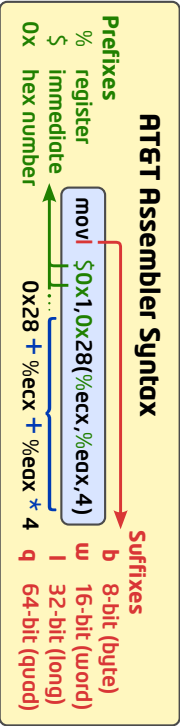


Running crash
sh\$ crash vmlinux.debug boot/vmlinux.gz vmcore



Calling Conventions

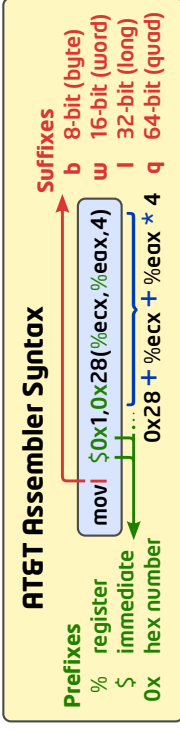
Function	1	2	3	4	5	6
Return	EAX	EDX	ECX	ESI	EDI	EBP
RetHi	EDX					
Syscall number:	EAX					

Reg	Usage	Saved	Virtual Memory Layout
EAX	Argument #1 / Return Lo	no	00000000 - BFFFFFFF user space
EBX	Local variable	yes	C0000000 - F7xxxxxx directmap (incl. kernel)
ECX	Argument #3	no	F7xxxxxx - FF7FE000 vmalloc (incl. modules)
EDX	Argument #2 / Return Hi	no	FF800000 - FFC00000 kmap
ESI	Local variables	yes	FFDxxxxx - FFFFFFF00 fixmaps (incl. VDSO)
EDI		yes	0x00100100 deleted list_head next
EBP		yes	0x00200200 deleted list_head prev
ESP	Stack pointer	yes	0xbcd destroyed secure key
			0x6c freed flexible array

Crash Reference Card (32-bit)

Crash Reference Card (32-bit)

Reg	Usage	Saved	Virtual Memory Layout
EAX	Argument #1 / Return Lo	no	00000000 - BFFFFFFF user space
EBX	Local variable	yes	C0000000 - F7xxxxxx directmap (incl. kernel)
ECX	Argument #3	no	F7xxxxxx - FF7FE000 vmalloc (incl. modules)
EDX	Argument #2 / Return Hi	no	FF800000 - FFC00000 kmap
ESI	Local variables	yes	FFDxxxxx - FFFFFFF00 fixmaps (incl. VDSO)
EDI		yes	0x00100100 deleted list_head next
EBP		yes	0x00200200 deleted list_head prev
ESP	Stack pointer	yes	0xbcd destroyed secure key
			0x6c freed flexible array



Running crash
sh\$ crash vmlinux.debug boot/vmlinux.gz vmcore

Calling Conventions

Function	1	2	3	4	5	6
Return	EAX	EDX	ECX	ESI	EDI	EBP
RetHi	EDX					
Syscall number:	EAX					

Calling Conventions

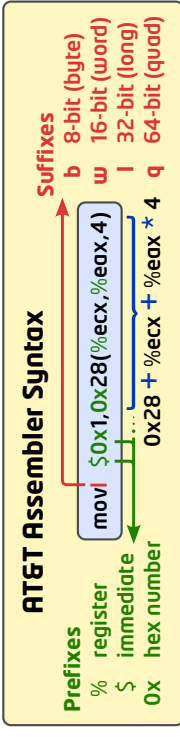
Function	1	2	3	4	5	6
Return	EAX	EDX	ECX	ESI	EDI	EBP
RetHi	EDX					
Syscall number:	EAX					

Reg	Usage	Saved	Virtual Memory Layout
EAX	Argument #1 / Return Lo	no	00000000 - BFFFFFFF user space
EBX	Local variable	yes	C0000000 - F7xxxxxx directmap (incl. kernel)
ECX	Argument #3	no	F7xxxxxx - FF7FE000 vmalloc (incl. modules)
EDX	Argument #2 / Return Hi	no	FF800000 - FFC00000 kmap
ESI	Local variables	yes	FFDxxxxx - FFFFFFF00 fixmaps (incl. VDSO)
EDI		yes	0x00100100 deleted list_head next
EBP		yes	0x00200200 deleted list_head prev
ESP	Stack pointer	yes	0xbcd destroyed secure key
			0x6c freed flexible array

Crash Reference Card (32-bit)

Crash Reference Card (32-bit)

Reg	Usage	Saved	Virtual Memory Layout
EAX	Argument #1 / Return Lo	no	00000000 - BFFFFFFF user space
EBX	Local variable	yes	C0000000 - F7xxxxxx directmap (incl. kernel)
ECX	Argument #3	no	F7xxxxxx - FF7FE000 vmalloc (incl. modules)
EDX	Argument #2 / Return Hi	no	FF800000 - FFC00000 kmap
ESI	Local variables	yes	FFDxxxxx - FFFFFFF00 fixmaps (incl. VDSO)
EDI		yes	0x00100100 deleted list_head next
EBP		yes	0x00200200 deleted list_head prev
ESP	Stack pointer	yes	0xbcd destroyed secure key
			0x6c freed flexible array



Running crash
sh\$ crash vmlinux.debug boot/vmlinux.gz vmcore

Calling Conventions

Function	1	2	3	4	5	6
Return	EAX	EDX	ECX	ESI	EDI	EBP
RetHi	EDX					
Syscall number:	EAX					

0000000000000000-00007FFFFFFF
DEAD0000xxxxxx
FFFFFFFF00000000-FFFFFFFF
FFFFFFFF80000000-FFFFFFFF
FFFFFFFF80000000-FFFFFFFF
FFFFFFFFC0000000-FFFFFFFF
FFFFFFFFE0000000-FFFFFFFF
FFFFFFFFF0000000-FFFFFFFF
FFFFFFFFF8000000-FFFFFFFF
FFFFFFFFFA000000-FFFFFFFF
FFFFFFFFFF600000-FFFFFFFF

user space
pointer poisons
hypervisor area
direct mapping
vmalloc/ioremap
vmemmap
kernel text+data
kernel modules
permanent fixmaps
vsyscalls (deprecated)

Function
1 RDI
2 RSI
3 RDX
4 RCX
5 R8
6 R9
Return RAX
RetHi RDX
Syscall number: RAX

Calling Conventions

0000000000000000-00007FFFFFFF
DEAD0000xxxxxx
FFFFFFFF00000000-FFFFFFFF
FFFFFFFF80000000-FFFFFFFF
FFFFFFFF80000000-FFFFFFFF
FFFFFFFFC0000000-FFFFFFFF
FFFFFFFFE0000000-FFFFFFFF
FFFFFFFFF0000000-FFFFFFFF
FFFFFFFFF8000000-FFFFFFFF
FFFFFFFFFA000000-FFFFFFFF
FFFFFFFFFF600000-FFFFFFFF

user space
pointer poisons
hypervisor area
direct mapping
vmalloc/ioremap
vmemmap
kernel text+data
kernel modules
permanent fixmaps
vsyscalls (deprecated)

Function
1 RDI
2 RSI
3 RDX
4 RCX
5 R8
6 R9
Return RAX
RetHi RDX
Syscall number: RAX

Calling Conventions

Reg	Usage	Saved	Reg	Usage	Saved
RAX	Return value	no	R8	Argument #5	no
RBX	Local variable	yes	R9	Argument #6	no
RCX	Argument #4	no	R10	Scratch registers	no
RDX	Argument #3	no	R11		no
RSI	Argument #2	no	R12		yes
RDI	Argument #1	no	R13	Local variables	yes
RBP	(Stack base pointer)	yes	R14		yes
RSP	Stack pointer	yes	R15		yes

Reg	Usage	Saved	Reg	Usage	Saved
RAX	Return value	no	R8	Argument #5	no
RBX	Local variable	yes	R9	Argument #6	no
RCX	Argument #4	no	R10	Scratch registers	no
RDX	Argument #3	no	R11		no
RSI	Argument #2	no	R12		yes
RDI	Argument #1	no	R13	Local variables	yes
RBP	(Stack base pointer)	yes	R14		yes
RSP	Stack pointer	yes	R15		yes

Crash Reference Card (64-bit)

Crash Reference Card (64-bit)

Reg	Usage	Saved	Reg	Usage	Saved
RAX	Return value	no	R8	Argument #5	no
RBX	Local variable	no	R9	Argument #6	no
RCX	Argument #4	no	R10	Scratch registers	no
RDX	Argument #3	no	R11		no
RSI	Argument #2	yes	R12		yes
RDI	Argument #1	yes	R13	Local variables	yes
RBP	(Stack base pointer)	yes	R14		yes
RSP	Stack pointer	yes	R15		yes

Reg	Usage	Saved	Reg	Usage	Saved
RAX	Return value	no	R8	Argument #5	no
RBX	Local variable	no	R9	Argument #6	no
RCX	Argument #4	no	R10	Scratch registers	no
RDX	Argument #3	no	R11		no
RSI	Argument #2	yes	R12		yes
RDI	Argument #1	yes	R13	Local variables	yes
RBP	(Stack base pointer)	yes	R14		yes
RSP	Stack pointer	yes	R15		yes

0000000000000000-00007FFFFFFF
DEAD0000xxxxxx
FFFFFFFF80000000-FFFFFFFF
FFFFFFFF80000000-FFFFFFFF
FFFFFFFFC0000000-FFFFFFFF
FFFFFFFFE0000000-FFFFFFFF
FFFFFFFFF0000000-FFFFFFFF
FFFFFFFFF8000000-FFFFFFFF
FFFFFFFFFA000000-FFFFFFFF
FFFFFFFFFF600000-FFFFFFFF

user space
pointer poisons
hypervisor area
direct mapping
vmalloc/ioremap
vmemmap
kernel text+data
kernel modules
permanent fixmaps
vsyscalls (deprecated)

Function
1 RDI
2 RSI
3 RDX
4 RCX
5 R8
6 R9
Return RAX
RetHi RDX
Syscall number: RAX

Calling Conventions

0000000000000000-00007FFFFFFF
DEAD0000xxxxxx
FFFFFFFF80000000-FFFFFFFF
FFFFFFFF80000000-FFFFFFFF
FFFFFFFFC0000000-FFFFFFFF
FFFFFFFFE0000000-FFFFFFFF
FFFFFFFFF0000000-FFFFFFFF
FFFFFFFFF8000000-FFFFFFFF
FFFFFFFFFA000000-FFFFFFFF
FFFFFFFFFF600000-FFFFFFFF

user space
pointer poisons
hypervisor area
direct mapping
vmalloc/ioremap
vmemmap
kernel text+data
kernel modules
permanent fixmaps
vsyscalls (deprecated)

Function
1 RDI
2 RSI
3 RDX
4 RCX
5 R8
6 R9
Return RAX
RetHi RDX
Syscall number: RAX

Calling Conventions

Function	Syscall
1 RDI	RDI
2 RSI	RSI
3 RDX	RDX
4 RCX	R10
5 R8	R8
6 R9	R9
Return RAX	RAX
RetHi RDX	-
Syscall number: RAX	-

Function	Syscall
1 RDI	RDI
2 RSI	RSI
3 RDX	RDX
4 RCX	R10
5 R8	R8
6 R9	R9
Return RAX	RAX
RetHi RDX	-
Syscall number: RAX	-

Reg	Usage	Saved	Reg	Usage	Saved
RAX	Return value	no	R8	Argument #5	no
RBX	Local variable	yes	R9	Argument #6	yes
RCX	Argument #4	no	R10	Scratch registers	no
RDX	Argument #3	no	R11		no
RSI	Argument #2	no	R12		no
RDI	Argument #1	no	R13	Local variables	yes
RBP	(Stack base pointer)	yes	R14		yes
RSP	Stack pointer	yes	R15		yes

Reg	Usage	Saved	Reg	Usage	Saved
RAX	Return value	no	R8	Argument #5	no
RBX	Local variable	yes	R9	Argument #6	yes
RCX	Argument #4	no	R10	Scratch registers	no
RDX	Argument #3	no	R11		no
RSI	Argument #2	no	R12		no
RDI	Argument #1	no	R13	Local variables	yes
RBP	(Stack base pointer)	yes	R14		yes
RSP	Stack pointer	yes	R15		yes

Reg	Usage	Saved	Reg	Usage	Saved
RAX	Return value	no	R8	Argument #5	no
RBX	Local variable	no	R9	Argument #6	no
RCX	Argument #4	no	R10	Scratch registers	no
RDX	Argument #3	no	R11		no
RSI	Argument #2	yes	R12		yes
RDI	Argument #1	yes	R13	Local variables	yes
RBP	(Stack base pointer)	yes	R14		yes
RSP	Stack pointer	yes	R15		yes

Reg	Usage	Saved	Reg	Usage	Saved
RAX	Return value	no	R8	Argument #5	no
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