFloat32Constant:
    return Constant(OpParameter<float>(node->op()));
case IrOpcode::kRelocatableInt32Constant:
case IrOpcode::kRelocatableInt64Constant:
    return Constant(OpParameter<RelocatablePtrConstantInfo>(node->op()));
case IrOpcode::kFloat64Constant:
case IrOpcode::kNumberConstant:
[2]    return Constant(OpParameter<double>(node->op()));
...

```

Finally, the `DeoptimizationLiteral` will be changed into a `Number` which stored at `Literal Array`.

```

...c++
Handle<Object> DeoptimizationLiteral::Reify(Isolate* isolate) const {
    Validate();
    switch (kind_) {
        case DeoptimizationLiteralKind::kObject: {
            return object_;
        }
        case DeoptimizationLiteralKind::kNumber: {
[3]    return isolate->factory()->NewNumber(number_);
        }
        case DeoptimizationLiteralKind::kString: {
            return string_->AllocateStringConstant(isolate);
        }
        case DeoptimizationLiteralKind::kInvalid: {
            UNREACHABLE();
        }
    }
    UNREACHABLE();
}
...

```

But when `NumberConstant` is the input of `TypedStateValues`, it may not be suitable for using `Immediate`. At the case in POC, the '39: StateValues' was marked with a `KRepWord32` input because of '32: Word32Shl' in `SimplifiedLoweringPhase`. And '68: ChangedTaggedSignedToInt32' was added as the input of '32: Word32Shl'. After `LateOptimizationPhase`, the '32: Word32Shl' was removed because the '68: ChangedTaggedSignedToInt32' was replaced with '142: Word32SarShiftOutZeros'. Thus the input of '39: TypedStateValues' is '14: NumberConstant[1337]', But it was marked with a `KRepWord32` input.

```

...cpp

Reduction MachineOperatorReducer::ReduceWord32Shl(Node* node) {
    DCHECK_EQ(IrOpcode::kWord32Shl, node->opcode());
    Int32BinopMatcher m(node);
    if (m.right().Is(0)) return Replace(m.left().node()); // x << 0 => x
}

```

```

if (m.IsFoldable()) { // K << K => K (K stands for arbitrary constants)
    return ReplaceInt32(base::ShlWithWraparound(m.left().ResolvedValue(),
        m.right().ResolvedValue()));
}
if (m.right().IsInRange(1, 31)) {
    if (m.left().IsWord32Sar() || m.left().IsWord32Shr()) {
        Int32BinopMatcher mleft(m.left().node());

        // If x >> K only shifted out zeros:
        // (x >> K) << L => x          if K == L
        // (x >> K) << L => x >> (K-L) if K > L
        // (x >> K) << L => x << (L-K) if K < L
        // Since this is used for Smi untagging, we currently only need it for
        // signed shifts.
        if (mleft.op() == machine()->Word32SarShiftOutZeros() &&
            mleft.right().IsInRange(1, 31)) {
            Node* x = mleft.left().node();
            int k = mleft.right().ResolvedValue();
            int l = m.right().ResolvedValue();
            if (k == l) {
                return Replace(x);
            } else if (k > l) {
                node->ReplaceInput(0, x);
                node->ReplaceInput(1, Uint32Constant(k - l));
                NodeProperties::ChangeOp(node, machine()->Word32Sar());
                return Changed(node).FollowedBy(ReduceWord32Sar(node));
            } else {
                DCHECK(k < l);
                node->ReplaceInput(0, x);
                node->ReplaceInput(1, Uint32Constant(l - k));
                return Changed(node);
            }
        }
    }

    // (x >>> K) << K => x & ~(2^K - 1)
    // (x >> K) << K => x & ~(2^K - 1)
    if (mleft.right().Is(m.right().ResolvedValue())) {
        node->ReplaceInput(0, mleft.left().node());
        node->ReplaceInput(1,
            Uint32Constant(std::numeric_limits<uint32_t>::max()
                << m.right().ResolvedValue()));
        NodeProperties::ChangeOp(node, machine()->Word32And());
        return Changed(node).FollowedBy(ReduceWord32And(node));
    }
}
}
return ReduceWord32Shifts(node);
}
...

```

As such, it will crash at a DCHECK[3] because the type.representation() is Word32 which came from '39: TypedStateValues'

...
 ...c++

```

void CodeGenerator::AddTranslationForOperand(Instruction* instr,
                                             InstructionOperand* op,
                                             MachineType type) {
//...
} else {
    CHECK(op->IsImmediate());
    InstructionOperandConverter converter(this, instr);
    Constant constant = converter.ToConstant(op);
    DeoptimizationLiteral literal;
    switch (constant.type()) {
// ...
[3] case Constant::kFloat64:
    DCHECK(type.representation() == MachineRepresentation::kFloat64 ||
           type.representation() == MachineRepresentation::kTagged);
    literal = DeoptimizationLiteral(constant.ToFloat64().value());
    break;
...

```

And also, it may lead to type confusion in deoptimize.

VERSION

d8 version: commit [4e9ab3a0f5387495781bf7e873586ce88441c274](#) ia32

Operating System: ubuntu

REPRODUCTION CASE

1. execute the attach file in d8 version.

in ia32 Debug version, it will crash with detail below:

```

#
# Fatal error in ../../src/compiler/backend/code-generator.cc, line 1351
# Debug check failed: type.representation() == MachineRepresentation::kFloat64 || type.representation() ==
MachineRepresentation::kTagged.
#
#
#
#FailureMessage Object: 0xffcd48e8
==== C stack trace =====

```

in release version, it will get a wrong value after deoptimize.

```

$ ./out/ia32.release/d8 --allow-natives-syntax test.js
2674
2674
1337

```

FOR CRASHES, PLEASE INCLUDE THE FOLLOWING ADDITIONAL INFORMATION

Type of crash: [tab]

I wrote a patch based on my understanding of the bug, see patch.diff .

test.js

330 bytes [View](#) [Download](#)

patch.diff

1020 bytes [View](#) [Download](#)

Comment 1 by [sheriffbot](#) on Wed, Mar 9, 2022, 7:01 AM EST

Labels: external_security_report

Comment 2 by [ClusterFuzz](#) on Wed, Mar 9, 2022, 7:59 AM EST

ClusterFuzz is analyzing your testcase. Developers can follow the progress at <https://clusterfuzz.com/testcase?key=5722427753299968>.

Comment 3 by [ClusterFuzz](#) on Wed, Mar 9, 2022, 8:06 AM EST

ClusterFuzz is analyzing your testcase. Developers can follow the progress at <https://clusterfuzz.com/testcase?key=5619746762194944>.

Comment 4 by [ClusterFuzz](#) on Wed, Mar 9, 2022, 8:38 AM EST

Labels: Security_Impact-Extended FoundIn-99 FoundIn-101 FoundIn-98 FoundIn-100

Detailed Report: <https://clusterfuzz.com/testcase?key=5619746762194944>

Fuzzer: None

Job Type: linux32_d8_dbg

Platform Id: linux

Crash Type: DCHECK failure

Crash Address:

Crash State:

type.representation() == MachineRepresentation::kFloat64 || type.representation(

Sanitizer: address (ASAN)

Crash Revision: https://clusterfuzz.com/revisions?job=linux32_d8_dbg&revision=79142

Reproducer Testcase: https://clusterfuzz.com/download?testcase_id=5619746762194944

To reproduce this, please build the target in this report and run it against the reproducer testcase. Please use the GN arguments provided at bottom of this report when building the binary.

If you have trouble reproducing, please also export the environment variables listed under "[Environment]" in the crash stacktrace.

If you have any feedback on reproducing test cases, let us know at <https://forms.gle/Yh3qCYFveHj6E5jz5> so we can improve.

Comment 5 by [bookholt@chromium.org](#) on Wed, Mar 9, 2022, 7:25 PM EST

Owner: ishell@chromium.org

Labels: Security_Severity-Medium Pri-2

Assigning owner in addition to CCs from ClusterFuzz since @ishell has been so helpful recently. :)

Treating as Severity Medium without attempting to repo local since ClusterFuzz agrees.

Comment 6 by [bookholt@chromium.org](#) on Wed, Mar 9, 2022, 7:27 PM EST

Cc: clemensb@chromium.org

+clemensb as uploader of CF test case

Comment 7 by [ishell@chromium.org](#) on Thu, Mar 10, 2022, 5:11 AM EST

Owner: ecmziegler@chromium.org

Cc: ishell@chromium.org nicohartmann@chromium.org

Assigning to ecmziegler@ to find the right owner from the compiler team.

Comment 8 by [ecmziegler@chromium.org](#) on Thu, Mar 10, 2022, 5:47 AM EST

Owner: nicohartmann@chromium.org

Cc: -nicohartmann@chromium.org

@nicohartmann: PTAL, thank you!

Comment 9 by [sheriffbot](#) on Thu, Mar 10, 2022, 12:52 PM EST

Labels: M-100 Target-100

Setting milestone and target because of medium severity.

For more details visit <https://www.chromium.org/issue-tracking/autotriage> - Your friendly Sheriffbot

Comment 10 by [sheriffbot](#) on Thu, Mar 10, 2022, 1:18 PM EST

Labels: -Pri-2 Pri-1

Setting Pri-1 to match security severity Medium. If this is incorrect, please reset the priority. Sheriffbot won't make this change again.

For more details visit <https://www.chromium.org/issue-tracking/autotriage> - Your friendly Sheriffbot

Comment 11 by [sheriffbot](#) on Thu, Mar 10, 2022, 2:22 PM EST

Status: Assigned (was: Unconfirmed)

Comment 12 by [tebbi@chromium.org](#) on Wed, Mar 16, 2022, 5:31 AM EDT

Cc: adamk@chromium.org tebbi@chromium.org gdeepthi@chromium.org

~~Issue 1305573~~ has been merged into this issue.

Comment 13 by [nicohartmann@chromium.org](#) on Thu, Mar 17, 2022, 9:12 AM EDT

Status: Started (was: Assigned)

Comment 14 by [nicohartmann@chromium.org](#) on Thu, Mar 17, 2022, 11:54 AM EDT

This is pretty much the same issue as this one: <https://bugs.chromium.org/p/chromium/issues/detail?id=1254189>

Comment 15 by [Git Watcher](#) on Fri, Mar 18, 2022, 4:31 AM EDT

The following revision refers to this bug:

<https://chromium.googlesource.com/v8/v8/+bbea5909c797dec7c620b9fee43d80a1420c2e08>

commit [bbea5909c797dec7c620b9fee43d80a1420c2e08](#)

Author: Nico Hartmann <nicohartmann@chromium.org>

Date: Thu Mar 17 16:03:12 2022

[turbofan] Fix NumberConstant used with Word32 rep in ISel

[Bug: chromium:1304658](#)

Change-Id: I6a82603a7c5de5ae8f5a895990c1a904bbdd39b2

Reviewed-on: <https://chromium-review.googlesource.com/c/v8/v8/+3532263>

Auto-Submit: Nico Hartmann <nicohartmann@chromium.org>

Reviewed-by: Tobias Tebbi <tebbi@chromium.org>

Commit-Queue: Tobias Tebbi <tebbi@chromium.org>

Cr-Commit-Position: refs/heads/main@{#79526}

[modify] <https://crrev.com/bbea5909c797dec7c620b9fee43d80a1420c2e08/src/compiler/backend/instruction-selector.cc>

[Comment 16](#) by [ClusterFuzz](#) on Fri, Mar 18, 2022, 7:54 AM EDT

Detailed Report: <https://clusterfuzz.com/testcase?key=5619746762194944>

Fuzzer: None

Job Type: linux32_d8_dbg

Platform Id: linux

Crash Type: DCHECK failure

Crash Address:

Crash State:

```
type.representation() == MachineRepresentation::kFloat64 || type.representation(
```

Sanitizer: address (ASAN)

Crash Revision: https://clusterfuzz.com/revisions?job=linux32_d8_dbg&revision=79142

Reproducer Testcase: https://clusterfuzz.com/download?testcase_id=5619746762194944

To reproduce this, please build the target in this report and run it against the reproducer testcase. Please use the GN arguments provided at bottom of this report when building the binary.

If you have trouble reproducing, please also export the environment variables listed under "[Environment]" in the crash stacktrace.

If you have any feedback on reproducing test cases, let us know at <https://forms.gle/Yh3qCYFveHj6E5jz5> so we can improve.

[Comment 17](#) by [ClusterFuzz](#) on Fri, Mar 18, 2022, 7:55 AM EDT

Status: Verified (was: Started)

Labels: ClusterFuzz-Verified

ClusterFuzz testcase 5860360862892032 is verified as fixed in https://clusterfuzz.com/revisions?job=linux32_d8_dbg&range=79525:79526

If this is incorrect, please add the ClusterFuzz-Wrong label and re-open the issue.

[Comment 18](#) by [sheriffbot](#) on Fri, Mar 18, 2022, 12:41 PM EDT

Labels: reward-topanel

[Comment 19](#) by [sheriffbot](#) on Fri, Mar 18, 2022, 1:41 PM EDT

Labels: -Restrict-View-SecurityTeam Restrict-View-SecurityNotify

[Comment 20](#) by [sheriffbot](#) on Sat, Mar 19, 2022, 12:41 PM EDT

Labels: reward-topanel

[Comment 21](#) by [sheriffbot](#) on Sat, Mar 19, 2022, 2:10 PM EDT

Labels: Merge-Request-101 Merge-Request-100

This is sufficiently serious that it should be merged to beta. But I can't see a Chromium repo commit here, so you will need to investigate what - if anything - needs to be merged to M100. Is there a fix in some other repo which should be merged? Or, perhaps this ticket is a duplicate of some other ticket which has the real fix: please track that down and ensure it is merged appropriately.

This is sufficiently serious that it should be merged to dev. I can't currently determine details for that channel, so please assess whether this is already merged.

For more details visit <https://www.chromium.org/issue-tracking/autotriage> - Your friendly Sheriffbot

[Comment 22](#) by [Git Watcher](#) on Mon, Mar 21, 2022, 10:13 AM EDT

Labels: merge-merged-10.1

The following revision refers to this bug:

<https://chromium.googlesource.com/v8/v8/+90c861ffe7fd4805959867975e5855a61c0bc341>

commit [90c861ffe7fd4805959867975e5855a61c0bc341](#)

Author: Nico Hartmann <nicohartmann@chromium.org>

Date: Thu Mar 17 16:03:12 2022

Merged: [turbofan] Fix NumberConstant used with Word32 rep in ISEL

~~[Bug-chromium:1304658](#)~~

(cherry picked from commit [bbee5909c797dec7c620b9fee43d80a1420c2e08](#))

Change-Id: Id3597bae9397805d8a46fe2eeb6fc4f6b7784b12

Reviewed-on: <https://chromium-review.googlesource.com/c/v8/v8/+3540140>

Reviewed-by: Tobias Tebbi <tebbi@chromium.org>

Commit-Queue: Nico Hartmann <nicohartmann@chromium.org>

Cr-Commit-Position: refs/branch-heads/10.1@{#4}

Cr-Branched-From: [b003970395b7efcc309eb30b4ca06dd8385acd55](#)-refs/heads/10.1.124@{#1}

Cr-Branched-From: [e62f556862624103ea1da5b9dcef9b216832033b](#)-refs/heads/main@{#79503}

[modify] <https://crrev.com/90c861ffe7fd4805959867975e5855a61c0bc341/src/compiler/backend/instruction-selector.cc>

[Comment 23](#) by [sheriffbot](#) on Mon, Mar 21, 2022, 2:50 PM EDT

Labels: -Merge-Request-100 Hotlist-Merge-Review Merge-Review-100

Merge review required: M100 is already shipping to beta.

Please answer the following questions so that we can safely process your merge request:

1. Why does your merge fit within the merge criteria for these milestones?

- Chrome Browser: <https://chromiumdash.appspot.com/branches>
- Chrome OS: <https://goto.google.com/cros-release-branch-merge-guidelines>
- 2. What changes specifically would you like to merge? Please link to Gerrit.
- 3. Have the changes been released and tested on canary?
- 4. Is this a new feature? If yes, is it behind a Finch flag and are experiments active in any release channels?
- 5. [Chrome OS only]: Was the change reviewed and approved by the Eng Prod Representative?
<https://goto.google.com/cros-engprodcomponents>
- 6. If this merge addresses a major issue in the stable channel, does it require manual verification by the test team? If so, please describe required testing.

Please contact the milestone owner if you have questions.

Owners: govind (Android), harrysouders (iOS), dgagnon (ChromeOS), srinivassista (Desktop)

For more details visit <https://www.chromium.org/issue-tracking/autotriage> - Your friendly Sheriffbot

Comment 24 by [sheriffbot](#) on Mon, Mar 21, 2022, 3:03 PM EDT

Labels: -Merge-Request-101 Hotlist-Merge-Approved Merge-Approved-101

Merge approved: your change passed merge requirements and is auto-approved for M101. Please go ahead and merge the CL to branch 4951 (refs/branch-heads/4951) manually. Please contact milestone owner if you have questions.

Merge instructions:

https://chromium.googlesource.com/chromium/src.git/+refs/heads/main/docs/process/merge_request.md

Owners: None (Android), None (iOS), None (ChromeOS), None (Desktop)

For more details visit <https://www.chromium.org/issue-tracking/autotriage> - Your friendly Sheriffbot

Comment 25 by [gov...@chromium.org](#) on Mon, Mar 21, 2022, 3:28 PM EDT

Cc: amyressler@chromium.org

Labels: OS-Android OS-Chrome OS-Linux OS-Mac OS-Windows

Applying all OSs except iOS as this is V8 change. Please adjust as needed.

Comment 26 by [sheriffbot](#) on Mon, Mar 21, 2022, 3:28 PM EDT

Labels: LTS-Merge-Candidate

LTS Milestone M96

This issue has been flagged as a merge candidate for Chrome OS' LTS channel. If selected, our merge team will handle any additional merges. To help us determine if this issue requires a merge to LTS, please answer this short questionnaire:

1. Was this issue a regression for the milestone it was found in?
2. Is this issue related to a change or feature merged after the latest LTS Milestone?

For more details visit <https://www.chromium.org/issue-tracking/autotriage> - Your friendly Sheriffbot

Comment 27 by [amyressler@chromium.org](#) on Mon, Mar 21, 2022, 5:40 PM EDT

Labels: -merge-merged-10.1

already merged to applicable branch for M101

Comment 28 by [rzanoni@google.com](#) on Tue, Mar 22, 2022, 5:37 AM EDT

Cc: rzanoni@google.com
Labels: LTS-Evaluating-96

[Comment 29](#) by [rzanoni@google.com](#) on Tue, Mar 22, 2022, 9:39 AM EDT

Labels: -LTS-Evaluating-96 LTS-Merge-Request-96

[Comment 30](#) by [sheriffbot](#) on Tue, Mar 22, 2022, 9:43 AM EDT

Labels: -LTS-Merge-Request-96 LTS-Merge-Review-96

This issue requires additional review before it can be merged to the LTS channel. Please answer the following questions to help us evaluate this merge:

1. Number of CLs needed for this fix and links to them.
2. Level of complexity (High, Medium, Low - Explain)
3. Has this been merged to a stable release? beta release?
4. Overall Recommendation (Yes, No)

For more details visit <https://www.chromium.org/issue-tracking/autotriage> - Your friendly Sheriffbot

[Comment 31](#) by [rzanoni@google.com](#) on Tue, Mar 22, 2022, 9:49 AM EDT

1. Just <https://crrev.com/c/3541919>
2. Low, no conflicts
3. Merged to main on Mar 17, included in 10.2.x
4. Yes

Tests passing locally

[Comment 32](#) by [gmpritchard@google.com](#) on Tue, Mar 22, 2022, 12:13 PM EDT

Labels: -LTS-Merge-Candidate LTS-Merge-Delayed-96

[Comment 33](#) by [pbommana@google.com](#) on Tue, Mar 22, 2022, 1:43 PM EDT

Your change has been approved for M101 branch, please go ahead and merge the CL's to M101 branch manually asap so that they would be part of this week's first M99 Dev release.

[Comment 34](#) by [nicohartmann@chromium.org](#) on Wed, Mar 23, 2022, 4:23 AM EDT

Labels: -Merge-Approved-101

[Comment 35](#) Deleted

[Comment 36](#) by [amyressler@chromium.org](#) on Mon, Apr 4, 2022, 6:06 PM EDT

Labels: -Merge-Review-100 Merge-Approved-100

M100 merge approved, please merge to branch 10.0-lkgr at your earliest convenience so this fix can be included in the next stable security refresh

[Comment 37](#) by [Git Watcher](#) on Tue, Apr 5, 2022, 8:24 AM EDT

Labels: merge-merged-10.0

The following revision refers to this bug:

<https://chromium.googlesource.com/v8/v8/+9a98f23bcabbf09525037b66a4e9202655197dc0>

commit [9a98f23bcabbf09525037b66a4e9202655197dc0](#)

Author: Nico Hartmann <nicohartmann@chromium.org>

Date: Thu Mar 17 16:03:12 2022

Merged: [turbofan] Fix NumberConstant used with Word32 rep in ISEL

~~Bug: chromium:1304658~~

(cherry picked from commit [bba5909c797dec7c620b9fee43d80a1420c2e08](#))

Change-Id: I721b07f434128d9fdf9fbd05932214e0a14e56c7

No-Presubmit: true

No-Tree-Checks: true

No-Try: true

Reviewed-on: <https://chromium-review.googlesource.com/c/v8/v8/+3540120>

Reviewed-by: Tobias Tebbi <tebbi@chromium.org>

Commit-Queue: Nico Hartmann <nicohartmann@chromium.org>

Cr-Commit-Position: refs/branch-heads/10.0@{#22}

Cr-Branched-From: [6ea73a738c467dc26abbbe84e27a36aac1c6e119](#)-refs/heads/10.0.139@{#1}

Cr-Branched-From: [ccc689011280419901e6ee42cae39980c0e96030](#)-refs/heads/main@{#79131}

[modify] <https://crrev.com/9a98f23bcabbf09525037b66a4e9202655197dc0/src/compiler/backend/instruction-selector.cc>

[Comment 38](#) by nicohartmann@chromium.org on Tue, Apr 5, 2022, 8:30 AM EDT

Labels: -Merge-Approved-100

[Comment 39](#) by gmpritchard@google.com on Fri, Apr 8, 2022, 11:29 AM EDT

Labels: -LTS-Merge-Review-96 -LTS-Merge-Delayed-96 LTS-Merge-Approved-96

[Comment 40](#) by [Git Watcher](#) on Mon, Apr 11, 2022, 8:45 AM EDT

Labels: merge-merged-9.6

The following revision refers to this bug:

<https://chromium.googlesource.com/v8/v8/+2004594a46c8a2766de63d850d15fcf5efe82dc9>

commit [2004594a46c8a2766de63d850d15fcf5efe82dc9](#)

Author: Nico Hartmann <nicohartmann@chromium.org>

Date: Thu Mar 17 16:03:12 2022

[M96-LTS][turbofan] Fix NumberConstant used with Word32 rep in ISEL

~~Bug: chromium:1304658~~

(cherry picked from commit [bba5909c797dec7c620b9fee43d80a1420c2e08](#))

No-Try: true

No-Presubmit: true

No-Tree-Checks: true

Change-Id: I6a82603a7c5de5ae8f5a895990c1a904bbdd39b2

Reviewed-on: <https://chromium-review.googlesource.com/c/v8/v8/+3532263>

Auto-Submit: Nico Hartmann <nicohartmann@chromium.org>
Commit-Queue: Tobias Tebbi <tebbi@chromium.org>
Cr-Original-Commit-Position: refs/heads/main@{#79526}
Reviewed-on: <https://chromium-review.googlesource.com/c/v8/v8/+3541919>
Reviewed-by: Nico Hartmann <nicohartmann@chromium.org>
Commit-Queue: Roger Felipe Zandoni da Silva <rzanoni@google.com>
Cr-Commit-Position: refs/branch-heads/9.6@{#58}
Cr-Branched-From: [0b7bda016178bf438f09b3c93da572ae3663a1f7](#)-refs/heads/9.6.180@{#1}
Cr-Branched-From: [41a5a247d9430b953e38631e88d17790306f7a4c](#)-refs/heads/main@{#77244}

[modify] <https://crrev.com/2004594a46c8a2766de63d850d15fcf5efe82dc9/src/compiler/backend/instruction-selector.cc>

Comment 41 by rzanoni@google.com on Mon, Apr 11, 2022, 8:48 AM EDT

Labels: -LTS-Merge-Approved-96 LTS-Merge-Merged-96

Comment 42 by adetaylor@google.com on Mon, Apr 11, 2022, 1:15 PM EDT

Labels: Release-2-M100

Comment 43 by adetaylor@google.com on Mon, Apr 11, 2022, 1:30 PM EDT

Labels: CVE-2022-1314 CVE_description-missing

Comment 44 by p4nda...@gmail.com on Mon, Apr 11, 2022, 4:19 PM EDT

Sorry, may I modify the credit info as "Bohan Liu (@P4nda20371774) and exp-sky of Tencent Security Xuanwu Lab"?

I would be very grateful if it could be modified!!

Comment 45 by amyressler@google.com on Fri, Apr 15, 2022, 1:09 PM EDT

Labels: -reward-topanel reward-unpaid reward-8500

*** Boilerplate reminders! ***

Please do NOT publicly disclose details until a fix has been released to all our users. Early public disclosure may cancel the provisional reward. Also, please be considerate about disclosure when the bug affects a core library that may be used by other products. Please do NOT share this information with third parties who are not directly involved in fixing the bug. Doing so may cancel the provisional reward. Please be honest if you have already disclosed anything publicly or to third parties. Lastly, we understand that some of you are not interested in money. We offer the option to donate your reward to an eligible charity. If you prefer this option, let us know and we will also match your donation - subject to our discretion. Any rewards that are unclaimed after 12 months will be donated to a charity of our choosing.

Please contact security-vrp@chromium.org with any questions.

Comment 46 by amyressler@chromium.org on Fri, Apr 15, 2022, 1:18 PM EDT

Congratulations, Bohan Liu and exp-sky! The VRP Panel have decided to award you \$7500 for this report +\$1,000 patch bonus. Thank you for your efforts and reporting this issue to us!

Comment 47 by amyressler@google.com on Fri, Apr 15, 2022, 9:55 PM EDT

Labels: -reward-unpaid reward-inprocess

Comment 48 by [sheriffbot](#) on Fri, Jun 24, 2022, 1:31 PM EDT

Labels: -Restrict-View-SecurityNotify allpublic

This bug has been closed for more than 14 weeks. Removing security view restrictions.

For more details visit <https://www.chromium.org/issue-tracking/autotriage> - Your friendly Sheriffbot

[Comment 49](#) by amyressler@google.com on Tue, Jul 26, 2022, 4:57 PM EDT

Labels: CVE_description-submitted -CVE_description-missing

[Comment 50](#) by amyressler@chromium.org on Fri, Jul 29, 2022, 5:26 PM EDT

Labels: -CVE_description-missing --CVE_description-missing

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