Subject: Re: Conditional breakpoints
Posted by dolik.rce on Thu, 13 Jan 2011 14:03:14 GMT
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I finally got some time with windows computer, so I could test what I blind coded in past few days

I extended the parser in Exp.cpp to allow comparisons, logical and bitwise operations. Hopefully with correct C++ priorities Then I added a Vector to store the conditions and Pdb::ConditionCheck() function that check whether the condition for given breakpoint is fulfilled or not by evaluating it using Pdb::Exp() call. Up to here it appears to work quite well.

I hit a problem when I tried to "cancel" the breakpoints for which condition is not fulfilled in Pdb::RunToException(). The code looks like it should be enough to break instead of returning and wait for next breakpoint:

```
   switch(event.dwDebugEventCode) {
   case EXCEPTION_DEBUG_EVENT: {
// ...
    int bp=bp_set.Find((adr_t)event.u.Exception.ExceptionRecord.ExceptionAddress);
    if(event.u.Exception.ExceptionRecord.ExceptionCode == EXCEPTION_BREAKPOINT && bp
>= 0)
     #ifdef CPU_32
     context.Eip = (adr_t)event.u.Exception.ExceptionRecord.ExceptionAddress;
     #else
     context.Rip = (adr_t)event.u.Exception.ExceptionRecord.ExceptionAddress;
     #endif

    RemoveBp();
    LLOG("Exception: " << FormatIntHex(event.u.Exception.ExceptionRecord.ExceptionCode) <<
         " at: " << FormatIntHex(event.u.Exception.ExceptionRecord.ExceptionAddress) <<
         " first: " << event.u.Exception.dwFirstChance);
    if(bp>=0 && !ConditionCheck(bp))
     break;     // condition doesn't fit - we don't want to stop at this breakpoint
    return true;       //the condition is true, we should stop
// ...
```

This however still stops at every breakpoint, regardless if it breaks or returns. Could you give me a hint how to do this properly, please?

Later, it would be also good idea to actually do the check before switching theide back to foreground etc., but that will probably require bigger changes. For now I'm just wondering how to skip the unfitting breakpoints.

Honza

PS: I attach all the changed sources, so you can test.

EDIT: Removed attachment, newer version available below.